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DEVELOPING ASEAN ECONOMIC COMMUNITY (AEC) INTO A GLOBAL SERVICES HUB

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Executive Summary

The services sector plays a critical role in the economy as it makes available to other productive sectors an environment to be more efficient by providing inputs in their production and distribution activities. However, in a globalized setting, a more efficient services sector does not only serve domestic industries but the global market as well. The expansion of global trade in recent years has seen a phenomenal rise in trade in services due to the prominence of the services as an economic sector, the rapid developments in information and communication technology, intense competition among global players, and the liberalization measures brought about by the General Agreement on Trade in Services (GATS) and the ASEAN Framework Agreement on Services (AFAS).

The aim of transforming the ASEAN Economic Community (AEC) into a global services hub is not only to further expand trade in services and reap the opportunities in global and regional trade in services but ultimately to be one of the useful avenues that will link the economies in the region in realizing the goal of regional integration and eventually the formation of an economic community. The healthcare and medical services, and the creative services were chosen in this study not only because of their potentials for income, employment and foreign exchange earnings generation but more importantly in contributing to regional integration.

A SWOT analysis of the sectors was made to determine their competitiveness. The strengths and weaknesses of the sectors are influenced mainly by internal factors as well as some external factors while opportunities and threats are mostly coming from external factors. Internal factors consist of resources and other characteristics inherent to the firms consisting of human, physical and financial resources, as well as the availability of appropriate technology. External factors, on the other hand, consist of a set of features in the environment where the sectors operate including the external market environment, domestic market environment, presence of supporting industries and the state of infrastructure. A second level of analysis was undertaken on the roles played by government policies, regulations and institutional support in expanding these

strengths and opportunities, on the one hand, and in mitigating the weaknesses and threats, on the other hand.

The analysis of strengths, weaknesses, opportunities and threats was made for the healthcare and medical tourism in Malaysia, Singapore and Thailand. Meanwhile, the creative services sector was represented by animation and design (fashion and interior) in Indonesia, animation and digital publishing in the Philippines, and fashion and interior design in Vietnam. Although the two sectors have huge economic potentials, they are characterized with varied strengths, faced with different set of opportunities and exposed to differing weaknesses and threats.

The healthcare industry is confronted with a set of opportunities including the huge tourism industry in the region, the changing demographic landscape, aging population, rise of chronic and non-communicable diseases rising income and the growth of the middle class. In the creative services the opportunities are numerous including the emergence of a knowledge-based economy, phenomenal development in ICT, enormous potential and actual demand in creative industries brought about by rising prosperity in the region and the varied applications of creative services.

The medical tourism sector is a mature industry while the creative services sector is a developing industry in terms of scope and depth of their current contributions in the domestic economy as well in regional trade in services. Medical tourism is a capital-intensive industry utilizing complex facilities, state of the art equipment and employing highly skilled, sometimes foreign-trained health professionals which are its core strengths. This sector is dominated by few large holding companies that control a network of hospitals in the region. However, an incipient component of the healthcare and medical travel industry is relatively labor-intensive and competitive including wellness and alternative medicine. The creative services sector, on the other hand, is composed of small firms in a highly competitive market. Although the industry uses information and communication technology including modern computer hardware and software it is relatively labor intensive employing skilled technicians, artists and writers which is a major component of its strengths.

In terms of supplying services, the healthcare and medical services utilize primarily mode 2 with foreign patients seeking medical treatment in internationally accredited hospitals in the region. Trade in creative services, on the other hand, is primarily

facilitated by cross border transactions with outputs of animation, electronic games, and digital publication transmitted to customers and foreign partners digitally. In addition, some of the outputs of fashion design and interior design are used in the garments and furniture industry whose products are exported to foreign markets.

Another important difference is the impact of these industries on the other sectors of society. The health has a number of externalities because healthcare and medical tourism is not only a service to be traded regionally and globally but a public good for domestic consumption. This conflict is totally absent in the creative services where efficiency and reaping the economic gains of trade in services is a major consideration in the expansion of the creative services for the internal and external markets.

In transforming the AEC into a global services hub, the challenge for the countries and for the region is to respond to these opportunities by enhancing the strengths of the sectors and mitigate their weaknesses and threats. In addition, given the differences of the two sectors in terms of their market structure, scale of production, factor intensity, utilization of the various modes of supply of services as well its impact on other sectors of society there will be differences in the approaches that government can take in promoting the sectors via the formulation of regulations, the provision of regulatory environment, and the extension of institutional support. The regional cooperative measures for the two sectors will likewise differ. Identification and implementation of these government measures as well as regional efforts are meant to strengthen the sectors, mitigate their weaknesses and threats in order to reap the opportunities that will enhance their contributions towards the transformation of the ASEAN as a global hub for services.

Government responses in healthcare travel industry must be crafted in the light of inconsistencies arising from trade and public service perspectives of medical tourism, inequities from the dual delivery system and varied financing schemes, imbalances and subsequent migration of doctors and other health professionals from the public to private hospitals resulting from compensation gap, the regulatory frameworks for healthcare provision, on the one hand, and the differentiated services in medical tourism, on the other hand. In creative services the government can assist in addressing the sector's major concern: enhancing its contributions in the value chain. To this end, the linkages of the various industries can be explored by revisiting the rich cultural

heritage of the country for product development, discovering the global market for niches, exploring information and communication technology (ICT) for applications, and improving skills of its human talents..

Three categories of measures including investment in physical capital, investment in human capital and exploration of market niches were identified that the national government and the regional bodies can undertake to enhance the competitiveness of the sectors. These specific recommendations although meant to address productive capacity, human resource development and market expansion are likewise responding to the modes services are supplied. They are also linked with the policies, regulatory environment, and institutional support needed to enhance the competitiveness of the healthcare sector and the creative services and realize the goal of transforming the region into a global hub in services.

CHAPTER 1

Transforming the ASEAN Economic Community (AEC) into A Global Services Hub: Enhancing the Competitiveness of the Health and Wellness and Creative Services Sectors

An Integrative Report

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1. Introduction

The services sector plays a critical role in the economy as it makes available to other productive sectors an environment to be more efficient by providing inputs in their production and distribution activities. The quality of the provision of credit, transportation services, telecommunication to business and professional services can define the competitiveness of the agricultural, industrial and the services sectors. On the other hand, the growth of household income has placed pressure on the services sector to improve in providing individuals and households with a variety and enhanced services from health, education, recreation and other personal services.

However, in a globalized setting, a more efficient services sector does not only serve domestic industries but the global market as well. The expansion of global trade in recent years has seen a phenomenal rise in trade in services. Several key factors contribute to this growth. First, the services sector is becoming the most prominent economic sector in many countries today in terms of income and employment generation and it will continue to dominate the economic activities of these countries in the future. Second, the rapid improvements in information and communication technology (ICT) have tackled the non-tradability of services by separating production and consumption of a service across space. Third, the intense competition among key players in major industries has forced several global companies to segment production and distribution activities and placed them in locations that will minimize cost. In

addition, liberalization measures allowed provision of services either through the movement of producers or consumers.

One of the key responses undertaken by firms in such a competitive backdrop is to outsource non-core business activities including shared accounting and financial services, auditing, data processing, research and development, and contact services that in turn enlarged cross border transactions. On the other hand, the lower cost of travel brought about by competition and the information available to the consumers, the supply mode of consumption abroad has expanded beyond tourism. Health and educational services are increasing opportunities for consumption abroad. With the deregulation and liberalization measures the entry of foreign companies has encouraged commercial presence. Meanwhile the movement of natural persons were brought about by the increasing entry of foreign firms establishing commercial presence and bringing with them managers and technical staff from across the globe.

The commitments made by acceding countries and economies in the General Agreement on Trade in Services (GATS) are meant primarily to address the liberalization measures along the four modes of supply including cross border transactions, consumption abroad, commercial presence and movement of natural persons that further enhanced trade in services at the global level. Service has usually been a non-tradable commodity in the past mainly because of the simultaneity of production and consumption. However, this characteristic of services has been addressed through the developments in information and communications technology where production and consumption of a service can be done in real time across national boundaries. But the more pressing issue in the non-tradability of services is the brought about by extensive domestic regulations governing services due to the asymmetry of information between service providers and consumers as well as the promotion of public interest like maintenance of sovereignty and the public good character of services in general particularly education and health. These issues are being addressed in various articles of the GATS including domestic regulation, recognition and a host of exemptions in market access and national treatment across all sectors and specific modes of supply.

At the regional level, the ASEAN Framework Agreement on Services (AFAS) has been pursued to serve as an institutional driving force in expanding trade in services.

Countries, likewise, enter into bilateral preferential agreements to expand trade in services (Tullao & Cortez, 2006). The liberalization of trade in services in the ASEAN has utilized as a platform for greater economic integration as envisioned in the ASEAN Vision 2020. The ASEAN Framework Agreement on Services (AFAS) aims at liberalizing trade in services by expanding the depth and scope of liberalization through the elimination of discriminatory measures and market access liberalization. To enhance trade in services, the AFAS commitments are meant to go beyond the commitments made by member countries in the General Agreement on Trade in Services (GATS). Since 1996, seven packages of commitments have been concluded, including business services (aseansec.org).

Aside from the formation of regional accords the economic integration in the East Asian region has been influenced by several factors including market well as other institutional drivers (Urata, 2004), and the need to address regional public goods, (Tullao, 2007). The market-driven forces refer to the impact of economic of growth, globalization, improvements in information technology and increasing competition on the rapid expansion of trade, investments and flows of people across the region. Institutional factors consist of the role of trade negotiations at multilateral, regional and bilateral levels in facilitating the expansion of trade, investment and flows of workers. Addressing regional public goods, on the other hand, is due to the spill over effects across national boundaries within the region brought about enhanced globalization including movement of goods, services and people (Tullao, 2007).

Thus, the aim of transforming ASEAN Economic Community into a Global Service Hub is not only to further expand trade in services and reap the opportunities in global and regional trade in services but ultimately to be one of the useful avenues that will link the economies in the region in realizing the goal of regional integration and eventually the formation of an economic community.

The health care and wellness sector has been identified as one of the priority sectors in the ASEAN because of its potentials for growth and as an important driver for enhancing regional integration. Improvement in economic performance of the economies, longer life expectancy of people in the region and increasing population are the major economic and demographic factors that influence the demand for health services. Aside from these factors, institutional as well as developments in information

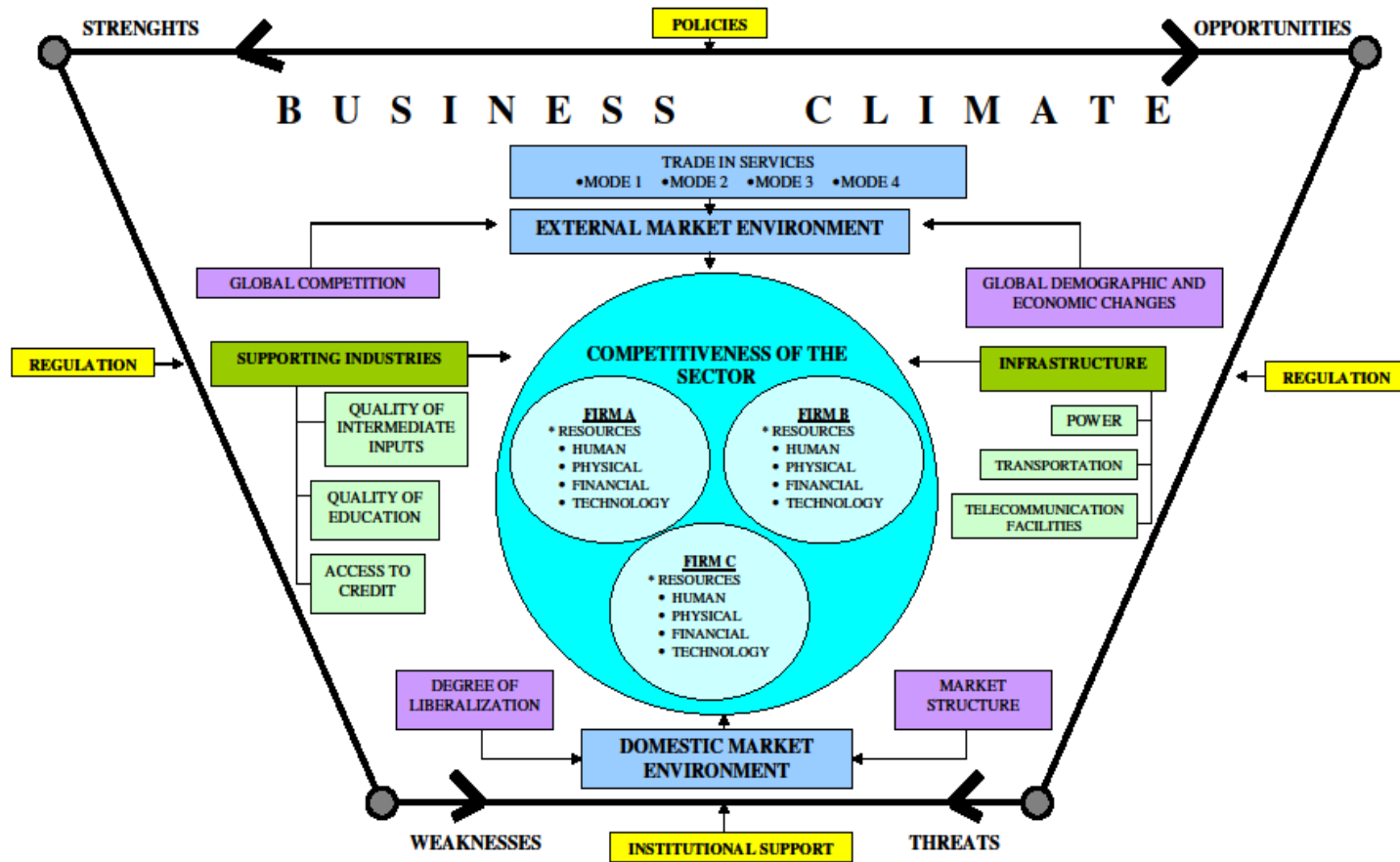
technology are likewise increasing not only the internal demand for health services but also the global trade in health services.

The creative services including animation, fashion design, printing and publishing, on the other hand, is another key sector in the ASEAN with a huge potentials for development as a global hub given the growing prominence of the business process outsourcing (BPO) in several countries in the region. This phenomenal growth was been facilitated largely by improvements in ICT infrastructure of the region, the availability of a pool of creative talents, and the cost advantages of some the economies in the region to compete with the rest of the world.

2. Developing AEC into a Global Services Hub: Framework of Analysis

The overall framework of analysis in this study is depicted in the structural chart below and the detailed description is in section 2.1. Suffice it to say that the strengths and weaknesses of the sector/industry are influenced mainly by the internal factors as well as some external factors particularly supporting industries and the infrastructure. On the other hand, the opportunities and threats that may affect the sector/industry are mostly coming from external factors specifically from domestic and external market environments.

**DEVELOPING AEC INTO A GLOBAL SERVICES HUB
FRAMEWORK OF ANALYSIS**



Through this structural diagram the SWOT analysis will proceed. First, through the internal and external factors, we will identify the strengths, weaknesses, opportunities and threats that may describe of the sector/industry. Beyond description and identification, the second level of analysis will inquire on how these strengths and opportunities are expanded, on the one hand, and how the weaknesses and threats mitigated, on the other hand. The second level of analysis will be done through the analysis of the roles played by macro factors including government policies, regulations and institutional support on the internal and external factors constituting the business climate.

2.1. An analysis of overall business climate of the sector

For the ASEAN Economic Community (AEC) to become a global services hub it is imperative that the business climate within the targeted sector must be favourable. A promising business climate, in turn, consists of firms and industries within the services sector that are competitive and their external environment encouraging and supportive in maintaining this competitiveness. This means that these companies can continue to provide excellent services at low cost even in the future.

There are two main factors affecting the ability of the sector to provide competitive services- internal characteristics of the sector as well as the external factors. These sets of factors define a favourable business climate for the provision of a competitive service.

2.1.1. Internal Factors

Internal factors consist of resources and other characteristics inherent to the firms within the sector. It includes the quality of human, physical and financial resources, as well as the availability of appropriate technology to compete in a highly competitive global market. Firms with potentials in enhancing the competitiveness of the sector usually have talented and productive workforce, efficient managers, ample funds that can be sourced internally and outside, and access and capability to implement state of the art technologies. Since these qualities are internal to the firms within the sector/industry, firms can contribute to the competitive edge of the sector/industry through direct corporate strategic decisions and policies. The features of the internal factors largely define the strengths and weaknesses of the sector.

2.1.2. External Factors

External factors, on the other hand, consist of a set of features of the environment where the firms and sectors operate. Although these external features directly affect the competitiveness of the firms within the sector; they, however, cannot be directly influenced by decisions of the firms, individually and collectively. These external factors include the external market environment, domestic market environment, presence of supporting industries and the state of infrastructure. As mentioned earlier, supporting services and the state of infrastructure, although considered as external factors will largely contribute to the strengths and weaknesses of the sector. On the other hand, the purely external factors like external market environment and domestic market environment may present opportunities and threats to the sector.

a. External market environment

The external market environment is described by three indicators in the framework: global competition, demographic and economic changes as well as the expansion of the trade in services. Global competition refers to the extent to which domestic players compete with foreign players in the international market. For example, the presence of big players in the global market for the targeted services may pose difficulties for AEC firms to compete internationally. Demographic and economic changes, on the other hand, consist of global developments in population and trends in the growth of the global economy that may affect the demand for various types of services. Related to this, an aging population in developed countries and its accompanying labor shortages and higher wages can put pressure on richer countries to demand some of their health and medical services from other regions including AEC. In addition, the expansion of trade of services through cross border transactions (mode 1), consumption abroad (mode2), commercial presence (mode 3) and movement of natural persons (mode4) can enhance the demand for services. In this light, a relatively lower cost of medical treatment in some of the ASEAN countries can boost consumption abroad or mode 2 as an increasing number of foreign patients seek treatment in some of the best hospitals in the ASEAN region.

b. Domestic market environment

Domestic market environment is characterized by the degree of liberalization and market structure. Degree of liberalization is the extent to which foreign players compete with the

domestic players in the domestic market. For example, the removal of tariffs for imported equipment including computers as a consequence of liberalization measures allows domestic players with cheap capital equipment that can boost their competitiveness in providing services. Market structure, on the other hand, refers to the degree of competition as indicated by the ease of entry into the market or industry. In the provision of service enhanced competition resulting from ease of entry into the market can provide services at cheaper cost. This result has been shown in the deregulation of the telecommunications industry in the Philippines. Deregulation allowed the entry of new players significantly and increased the competition in the telecommunications market, thus driving costs down.

c. Infrastructure

Infrastructure refers to the quality and cost of power, access to various means of transportation and the provision of telecommunications facilities. Cheap power, for example, is very important for the operations of BPOs that are operating on 24/7 basis using a lot of electricity to reap the opportunities of time differences across the globe. In addition, aside from being cheap, the supply of electricity should be reliable for longer periods since cross border transactions or mode 1 can only be facilitated with consistency of delivery. Brown outs and unreliable supply of electricity are threats to the competitiveness of business process outsourcing. Efficient ICT facilities are crucial too in competing globally. The Philippines, for example, has contested the market dominance of India in the BPO market when its standard high bandwidth telephone lines became much cheaper as well as the international phone calls. But reforms in the telecoms in other regions may take away this competitive edge.

d. Supporting industries

Another important external factor is supporting industries. In the services sector this includes backward linkages of the sector where it is sourcing its intermediate inputs as well as other productive inputs. It may include the quality of intermediate inputs, quality of education, and access to credit. As discussed previously, the reliability of power is one main intermediate inputs used in the supply of BPO services. In health and wellness services the quality of human resources is a major determinant of its competitive edge. The quality of human resources in this sector is shaped primarily by the quality of education in medical and other allied health fields. Both BPO and health and wellness sectors need the necessary

financial resources to augment and improve its facilities to be at par with global standards. This will be influenced by the access to credit.

2.2. Macro Environment

The interactions between the sets of internal factors and external factors affecting the competitiveness of the firms within the sector/industry are described in the framework as the business climate. But these internal and external factors as well as their interactions are in turn influenced by a set of even broader macro policies, regulations and institutional support initiated and promulgated largely by the government.

2.2.1. Policies

In general, macro-economic policies are strategic plans of the government in stabilizing the economy. There are also set course of actions that the government may undertake to propel economic growth. Likewise, there are guidelines made by the government in the development of specific sectors and productive inputs. Policies for stabilization, growth, employment generation, industrial development, human resource development and others can affect the competitiveness of the firms directly as they impact on the quality of their resources. Indirectly, the firms are likewise affected since these policies can influence the various external factors that in turn affect the firms. For example, the trade and industrial policies of the government can influence the external market environment as well as the domestic market environment through liberalization and deregulation measures. Human resource development policy of the government can affect the supporting industries of the sector through the human capital formation. Fiscal policies and tax holidays intended for public capital expenditures can affect the quality of infrastructure.

2.2.2. Regulation

Regulations are government initiatives primarily intended to correct distortions brought about by market imperfections, externalities and the asymmetry of information among others. However, these standards for the promotion of public interest can have adverse effects on the competitiveness of the firms as well as on the external factors leading to an unfavourable business climate. For example, many of the domestic regulations governing the provision of services including the practice of professions in many countries can discriminate foreigners in the name of public interest. The difficulties of harmonizing standards through Mutual Recognition Agreements (MRA) may prevent, for example, foreign medical specialists to

conduct an operation in one of medical centers in the ASEAN which in turn may thwart the competitiveness of the health services in the region. Moreover, constitutional and legal provisions on land ownership as well as the various limitations on market access and national treatment can discourage of the flow of investments in targeted services sector. On the other hand, standards and other regulatory measures can improve the quality of infrastructure, and supporting industries as the domestic firms benchmark with global best practices and standards.

2.2.3. Institutional Support

Similar to government policies and regulations, institutional support by the government in terms of the provision of the soft infrastructure like the administration of justice, peace and order, security, and provision of necessary human capital can likewise affect the overall business climate and the competitiveness of the sector. Rule of law is a very important element sought by foreign investors when supplying services under commercial presence or mode 3. On the other hand, political instability, insurgency, deteriorating peace and order, corruption and government red tape can adversely affect the domestic market environment, the supporting industries and the quality of infrastructure.

2.3.SWOT Analysis of the Sector

Given the framework drawn in section 2.1 and described extensively in sections 2.2 and 2.3 the potentials of transforming the health services and wellness sector, on the one hand, and the creative services sector, on the other hand, can be evaluated in terms of the analysis of the strengths, weaknesses, opportunities and threats of the sector.

2.3.1. Identification of Strengths, Weaknesses, Opportunities and Threats

The SWOT analysis is meant to identify existing strengths and weaknesses arising from the features of internal factors, and some external factors, specifically supporting industries and infrastructure, as well as the opportunities and threats that the sector may face given the domestic and external market environments.

For the strengths and weaknesses the analysis will involve the identification of the internal characteristics of the firms in the sector/industry that may contribute to its competitive edge. This may include the quality of the work force including the managerial talents of the firms, the type of equipment and technology utilized and sufficiency of

financial resources to fund plant expansion, acquisition of new equipment and payment of competitive compensation to its work force.

Together with these internal features, the description on role of supporting industries and infrastructure in enhancing the competitiveness of the sector will be conducted. This may cover the description on the role of supporting industries, business associations, access to credit, quality of intermediate inputs, source of reliable and efficient power, and most importantly the quality of telecommunications infrastructure in shaping the competitiveness of the sector and the overall business climate.

For the identification of opportunities and threats the analysis will involve a description on the role of the domestic and external market environments in shaping the competitiveness of the sector/industry. This will require an explanation on how external market factors including demographic and economic changes, global competition, and expansion of trade in services are creating opportunities and threats to the sector/ industry. Similarly, we need to account on how liberalization, deregulation measures and other domestic market factors are creating opportunities or threats to the sector/industry.

2.3.2. Enhancing the Strengths and Opportunities and Mitigating Weaknesses and Threats: Roles of Policies, Regulations and Institutional Support

Beyond an accounting of the strengths, weaknesses, opportunities and threats of the sector/industry the SWOT analysis will require an evaluation on how the current strengths and opportunities in the sector/industry are enhanced and current weaknesses and threats mitigated. This will be done through an examination on how the broad macro forces are creating favourable or adverse effects on the competitiveness of the firms and the sector/industry and the overall business climate. Positive direct impacts on the internal factors and some external factors may further strengthen the competitiveness of the sector while adverse effects may weaken the sector and its competitiveness. On the other hand, the positive impact made by the domestic and external market environments as well as the broad macro forces may open up opportunities to the sector that can expand its competitiveness.

The roles of government policies, regulations and institutional support will be crucial in the laying down the foundations for a global services hub in AEC in the health and wellness sector as well as for the creative services sector. In section 2.1 the overall business climate was illustrated as a trapezoid with longer horizontal lines for strengths and opportunities. The movement of the arrows are outward implying expansion of strengths and opportunities. On the other hand, the horizontal line for the weaknesses and threats is shorter and the arrows

are pointing inwardly implying the need to minimize and mitigate the weaknesses and threats to the sector.

The analysis would involve an evaluation on how policies and regulations of the government can affect the competitiveness of individual firms in enabling them to develop into regional players, in enhancing the efficiency of supporting industries and in improving the quality of infrastructure. In addition, the analysis will cover how government policies and regulations affect in creating a competitive domestic market environment so that firms can compete in the external market environment. Lastly, the analysis will highlight the extent to which government policies and regulations are opening up opportunities or generating threats to the sector/industry.

For institutional support, the analysis will cover a discussion on the effectiveness of institutional support for the designated services industr(ies) including the adequacy of the educational system, the administration of justice, peace and order, and security in enhancing the competitiveness of the firms in the sector/industry. Lastly, the analysis will involve an examination on how these set of institutional support are creating opportunities or spawning threats to the sector/industry.

3. Analysis of the Competitiveness of the Sectors

3.1. Health and Medical Services

3.1.1. Basis for Promoting Medical and Health Tourism

The commitment of a number of countries in the region to pursue medical and health tourism is founded on the potential economic impact this sector can generate in terms of income and employment. In Malaysia, for example, the health and tourism sectors were included among the 12 National Key Economic Areas (NKEA). Because these key sectors are expected to make substantial contributions to Malaysia's economic performance in the medium and long term the government has made a strong commitment for public investment and policy support. Tourism sector has been included in the 12 NKEA because of the importance of the industry to the Malaysian economy with the generation of RM37 billion in GNI in 2009 making it the fifth largest industry in the economy. Because Malaysia is one of the world's top destinations in terms of arrivals and revenues the industry is expected to grow in the future with arrivals expected to reach 36 million in 2020. On the other hand, the inclusion of the healthcare industry in the NKEA is premised on demographic changes and

the increase incidence of lifestyle diseases that would contribute significantly in the increase in the sector's demand that in turn make it a powerful engine of growth. (Dahlui & Aziz, 2012)

For almost a decade now Singapore has recognized the value of medical tourism with a government announcement of targeting to attract medical tourists and promoting the export of health services globally. In 2003, the "Healthcare Services Working Group (HSWG) of the Economic Review Committee recommended that Singapore attract one million foreign patients by 2012". To achieve this goal, the Singapore Tourism Board (STB), along with the Economic Development Board (EDB) and International Enterprise (IE) Singapore, launched "Singapore Medicine in 2003, a multi agency initiative that aims to promote, develop, and maintain Singapore as an international medical hub". (Phua & Pocock, 2012)

The development of Singapore as an international medical hub should be seen in the light of the role of healthcare services in the development of the biomedical industry which is considered one of the pillars of the new economy that will drive and sustain the growth of the Singaporean economy in the future. The influx of foreigners to avail of the quality health and medical services can "create value added of roughly 1% to 3 % of GDP and generating 13,000 new jobs". More than these direct economic gains the development of the health care industry through the promotion of medical tourism has the potentials of creating backward and forward linkages that may affect the pharmaceutical, medical devices and biotechnology, the other components of the biomedical industry. (Phua & Pocock, 2012)

While the government agencies were instrumental in the promotion of medical and health tourism in Malaysia and Singapore, the healthcare travel industry in Thailand, on the other hand, started as a response to the debilitating impact of the Asian financial crisis in the late 1990's. The decline in bed occupancy in high-end private hospitals impelled hospital managers to seek patients from all over the world to recoup the heavy investments made in these hospitals in the previous years. Since then, it has become an official policy to promote medical tourism as an option for the viability of private hospitals and to generate foreign exchange for the country. "Thailand is proud for being the first developing country where citizens from developed country seek medical treatment through medical tourism". As a result of this official support the country is now the leading country in the region receiving the highest number of tourists seeking various health and medical services. In 2009, close to 1.5 million foreign patients were registered generating substantial revenues for the country. Although the number is still huge and growing the growth rate of medical tourists has

declined in the last few years because of the internal problems in Thailand as well as the economic recession in major developed countries. (Supakankunti & Herberholz, 2012)

3.1.2. Opportunities for Medical and Health Tourism in the Region

The development of ASEAN Economic Community as global hub in medical and healthcare services is premised on a number of developments that serve as opportunities that can be tapped and explored by the economies in the region. First, in all of these countries tourism is a major industry attracting millions of foreigners every year. The flow of foreign visitors in the region and the positive impressions fostered on their visits can trigger subsequent positive reactions including the repeat and flow of foreign investments. This can likewise create subsequent consumption abroad in various fields including medical and healthcare services. Thailand developed its health and medical travel industry on the basis that it is the leading tourist destination in the region as well as the residence of a huge number of expatriates. The fact that Thailand is one of the leading tourist destinations in the ASEAN it can readily expand its niche in healthcare, medical and wellness tourism. (Supakankunti & Herberholz, 2012)

In the same manner Malaysia has realized the potential huge returns from healthcare travel industry with an increasing number of tourists and huge revenues generated by the sector. As a consequence, the Ministry of Health has been continuously bringing potential buyers of healthcare travel services to Malaysia by providing foreign facilitators, insurance brokers and agents exposure tours to various healthcare facilities in major cities of the country. In addition, the fact that Malaysia is considered the Halal hub in the region has attracted Moslem tourists from the region as well as from the Middle East and North Africa. (Dahlui & Aziz, 2012)

In Singapore tourism accounts for at least 5% of the country GDP and around 0.5% goes to medical tourist spending. Although still insignificant this share is projected to increase in the future. However, despite differing views on medical tourism Singapore has remained a leading player in attracting foreign patients seeking medical treatment in the region generating USD 1.2 billion in 2007 for the Singaporean economy (Phua & Pocock, 2012). In addition, Aside from being a major tourist destination in the region, Singapore is host to a number regional headquarters of foreign companies with its liberal investment policies and residence to thousands of expatriates employed in many of its companies. This can likewise serve as an opportunity for greater expansion of medical and healthcare tourism.

Another opportunity that can be harnessed by the countries that will have a bearing on the development of medical and healthcare tourism in the region is the changing demographic landscape with an aging population accompanied by the rise of chronic and non-communicable diseases. These demographic and morbidity changes can differentiate the provision of medical and healthcare services beyond primary and preventive medicine. The healthcare needs of expanding aging population will have to be addressed. As a consequence, the health sector of the countries in the region will have to respond because of the prominence of chronic and non-communicable diseases among this age cohort and provide other healthcare services beyond primary healthcare. In addition, with the mobility of people and the limited income of this aging population, they would prefer to secure medical and healthcare services at the most cost-efficient way. Aside from the quality of service, the healthcare services should be relative inexpensive to attract foreign patients.

The development of the healthcare sector in Singapore has been influenced by a host of factors including the aging population, incidence of chronic diseases and the increasing income of its citizens. The government has responded to these factors by “introducing market mechanism to make the sector more competitive and efficient in the delivery of health care services including the corporatization of public hospitals and highly privatized primary health sector”. As corporatized public hospitals these “health facilities are autonomous and provide most secondary care in Singapore and account for almost three quarters of total beds. Almost a third of beds in public hospitals are highly subsidized and not more than 10% of beds can be used for private patients”. (Phua & Pocock, 2012)

To avail of the various healthcare services the government has established “various financing schemes through medical savings, health insurance, government subsidy to vulnerable groups and out of pocket payments (OPP)”. “Since OPP dominates private health spending it is considered regressive since it leads to competition in the private health care market and may exclude those with limited funds”. Moreover, medical tourist payments are dominated by OPPs, but these payments are becoming more organized as part of insurance coverage. (Phua & Pocock 2012).

This differentiation is further realized because of rising income and the expansion of the middle class. Since most of medical and healthcare services are highly differentiated, there will be a need for private financing for its provision. The expanding middle class and rising income may serve as opportunities for demand for quality of healthcare services. Since there are people willing and able to pay, the private sector may answer this emerging demand. The

rise in income will create differentiated demand for healthcare that consumers are willing to pay for services with differentiated quality.

Table 1. Strengths and Opportunities of Medical and Health Services in the ASEAN

Malaysia	<ul style="list-style-type: none"> • cheap medical cost in the country • highly-trained medical specialists, up-to-date facilities and supporting services • multi-ethnic population and culture • use of English language • stable political environment • locational advantage 	<ul style="list-style-type: none"> • strong business association • presence of quality assurance system • Halal hub in the region • tax incentives • provision of exposure tours to agents • high returns • awareness on alternative medicine
Singapore	<ul style="list-style-type: none"> • state of the art medical equipment • quality and standard of medical care • high quality of medical professional workforce • sufficient new products and service • service orientation • a large number of private hospital beds, variety of service choice • favorable domestic and external market • available local training institutes and universities 	<ul style="list-style-type: none"> • low barriers to entry • clear policy coherence between local and foreign health care service providers. • ageing population • the rise of chronic and non-communicable diseases • increase in income of the middle class in the region • the increasing popularity of the region as a medical hub
Thailand	<ul style="list-style-type: none"> • private hospitals are in place • heavy investment in modern equipment and facilities • huge number of expatriates living in Bangkok and the over 10 million tourist arrivals • investment in training and education • increasing demand for health and wellness tourism all over the region 	<ul style="list-style-type: none"> • leading tourist destinations in the region • strong local demand for cosmetic surgical procedures • changing demographic features • rise of chronic and non-communicable diseases

3.1.3. Strengths of the Medical and Health Care Sector

Is the region capable of harnessing the opportunities offered by the dynamism of the tourism sector, changes in demographic and morbidity structure as well as rise in income and expansion of the middle class? The answer to this question is found in Table 1 where a list of

strengths in the sector is given that can harness these opportunities and make the region indeed a global hub for medical and health care services.

Notwithstanding the share of Thailand and Singapore in the medical tourism market in the region Malaysia has something to offer to establish a niche in medical and health care travel industry. For one the medical cost in the country is relatively cheaper compared with regional competitors. In addition, the healthcare sector has highly-trained medical specialists, up-to-date facilities and supporting services comparable with the best in the world. These two factors has been cited as the major reasons for the increase in foreign patients from Singapore, Australia and European countries seeking health services including those in the area of cardiology, hematology, dermatology and neurology. Malaysia has also been successful in attracting patients from such countries as Indonesia, Vietnam, China, Myanmar and Cambodia. (Dahlui & Aziz, 2012).

The Malaysian healthcare sector draws its strengths from its multi-ethnic population and culture that can understand the languages and culture of Indonesia, India and China. In addition, the use of English language in many sectors of society including health and medical services can attract patients from the large English speaking world. Malaysia is likewise peaceful and has a stable political environment that attracts foreign investors as well as tourists. The proximity of Malaysia to Indonesia, Singapore and other countries in East and West Asia can likewise attract medical tourists. The modern treatment offered by many private hospitals on various specialized medical treatment is one of the major strengths of the Malaysian health care tourism industry coupled by relatively lower costs. This feature is reinforced by a strong association among private hospitals that coordinates with the government in the delivery of safe and high quality medical treatment. “Malaysia has a parallel medical system, the traditional and complementary medicine (TCM), that can attract various peoples in the region familiar with these alternative systems”. The quality of medical practice and provision of health services is maintained through a well established quality assurance system. (Dahlui & Aziz, 2012)

Despite differences in policy perspectives and the problem of financing, Singapore continues to be a leader in the healthcare and medical travel industry in the region. The attraction of Singapore as major medical tourism destination lies on its strengths which include the state of the art medical equipment as hospitals benchmark with the global players, quality and standard of medical care, high quality of medical professional workforce sufficient new products and services, service orientation, a large number of private hospital beds, variety of service choice. In addition the domestic and external market environment is

largely supportive of the expansion of health sector. Local training institutes and universities are also contributing to the formation of human resources to provide skilled medical professionals. In addition, the government commitment of maintaining low barriers to entry has attracted foreign capital to expand the healthcare sector. There is clear policy coherence between local and foreign healthcare service providers. (Phua & Pocock 2012)

In Thailand the competitiveness of the medical tourism industry is anchored of a number of strengths. A number of private hospitals are in place and have invested heavily in modern equipment and facilities the 1990s while availing of a number of government incentives. Another strength working for the industry is the “huge number of expatriates living in Bangkok and the over 10 million tourist arrivals” annually are the ready target market for the Thai medical and health care industry. Aside from adopting the Western medical system, the production of Thai medicines, massage and herbal products do add up to the strength and variety of services in this sector. All these positive factors have been reinforcing each other with the active support of government with policies conducive to the development of the sector including investment in technical training and higher education for the preparation of skilled health professionals. (Supakankunti & Herberholz, 2012)

3.1.4. Constraints: Weaknesses and Threats of the Medical and Health Care Sector

However, these opportunities can be hampered by a list of weaknesses and threats to the sector. Against this positive backdrop is a set of weaknesses including internal and external brain drain among health professionals from the public hospitals to private hospitals that can threaten the ability of the public hospitals to provide quality services. Although traditional and complementary medicine (TCM) is one of the positive features of the Malaysian health care travel industry it is however, “not well organized and its practice not fully regulated” that may endanger safety and quality. Although Malaysia boasts of modern health facilities and excellent health professionals there is a growing concern on the quality of health professionals particularly nurses with the proliferation of private nursing schools. There is likewise concern on the quality of training of medical doctors from local and overseas medical schools. (Dahlui & Aziz, 2012)

In terms of weaknesses, the disparity in the quality of health professionals and the quality of management staff may threaten the expansion of the health care sector. Although the country boost of highly skilled health professionals Singaporean health administrators are not up to “international standard for both large and small healthcare service providers”. Adding to the list of weaknesses is the segmentation of the health care travel industry in the region.

“The Thai and Malaysian market can compete on the basis of cost advantage and Singapore caters to high end and complex health and medical services. There is a lack of market for middle income patients which Singapore can miss given the impact of competition brought by out of pocket payments (OPP) on the price of health care services”. In addition, limited information available on the pricing of health services may present as a threat in attracting both local and foreign patients and raising demand. In contrast, “the availability of credit to corporate healthcare players is generally high but the limited access to external funds/ credit could pose a potential threat for SME expansion in healthcare”. The impact on the public health system and access for local patients can present a threat that can intensify the debate on whether health is a trade or public good issue. Public opposition to medical tourism stem from the “high cost to the public sector and local consumers in terms of public to private health worker brain drain and rising medical costs induced by a fee-for-service payments model”. (Phua & Pocock 2012)

As part of the overall healthcare sector of Thailand the medical tourism sector is likewise faced with problems affecting the entire health care sector. One of the problems includes the production of qualified health professionals to meet the increasing demand for medical tourism. The training institutions and universities may not be enough to produce the quantity and quality of health professionals needed in an expanding health care travel industry. Aside from the production issue is the problem of distribution of health professionals that currently is causing internal brain drain. The problem of internal brain drain arising from geographical imbalance may further highlight the bias towards the provision of health and medical services for foreigners at the expense of health services for the citizens. This can led to the problem of accessibility and higher medical costs for ordinary Thais in the light of stiff competition created by the demand by foreign medical tourists. (Supakankunti & Herberholz, 2012)

Table 2. Weaknesses and Threats in Medical and Health Services in the ASEAN

Malaysia	<ul style="list-style-type: none"> • internal and external brain drain among health professionals • TCM is unorganized and unregulated • quality of nurses from expanded nursing schools • quality of doctors from medical schools overseas • medical tourism may pose bio-security and nosocomial risks • financing schemes may favor foreigners over citizens
Singapore	<ul style="list-style-type: none"> • disparity in the quality of health professionals and the quality of management staff • segmentation of the health care travel industry in the region • limited information on price of health services • limited access to credit for SME • debate on economic gain vs. social service
Thailand	<ul style="list-style-type: none"> • limited number of training institutions to meet expanding demand in health care travel • internal brain drain of health professionals • impact of medical tourism on provision of public health services • inadequacies in foreign languages • regulations on treatment in foreign countries • portability of medical insurance • malpractice

Related to these weaknesses is number of threats that may weaken the health care travel industry in the medium term. The reform on the healthcare financing scheme may lead to a competition for health resources between domestic and foreign demand for health services and may favour the latter. In addition, medical tourism may pose bio-security and nosocomial risks to both patients' home country and the country providing the medical services in terms of higher rate of cross infection, spread of pandemic and transplant failures. Lastly, the health care industry may be engulfed with legal issues pertaining to the negligence of medical service providers. (Dahlui and Aziz, 2012)

The vibrancy of the sector in the future is likewise threatened by a long list of issues and problems. For example the problems with laws and regulations regarding the medical treatment in foreign countries and regulations on the hiring the foreign doctors may pose a threat to the industry. There is also ambivalence on the financial and managerial capacity of local hospitals to compete with the global players. Inadequacies in language skills of health professionals, insufficient number of health care service providers, absence of mechanisms against malpractice, limited resources to finance expansion of hospitals and the intense competition from regional players may jeopardize the dynamism of medical tourism in Thailand in the future. The universal coverage system under the National Health Insurance policy has also undermined the feasibility of the sector. On the other hand, the high cost to

public sector in promoting private HSPs in terms of brain drain and rising prices for local consumers can make the private sector inaccessible. (Supakankunti & Herberholz, 2012)

3.1.5. Key Players in Health and Medical Tourism

One of the major factors that has contributed significantly in putting the region in the global map of healthcare and medicine is the presence of several internationally competitive hospitals. In Malaysia, the sector has a number of well-known hospitals including the i) **Gleneagles Intan Medical Centre** that specializes in maxillofacial/facial cosmetic surgery, neurosurgery, plastic and reconstructive surgery; ii) **KPJ Ampang Puteri Specialist Hospital** one of the most modern of its kind in the region with MSQH accreditation and MS-ISO 9001:2000; iii) **National Heart Institute (IJN)**, with specialization in cardiovascular and thoracic medicine for adult and paediatric heart patients; iv) **Sime Darby Medical Centre Subang Jaya**, an award winning tertiary-care hospital with JCI and MSQH accreditation and ISO 9001-2000 with specialists trained in UK, Australia and USA; v) **Sunway Medical Centre** that provides professional clinical expertise for a wide range of inpatient and outpatient specialised healthcare facilities, health promotion programmes; vi) **Loh Guan Lye Specialists Centre**, a "One-Stop" Medical Centre providing a very comprehensive and up-to date quality healthcare services and facilities ranging from prevention, diagnosis and treatment of a wide range of diseases and medical conditions to aesthetic procedures and health screening packages in a warm and caring environment; vii) **Columbia Asia Hospital, Seremban** provides multidisciplinary healthcare services covering outpatient and inpatient specialist services utilizing the latest, effective and affordable medical technology. (Dahlui & Aziz, 2012)

In Singapore, the key players in the health care and medical tourism are dominated by large holding companies including the Parkway Pantai Limited, Raffles Medical Group (RMG), and the Thomson Medical Pte Ltd. The **Parkway Pantai Limited** is a holding company controlling one of the region's largest integrated private healthcare providers with a network of 16 hospitals throughout Asia, including Singapore, Malaysia, Brunei, India, China and Vietnam, and United Arab Emirates. In Singapore, the Group owns **Parkway Group Healthcare Pte Ltd** and **Parkway Hospitals Singapore Pte Ltd**, which operates three of Singapore's major healthcare providers: i) **Gleneagles Hospital**, that specializes in cardiology, gastroenterology, liver transplant, obstetrics & gynecology, oncology and orthopedics; ii) **Mount Elizabeth Hospital**, one of the largest hospitals in the region and a reputation for having the largest number of cardiology and neurology surgeries in the region;

and iii) **Parkway East Hospital**, a private general acute care hospital that has clinical expertise in surgery, pediatrics, obstetrics and gynecology, and cardiology. All these hospitals have international accreditation given by the Joint Commission International (JCI). In Malaysia, the Group owns **Pantai Holdings Berhad** which operates nine **Pantai Hospitals** and two **Gleneagles Hospitals**. Parkway Pantai Limited also operates 40 **ParkwayHealth Patient Assistance Centres (PPAC)** across the globe. (Phua & Pocock 2012)

The **Raffles Medical Group (RMG)**, on the other hand, is one of Singapore's largest private integrated healthcare providers. The group runs a network of clinics, hospitals, surgical centers, specialty units and medical laboratories throughout the country. It owns a part of the Raffles Hospital and has diversified into other business activities such as consultancy services and manufacturing its own range of health care products. RMG also operates over 50 clinics across Singapore, medical laboratories and an imaging centre. It has likewise established overseas presence overseas in Hong Kong and Shanghai. The group draws its foreign patients from the Gulf, Indonesia, Malaysia and Indochina. (Phua & Pocock 2012)

The **Thomson Medical Centre (TMC)**, now known as **Thomson Medical Pte Ltd**, is known for its specialization in the areas of obstetrics & gynaecology and paediatrics. TMC provides a comprehensive range of fully integrated services including medical, surgical, therapeutic, diagnostic and preventive healthcare, and specialised services such as fertility treatment. Thomson International Health Services Pte Ltd is the international arm of the Group that explores and develops strategic partnerships, healthcare consultancy and management projects as well as investment opportunities in the region. It has secured its first major hospital consultancy and management project in Vietnam in 2010. (Phua & Pocock 2012)

In Thailand, the list of key players in health care and medical tourism is dominated by three major hospital groups: Bangkok Hospital, Samitivej Hospital, and the Bumrungrad Hospital PLC. The **Bangkok Hospital** is owned by the Bangkok Dusit Medical Services PLC (BGH). BGH is the largest private hospital operator in Thailand and has a very strong network of brand hospitals. In 2011, the company owned 28 hospitals, of which 7 have achieved JCI accreditation, with a total of 3,929 registered beds (TRIS, 2011a as cited in Supakankunti & Herberholz, 2012). Aside from its personalized medical services, the Bangkok Hospital offers a full range of support services are provided for patients, which include limousine transfer to and from any destination in Bangkok, accommodation

arrangements, visa extension services, and even tours for patients' families. Bangkok Hospital is accredited by JCI. (Supakankunti & Herberholz, 2012)

Samitivej Hospital and its network facilities provide healthcare services for mid- and high-end patients. Like the Bangkok Hospital, Samitivej Hospital is a leading provider of medical care in Thailand and also serves international tourists. Samitivej Hospital offers comprehensive health service through a team of physicians in all areas of specialty along with modern medical instruments and warm services. Samitivej Hospital is also accredited by JCI. (Supakankunti & Herberholz, 2012)

Bumrungrad Hospital PLC operates a multi-specialty stand-alone hospital in Bangkok and holds a leading position in Thailand's private hospital market. The hospital targets high-end domestic and international patients, which account for about 60 percent of total revenue (TRIS, 2011b). The hospital specializes in allergy treatment, breast care, dermatology and skin aesthetics, eye laser refraction, fertility and IVF, hypertension, nephrology, neurology and plastic surgery. The company is also involved in the rental of properties, provision of clinical research services and investment in healthcare and related business, in Thailand and abroad. (Supakankunti & Herberholz, 2012)

Given the sizable number of hospitals in the region, the involvement of private sector particularly well-financed holding companies, state of the art facilities and equipment, well-trained medical professionals as affirmed by international accreditation, varied specialization as well as attention to the needs of the foreign patients the region is indeed has a mature environment and ready to be a global hub in healthcare and medical services.

3.1.6. Issues Confronting the Health and Medical Tourism in the Region

a. Governance

One of the key issues confronting the health services sector is whether the provision of health services particularly in health and medical tourism is a trade concern or a public good issue. This has been a major consideration in various discussions on trade in services in general, and on education and health services in particular. Since provision of health services entails some public funds, liberalizing this sector may entail some public subsidy to the consumers including foreigners. If some of the consumers of this publicly provided services are foreigners, it may be difficult for local consumers and taxpayers to understand such public assistance. This is a legitimate concern since foreigners are not paying taxes while enjoying the subsidy given by the government through the use of health services.

At the international level this issue has given rise to differing perspectives on health services coming from the WHO, on the one hand, and from the WTO, on the other hand. This divergence in views is observed likewise at the national level between the Ministry of Health and from the Ministry of Trade. For example, despite the huge economic benefits of medical tourism as articulated by the Ministry of Tourism and Ministry of Trade of Singapore, the Ministry of Health was lukewarm in endorsing Singapore Medicine. (Phua & Pocock 2012)

The conflict is rooted on which aspect of the provision of health services should be pursued: the economic gains from the expansion of trade in health services or the social aspect of the delivery of a public good. The conflict arises not only in terms of the thrust but in terms of the objective being pursued at the societal level - to be more efficient in the delivery of services or to be more equitable. Aside from international and national discourses these conflicting views affect the promotion of the economic gains or social value of health services. This trade-off will continue to emerge in issues confronting the liberalization of trade in health services. Related to this is the equity issue arising from the public good and subsidy of the government as well as the need to have accessible health services for citizens.

However, mechanisms can be worked out so that provision of health services can be efficient and equitable at the same time. One way of addressing this issue is to price the service at full cost for both citizens and foreigners alike. However, citizens can still avail of government subsidy through discounts from national health insurance schemes as practiced in many countries in the region. In this way a non-citizen from abroad can also avail of the excellent health services that the country offers at full cost without enjoying the subsidy from the government. At the same time, since it is part of government national interest to subsidize the provision of health services to its citizens, it can cost the service at a subsidized price.

b. Delivery

The emergence of the dual provision of health services can likewise threaten the trade in health services. Aside from funding, the expansion of trade in health services may entail a re-allocation of resources between the private and public health sectors. A pertinent question should be answered by policy makers, will the sector respond with bias towards the production of services whose prices are market determined at the expense of the basic and primary health services? This is another legitimate issue since the price is relatively higher in medical services that are open for foreign consumption. But this may lead to the under-

provision of some primary health services and result in the disparity of compensation health professionals between sectors. The dual system of delivery highlights the economic-social dichotomy as well as the equity and efficiency trade-off confronting health services sector. The private provision may be efficient with full cost pricing but not as accessible as the public provision which is highly subsidized for equity considerations.

One way of addressing this issue is for the government to continue subsidizing primary health services provided by the public hospitals. To address the disparity in salary between sectors and the under-investment in public hospitals, the government can likewise augment the compensation package of health professionals in the public sector and increase its capital outlay in public hospitals. Funding from this additional compensation as well as public investment can be derived from taxes on the income of private health institutions and from their income derived from the provision of health services to foreigners. The difference between the subsidized cost and the full cost of privately provided services may be used to create a fund to finance the compensation differentials between public and private health professionals and finance investments in public hospitals. Related to the issue of governance, this tax cum subsidy measure can address the apprehension of some sectors in liberalizing trade in health services.

c. Financing

Financing is also related to the issue of delivery and the conflict between efficiency and equity considerations. Many of the health services particularly in private-funded hospitals are financed through out-of-pocket expenses. Consumers are willing to pay the provision of quality service made by private hospitals. However, because of the high cost or full cost pricing in these privately run hospitals they may not be accessible to low income individuals.

With liberalization of trade in health services the entry of foreign patients can further increase the price of health care because of competition. This has implications on the way provision of health services is financed. Given that majority are using out-of-pocket expenses, higher price due to liberalization may imply higher out-of-pocket expenses while reducing other expenses in other goods and services. On the other hand, those who cannot afford the additional cost may seek public hospitals and put a pressure on these public institutions. The lesson from Thailand may be instructive. With the introduction of universal coverage for health insurance the demand for public hospitals has surged at the expense of the private hospitals because the government subsidy is lower than the unit cost in private

hospitals. It created an imbalance where public hospitals are fully utilized while there is under-utilization of capacity in private hospitals.

Although those enjoying health insurance may seem to be unaffected by the impact of liberalization of trade in health services since they are fully covered, the increase in price of medical care due to trade in health services may also increase the insurance premiums subsequently for those currently covered by health insurance. In addition, this can also have a budgetary impact on the government which is financing the operations of public hospitals and a variety of public health insurance. Thus, the impact of liberalization on the cost of health care may further exacerbate the existing inequities in financing health services and making it less affordable and less accessible.

Because of the public good issue, re-allocation and financing, the liberalization of the health sector will have to be selective. Only those whose cost can be privately internalized by service consumers may be liberalized. This may cover highly specialized medical services including cosmetic surgery, complex procedures, and chronic ailments. If the health sector is highly subsidized by the state, full cost pricing or a user's fee should be charged to the foreign patients. For citizens and other marginalized sectors in the domestic economy that have to be subsidized they can be given discounts through a national health insurance scheme.

d. Human Resources

In terms of human resources in the health sector the issue of migration becomes prominent. Currently there is an observed movement of health professionals from public to private (less endowed to more endowed sectors) hospitals, creating a two tiers health system. With the liberalization of trade in health services this internal sectoral migration will be further magnified as the gap between public and private hospitals becomes wider. It is possible that the pull of the private hospitals will be more intense so that doctors and health professionals may be attracted to these private hospitals at the expense of the public and primary health services. In addition to this internal migration the liberalization of the health services sector may encourage the inflow of foreign health professionals.

Since the private sector is reaping profits from the domestic market and transactions under trade in services, these hospitals are levied with income tax. Part of government revenues can be used to subsidize the public sector health primary health facilities and doctors' compensation to mitigate the impact of internal migration. Aside from the income tax, the possibility of imposing a tax on the egress of doctors and health professionals to

private hospitals can also be explored. Hospitals that have been liberalized can be charged with a special levy for their role in draining the public hospitals of health professionals especially if these doctors' education were subsidized by the state.

e. Regulation

There are efficiency issues and equity considerations on the regulation of health services. This is due to the choice between clinical quality as against quality service orientation by the consuming public. The minimum requirements of standards for clinical quality are mandated for both public and private hospitals by health regulatory agencies. However, in private hospitals, the quality of service may be more differentiated and they are willing to go beyond minimum clinical quality to improve their services. For these amenities the patients have to pay a premium to cover for extra and improved services. With this the equity issue may arise as there will be hospitals for the poor as against hospitals for the rich who are able to afford the added services. In terms of trade in health services this means that for the health sector to be competitive globally, it has to go beyond the minimal clinical quality and provide extra service that consumers both domestic and foreign are willing to pay. Although payment will be different between public and private hospitals, the regulatory standards will be the same in the practice of any profession. What will differ is the degree of specialization of the health professionals, the equipment and the quality of services.

Another regulatory issue pertains to the qualifications of foreign health professionals to practice in foreign territories. Domestic regulations of host countries may prevent these foreign doctors to practice outside their countries for various reasons including differences in education, training, experience and other qualifications. One way of addressing this issue is for have reciprocity clauses in the regulatory measures governing the practice of health and medical professions in the countries in the region. Another avenue is the establishment of mutual recognition agreement on various professionals to settle these differences through accreditation and certification

3.2. Creative Services

3.2.1. Basis for Promoting Creative Services

In recent years many countries across the globe have underscored the need to develop creative industries because they have taken notice of the potential economic value of tradition and culture for export promotion. Aside from employment and income generation, creative

industries can strengthen the national image and local identity, support the utilization of renewable resources and have positive social impact. (Simatupang, *et al.* 2012)

In Singapore the Ministry of Information, Communications, and the Art (MICA) through the Economic Review Committee (ERC) has identified creative industries as one of the new areas in the services sector that has a lot of potentials for economic expansion. For example, DesignSingapore, a component of the Singapore Creative Economy, is aimed at making the country as the region's center for excellence in design. Another program of MICA is to position Singapore as the land of opportunity for the creative industries by "nurturing creative talent, stimulating creative ideas, and fostering creative effort". (Simatupang,*et al.*, 2012)

In Thailand the importance of creative industries is anchored on the structural changes brought about by the emergence of a knowledge-based economy. As the economy of Thailand matures and opens to the opportunities of a knowledge-based economy the stage for the creative industries is positioned. The country has sought to enhance its role in international trade by focusing on knowledge and creativity-based commodities and services with enhanced value added. As wages increases the country is gradually losing its comparative advantage in labor intensive commodities and considers knowledge as an important factor in promoting future economic development. Although not considered a major exporter in the field, Thailand was ranked 17 of top 20 exporters of creative goods in 2005. (Simatupang, *et al.*, 2012)

In Indonesia the promotion of the creative industries as viable avenues for job creation, poverty eradication, increasing national income, and nurturing national pride has been articulated in several official documents in recent years including the Instruction of the President in 2009, the Vision and Mission of Creative Economy for 2025, the Creative Economy Development Plan 2009-2015 and the 14 Creative Industries Sub sector Development Plan 2009-2015. At least 27 ministries/institutions and local government units are involved in the formulation and implementation of these several plans meant to enhance the role of creative industries in the economy. (Simatupang, *et al.*, 2012)

In the Philippines the improvement in ICT and the growing demand for fast and easy access to information has led to the growth of creative industries. The animation sector, for example, has branched from the phenomenal growth of the BPO sector in recent years that has brought employment and export receipts to the economy. The utilization of digital publishing, on the other hand, has gained popularity among households, firms and government across the globe including the Philippines.

3.2.2. Opportunities for Creative Services

There are several factors that serve as opportunities for the development of the creative industries in the region. First, the emergence of a knowledge-based economy brought about by the rapid improvements in information, communications technology (ICT). The technological transformations characterized by greater capacity, speed, reduced costs, and increases accessibility in ICT has facilitated cross border transactions and expansion of knowledge. With the significant reduction in the cost of transmitting information people across the globe can now access information at light speed. This development paved the way for the structural transformation of the economy. As an economy matures, the structure of production shifts from agriculture to manufacturing and to the services sector. In many countries in the region we observed the prominence of the services sector and the emergence of the creative industries (Tullao 2001).

The extensive use of knowledge in various economic activities emanating from the explosion of the global stock of knowledge has made it the new engine of growth. The use of knowledge has displaced labor and capital as the key factors explaining the competitive edge of economies. As a consequence, a number of economies in the region that have lost their competitive advantage in labor intensive commodities to countries with surplus labor and lower wages are now exploring the opportunities in knowledge-based industries. Knowledge is not only expanding exponentially, it is now easily accessible across the globe due to the rapid developments in information and communication technology. The interactions between the developments in information technology and the explosion in knowledge are rapidly pushing the emergence of a knowledge-based economy (Tullao 2001). Increased dependence on skilled professionals and the utilization of knowledge demonstrate the shift from physical capital and manual labor as major inputs of production. Consequently, the share of knowledge-content services in products and services being traded globally has risen exponentially. Thus, technical innovations and the competitive use of knowledge, rather than the abundance of traditional productive resources, have increasingly provided the competitive edge of today's economies. The integral role of knowledge, its application in various economic activities and its emergence as a new engine of growth is attributable to a great extent to the phenomenal explosion in the global stock of knowledge.

With the improvements of ICT the importance of the services sectors become more evident including creative services. With education and access to digital environment open to everyone, countries can see these as an opportunity to develop knowledge-based industries including creative industries. These developments in ICT have positive impacts on the

development of animation, design and electronic publishing as legitimate economic sectors to be pursued. With the introduction and evolution of the internet as a tool for communication and dissemination of information the utilization of time has altered. Presently, a person spends on average of 11 hours and 24 minutes online per month. The internet is mainly used to send e-mails, news and weather, information search, surfing, research, or instant messaging (Pew Internet and American Life Project as cited in Sharma, n.d.). The demand for digital materials (i.e., books) is fuelled by the accessibility and widespread use of the internet and the availability of gadgets that facilitate their use (i.e., computers, mobile phones, and e-book readers). (Castillo, 2012)

Another factor that can serve as opportunity is the enormous demand for creative services. As mentioned earlier with the development of ICT it has changed the mode of supplying a service including creative services. The digital content subsector is also faced with opportunities that can further reinforce the potentials of the sector. For one the “domestic market is huge and growing while internet penetration, outsourcing and various games are inspiring small developers”. The ease in the transfer of technology from foreign developers to local developers as well as adequate telecommunication facilities allow products/services developed in the subsector a chance to be successful in both internal and external markets. The government supports the sub sector with fiscal incentives that permit the conduct of research and product development. In addition developers are currently taking formal training in design that gives them “skills for accreditation and certification which leads to higher compensation”. (Simatupang, *et al.* 2012)

In addition, global demand for animation for entertainment purposes is quite substantial which was valued at USD 80 billion in 2010 (WTC, 2008). This huge market and potential global demand has created a a lucrative market for animation services. Competition for subcontracted animation services, however, is fierce among the major players in the region, namely: Singapore, South Korea, Philippines, India, and China. (Castillo, 2012). On the supply side governments in the region particularly Singapore, Malaysia, South Korea and China are actively supporting their animation sectors with co-production programs, provision of tax incentives and domestic market penetration policies (Fei, 2008; Young, 2008 and Seah, 2008 as cited in Castillo, 2012), which gives them an edge in securing projects in the domestic and international markets.

Likewise the increasing prosperity in the region has created an opportunity for the creative industries. As income increases, households can also afford goods and services beyond the basic necessities including the way they look and the way their homes are

constructed for comfort and aesthetics. This in turn has opened up opportunities for interior and fashion design. In terms of external demand, the exacting requirements of global markets create a high-end market niche in which companies compete by brand-names, new ideas and designs with cultural characteristics. This highly differentiated demand in the global market creates incentives for Vietnamese designers to reach out, understand and serve high-end customers. Knowing these needs and nuances of the global market are facilitated through information from media and social networks. (Thanh, *et al.* 2012)

Along side with the enhanced income of consumers of outputs of creative industries Indonesia is banking on its unique position as the largest Moslem country in the world. This serves as an opportunity for “entrepreneurs and designers to create a niche in Moslem fashion making and make Indonesia the Mecca of Moslem fashion and design” a market estimated to have generated at USD 96 billion revenues in 2010. (Simatupang,*et al.* 2012)

The third factor that serves as an opportunity is the increasing varied applications of these creative services in the other sectors of the economy. For example, aside from the traditional market for animation output, demand for animation services is projected to expand with the introduction of gadgets (i.e, tablets, hand-held devices for e-learning and others). Beyond entertainment, there is also an untapped domestic demand including e-learning, corporate animation, and animation in education. (Castillo, 2012). In design, various applications of interior design have the potentials of improving the competitiveness of the construction materials, garments and textiles. Creative industries have huge potentials in toys and other services.

The growth in digital publishing for textbook is expected to increase in the future with the expansion in scope and use of open educational resources. Although digital publishing has been a threat to traditional publishing and bookstores, it has been argued that online bookstores serve as a marketing tool, which boosts the sale of published materials, particularly new authors and back list books. In fact, some e-book sales are prompted by customers owning the traditional published versions or owning the electronically published version encourages the user to buy the traditionally published counterpart. (Castillo, 2012)

a. *Strengths of Animation*

Although the subsector is still relatively small it has a lot of potentials for income generation, employment absorption and exports. These potentials are drawn primarily on the strengths of the industry. On the business scope the subsector can be viewed as a “hobby of the developer and as a business enterprise. As a hobby it can trigger tenacity and creativity” while as business enterprise it can induce entrepreneurship as local talents and resources are networked with the global market. Aside from the low labor cost in design the short life cycle of games can likewise contribute to the growth of the industry. (Simatupang, *et al.*, 2012)

Table 3. Strengths and Opportunities of Animation in the ASEAN

Indonesia	<ul style="list-style-type: none"> • hobby and as a business enterprise • low labor cost • short life cycle of games • large domestic market • growing internet penetration • ease in the transfer of technology • adequate telecommunication facilities • government support • skills training for accreditation and certification
Philippines	<ul style="list-style-type: none"> • continuous training on traditional methods (i.e., hand-drawings) which stimulate creativity • Local animation firms provide in-house training • Training programs from educational institutions • Credibility in the global market through networks with foreign-owned animation firms • Filipino affinity with the United States enables appeal to American audiences • Adaptability of Filipino artists to changes in techniques • Strong business association in the industry • Reduced production costs plus decline of the cost of local broadband internet • Faster internet connections • Demand for animation services is projected to expand with the introduction of gadgets • Domestic demand generated by e-learning, corporate animation and animation in education

implementation of action programs on the development of economic activities based on creativity, skills and individual talents. Among the mission of this economic thrust is “to empower human resources to increase the contribution of the creative industries to GDP, increase national exports based on creative, and increase employment among others”.

Included among the goals of the creative industry is “to develop industries that are leading in domestic market and abroad and developing technology that supports the creativity of the people”. Two of the 14 creative industries are digital content (interactive, leisure software, games and animation) and fashion. (Simatupang, *et al.*, 2012)

Although the industry is still in the early stage of development it has a lot of potentials given the strengths of the sector and opportunities open to it. The competitive edge of the Filipino companies in animation over their foreign competitors is based on the continuous training on traditional methods (i.e., hand-drawings). According to the industry association, hand-drawings stimulate creativity and, thus, a factor that strengthens the competitive edge of the local industry. In addition, local animation firms provide in-house training to their new recruits that reinforce training programs taken from educational institutions. The industry has also built its credibility in the global market from the presence of large foreign-owned animation firms as well as the extensive foreign affiliation of local firms. This network allows them too to secure financing, linked with creative experts abroad and connected with foreign clients. Moreover, the cultural affinity of the Filipinos with the United States arising from its colonial ties in the past is working for the industry as animators are able to convey humor, use idiomatic expressions and other cultural nuances to the American audience. The expertise of Filipinos in 2D animation is unmatched despite the rise of competitors since Filipino artists are able to adjust to changes in techniques and current applications. Lastly, there is a strong business association in the industry that established a well-functioning mechanism in assisting members in marketing and distribution. (Castillo, 2012)

b. Constraints : Weaknesses and Threats In Animation

These strengths and opportunities, however, are confronted with weaknesses and threats that may slowdown the future development of the digital content sub sector. The cost can be high for developing production-based interactive games as well as for marketing. Small companies are constraint to reap economies of scale given the limited distribution and commercialization channels. There are also problems with the quality of human resources in game development. “The lack of technical proficiency of managers together with their limited language skills and the low level of innovativeness make them disadvantaged in competing globally. Businessmen do not appreciate the value of research and development needed to develop new products and services”. Designers, on the other hand, lack the entrepreneurial and managerial skills in translating their creative talents in creating value

added for the economy. In terms of the infrastructure the quality of internet is not stable. (Simatupang, *et al.*, 2012)

These weaknesses are further fueled by threats including the perception of limited career opportunities or less promising career in interactive games. There is also a “brain drain problem with domestic developers migrating overseas to be employed in foreign companies”. The financial sector is likewise lukewarm in extending credit in game development. The rules on interactive games distribution in cyberspace through the internet are not yet stable and not conducive to business. Since software and computers are quite expensive vulnerability to piracy and violation of intellectual property can make games development a risky business. (Simatupang, *et al.*, 2012)

Table 4. Weaknesses and Threats of the Animation Industry in the ASEAN

Indonesia	<ul style="list-style-type: none"> • prohibitive cost in developing production-based interactive games as well as for marketing • Difficulties in reaping economies of scale • problems with the quality of human resources • lack of technical proficiency of managers • limited language skills • businessmen do not appreciate the value of research and development • designers lack the entrepreneurial and managerial skills • quality of internet is not stable.
Philippines	<ul style="list-style-type: none"> • Capacity to absorb additional and large projects is restricted due to the limited sizes of companies • The industry cannot draw creative talents that can develop original content • Few artists can work with new technologies in 3D • Difficulty of retaining skilled and experienced workers due to higher compensation overseas • Local companies do not engage in securing, marketing and distributing projects as much as they prefer completing animated projects • Preference of Filipinos for foreign goods which inhibits the development of original and home-grown content • Lack of facilities for training due to high costs of equipment • High costs of software licenses for digital animation • Inadequate institutional support

In the Philippines, a set of weaknesses and threats are softening the competitiveness of the animation sector in the medium term. Since many of the companies in the industry are small and medium enterprises their capacity to absorb additional and large projects is quite restricted and they cannot undertake large scale marketing. Although the Filipino animation

artists are good the industry cannot draw creative talents that can develop original content. Moreover, since these artists have competitive edge in the production of 2D animation there are few artists who can work on new technologies including 3D. In addition, since animation is a highly competitive industry globally there are difficulties in retaining skilled and experienced workforce because of the attraction of higher compensation overseas. Lastly, local companies tend to be lukewarm engaging in securing, marketing and distributing projects and prefer tasks associated with completing animated projects. (Castillo, 2012)

These weaknesses are accompanied by threats including among others the preference of Filipinos for foreign goods that inhibit the development of original and home grown content. Many training institutions often lack needed facilities to equip graduates with knowledge and skills in the use of latest animation technology because of the high costs of equipment. The high cost of software licenses for digital animation can also be an obstacle for the development of the industry. Lastly, inadequate institutional support limits market access and pushes up production cost. (Castillo, 2012)

c. Key Players in Animation

In the Philippines the key players in the animation sector include the following: i) **Toei Animation** - a Japanese company with a Philippine subsidiary that has worked on GI Joe, Transformers, Dragonball, Sailor Moon and Nadja; ii) **Top Peg Animation and Creative Studio, Inc.** – Philippine-owned company that has worked on Disney TV series like 101 Dalmatians, Tarzan, Kim Possible and Hercules; Top Draw – a new entrant in 2004 with a track record in the global market; iii) **Philippines Animation Studios (PASI)** – funded by a listed Malaysian company; iv) **Holy Cow! Animation** – specializes in 3D digital animation. In 2009 two of the five firms listed above – Toei Animation and Top Draw - as well as four members of the Association Council of the Philippines were included in the 2010-11 Philippines Top 15000 Corporations. (Goldstein and Tschang (2004) as cited in Castillo, 2012)

In Indonesia the key players include the following: i) **Agate**, one of the biggest game developers in Indonesia that has created a number of games including esGame, Online Game, Silverlight Game, Social Game, Mobile Game, among others; ii) **Bamboomedia** is known as the producer of a number of computer software applications for office, students, employees, large or small companies, and the children; iii) **Kinema Systrans Multimedia** has new facility which intended for Indonesia-Singapore's entertainment industries offering a comprehensive range of facilities for the production of films, workshops, animation studios,

and post production facilities, including visual effects; iv) **Castle Animation** specializes in producing animation for the international market. Its products include TV Series, Home DVD, TV Commercial, CD-Interactive, and Children’s Book that distributed locally and in the international market.

Although many of these firms are relatively small and medium enterprises the success of the key players in animation is based on their ability to penetrate the global market. This in turn has been possible with their active collaboration with foreign partners.

d. Strengths of Design: Fashion and Interior

The vibrancy of the fashion sub sector emanates from a number of positive features. There is a “unique ethnic touch in some of its products drawing from the variety of ethnic groups in Indonesia”. In addition, raw materials are readily available domestically and from the rest of the world because of trade liberalization. There is available expert manpower in design, production and software that allows innovations in designs. Ample supply of electricity and energy is likewise available and an increasing number of entrepreneurs are in the sector creating a vibrant industry. (Simatupang, *et al.* 2012)

Table 5. Strengths and Opportunities of the Fashion Industry in the ASEAN

Indonesia	<ul style="list-style-type: none"> • unique ethnic touch • availability of local and foreign raw materials • expert manpower in design, production and software • ample supply of electricity and energy • increasing number of entrepreneurs • huge domestic market • the largest Moslem country in the world • development in ICT • the demographic changes and demographic dividends
Vietnam	<ul style="list-style-type: none"> • Vietnamese tradition of artistry • Vietnamese are known to be very dexterous • Younger generations are dynamic and talented through working with seasoned designers • Focus on details, subtle sophistication • Sustained economic growth • higher living standards • Requirements of global markets create a high-end market niche which allows companies to compete by brand names, new ideas and designs with cultural characteristics • Differentiated global demand, facilitated through media and social networks

The design industries in Vietnam have positive features that can influence its growth. First, there is a tradition of artistry among the Vietnamese. Vietnamese are known to be

skilful with their hands. This creative trait of Vietnamese is matched by the dynamism and talents of the young generation of Vietnamese. Many of these young artists have explored opportunities to express their new and bold ideas by working as apprentice with more senior and seasoned designers or by learning-by-doing. These young designers have also kept up with the latest trends in design. In addition, the excessive focus on details, subtle sophistication, producing the best for the selected few, over massive production, or large quantities are artistic traits that strengthens the creative industries. (Thanh, *et al.*, 2012)

e. Constraints: Weaknesses and Threats of Design: Fashion and Interior

However, the sector has also weaknesses including the inadequate or limited exploration of the local content that can inhibit the differentiation and development of unique techniques and designs Indonesia is known. The local textile factories produce limited variety of textiles that constrain designers in making a variety of designs. Additionally, the machines utilized have lower productivity due to low levels of investment in new equipment. This is also a limitation in terms of the skilled workers available. Because many of the companies in the sector a small and medium enterprises they have expansion difficulties mainly due to the apprehension of the finance sector to extend credit. The weak relationship “among entrepreneurs, designers and business associations prevent the sector in fully take advantage of promotional programs of the government”. In addition, there are “no incentives or motivations for entrepreneurs and designers to develop a national brand as they focus only the best selling products”. Some local entrepreneurs have limited exposure and understanding of the demands and requirements of the global market and have limited skills in branding and creating market niches. (Simatupang, *et al.*,2012)

The viability of the industry may be further weakened in the future as several factors may threaten the industry. The strong market power of the suppliers of raw materials can increase production costs or disrupt the production process. The inflow of cheap fashion products from China through trade liberalization is a significant threat to the local fashion industry. Since domestic consumers consider price and utility when they purchase garments and fashion accessories instead of quality and unique designs local producers may be dislodge by cheap garment imports. Business procedures, overlapping regulatory measures and limited institutional support can serve as real threat to the viability of the industry. (Simatupang, *et al.*, 2012)

Table 6. Weaknesses and Threats in the Fashion Industry in the ASEAN

Indonesia	<ul style="list-style-type: none"> • limited exploration of local content • production of limited variety of textiles • low levels of investment in new equipment • limited supply of skilled workers • expansion difficulties of SME • weak relationship among entrepreneurs, designers and business associations • no incentives or motivations to develop a national brand • limited exposure and understanding of the demands of the global market • limited skills in branding and creating market niches. • strong market power of the suppliers of raw materials • inflow of cheap fashion products from China • business procedures • overlapping regulatory measures • limited institutional support
Vietnam	<ul style="list-style-type: none"> • Uneven playing field for small enterprises • Competition for resources and support are biased towards larger firms • Inadequately trained new generation of designers (out-of-date materials and practice) • Weak linkage between training institutions and the industry and Little connection between associations, universities and the market • Lack of professional management • Limited supply of high-quality fabric • Considered “producer of last resort” due to cheap labor • Little room for the cultivation of talent and creativity due to cheap labor • Infrastructure bottle-necks • Competition from China

Against these positive characteristics of the design industries in Vietnam are some weaknesses and threats that may undermine its competitiveness in the medium term. There is an uneven playing field for small enterprises. While garment, textile, and furniture manufacturing firms are mostly large ones with a lot of capital and support from the state, interior and fashion design firms are usually small. The competition for resources and support among large and small firms is a source of weakness for potential designing firms. (Thanh, *et al.*,2012)

Although there is a new generation of creative and dynamic designers they are, however, are not adequately trained. “There is insufficient training, the lack of professionalism, and the out-of-date materials that are mostly theory with very little, even out-of-date, practice”. The weak linkage between training institutions and the industry leads to retraining of new graduates. While there are plentiful of talented individual workers in the industry it is difficult to group them into productive teams mainly due to the lack of professional

management. Many of these creative entrepreneurs operate as independent contractors with large corporations or responding to individual demands. The limitation in the supply of high quality fabric is a major weakness holding back the fashion designing industry. The domestic market has not provided the quality products that serve designers' need. Imported fabrics, on the other hand, could come cheaply from China, or more expensively from Japan and other countries. There is little connection between the associations and universities, and the market. These business associations have not been able to "connect the pearls", relating individual talents across the country to help forming a coherent strategy for the industry development at a broader level. In short, associations play almost no impacts in enabling small private designing firms in becoming more competitive, generating information about export markets, supporting research and development. As a result, the many small but dynamic companies continue to struggle on their own. (Thanh, *et al.*, 2012)

f. Key Players in Design

Indonesia boasts of a number of firms in fashion design and interior design. In fashion design the following are the key players: i) **Batik Danar Hadi**, a holding company that helped in the development of batik art and batik business in Indonesia by popularizing the traditional Javanese traditional art and culture.; ii) **Eiger Adventure Gear**, a major player in adventure equipment industry in Indonesia whose products have penetrated markets in North America and Europe; iii) **Shafira**, a company that specializes in Moslem fashion drawing its business model from the huge Moslem population in Indonesia and the region; **UNKL347**, one of the pioneers in clothing and distribution outlet in Indonesia that specializes on urban design for the youth.

In Vietnam because fashion design is still at an early stage of development, there is no leading key players in fashion design per se although there are leading garment companies with design departments. The **Vietnam National Textile and Garment Group (VINATEX)**, is a big complex that includes 5 textile companies and garment school, which have their own fashion design division, and a national Vietnam Fashion Design Institute. Big enterprises such as **Garco 10**, **Viet Tien** (for garment) and **Phong Phu** and **Viet Thang** (for textile) have also their own design departments. Although these garments enterprises have their own designers, the ability of designing as well as capacity of production is still limited mostly borrowed or pattern from foreign partners and international trends. (Thanh, *et al.*, 2012)

In interior design, Indonesia has the following key companies: i) **Accupunto**, a company that combines aesthetic and ergonomics on every product they create which distributed in the US and Europe; ii) **Dedato**, a company whose strength is based on the integration of architecture, interior design, and visual design in furniture and other export products; iii) **LeBoYe**, a graphic design firm that started as a small enterprises; iv) **Urbane Indonesia**, a consultancy firm specializing in architecture, urban design, and project visioning that has established an international reputation by doing some overseas projects such as Syria Al-Noor Ecopolis in Syria and Changchun Financial District in China. (Simatupang, *et al.*, 2012)

Because interior design sector has not been clearly defined in Vietnam it is usually considered as a component of the construction sectors. Thus, the key players are really not interior designers but large furniture companies with design departments. The **Truong Thanh Furniture Corporation** (TTF) is one of the leading domestic companies with huge export earnings. The second layer of players in interior design is composed of **Duc Thanh Wood Processing Company** (GDT), **Thuan An Wood Processing Joint-Stock Company** (GTA), and **SAVIMEX** (SAV). They specialized in wood and wood products processing as well as furniture manufacture for domestic and foreign consumption. Other companies are **Hoang Anh Gia Lai Furniture** (under the big Hoang Anh Gia Lai corporation), **Starwood Furniture** (a 100 foreign-invested company), **Thompson Furniture** (a 100% foreign-invested company). (Thanh, *et al.*, 2012)

Although there are successful firms in the design sub-sector, their success lies mainly in the distribution of their outputs as applications of designs and not really fashion and interior design per se. They have become successful in clothing and garments industry and probably in furniture design and architecture.

g. Strengths of Digital Publishing

The strengths of digital publishing are drawn primarily from the introduction, immediate acceptance and widespread utilization of internet that made electronic materials available to anyone worldwide. Globally, almost a third of the people in the world have access to the internet with a typical person allotting an average of more than 11 hours per month (Sharma, n.d.). Accordingly, electronically published materials have potential international market that devote time perusing digitally published materials.

(<http://www.internetworldstats.com/stats.htm> as cited in Castillo, 2012).

Table 7. Strengths and Opportunities of Digital Publishing

Philippines	availability to wide range of consumers/readers ease in accessing, purchasing and updating materials lower publication costs relatively more environmentally friendly higher value added prestigious literary awards that recognize literary talent and creativity in the Philippines greater chance of being published higher royalties applicability to a wider range of media activity
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Second, the internet allows consumers immediate, convenient and easy access to electronically published materials (i.e., fiction and non-fiction books, journals, magazines, newsletters, etc.). Distribution is likewise efficient since purchase of digital publications can be done anywhere with a click of the mouse. “In addition, digital publishing is also an ideal storage and retrieval mechanism for information that requires frequent updating such as the news. Not only is it less costly but data also reaches its audience in a timely manner and provides an easy means for revising and correcting”. (Castillo, 2012)

Third, production as well as environmental cost reduction in digital publishing is quite substantial with the elimination of the use of paper and ink among others (Saxena, 2009 as cited in Castillo, 2012). The consequences of this reduced demand for paper and chemicals can be beneficial to the environment. Fourth, the broad spectrum of possibilities in organizing, presenting and packaging the content and text may not only enhance the entertainment value of the digital publication but can also improve its pedagogical functions. “Electronic publishing is posed to revolutionize data storage and retrieval, entertainment habits and broaden educational opportunities”. (Castillo, 2012)

h. Constraints: Weaknesses and Threats in Digital Publishing

Despite these strengths digital publishing is also confronted with a list of weaknesses and threats. Book piracy remains the most serious concern not only for traditional publishers but to digital publishing as well. Electronic materials like e-books are easier to copy and share/sell. They can be quickly downloaded, stored indefinitely in flash and hard drives, and shared with relative ease via e-mail, instant message, posted on websites, or copied to another

flash/hard drive. Copyright infringement goes hand-in-hand with digital piracy. (Castillo, 2012).

Table 7. Weaknesses and Threats of Digital Publishing

Philippines	<ul style="list-style-type: none"> • electronic readers are expensive • preference for traditionally printed books • limited titles • piracy • copyright infringement • rapid rate hardware and software obsolescence • greater competition
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The rapidly changing technology can also present a threat to digital publishing. With these changes certain formats/platforms that are used in accessing the digitally published work may become obsolete. Although digital publishing may be cheap and accessible with a given format/platform transporting these digital published works into a new format/platform may become prohibitive. This technological risk may hamper the development of digital publishing. Lastly, although digital book sales are growing at relatively rapid rates it is confronted with numerous competitors including online bookstores/aggregators/internet companies, self-publishers, traditional and established book publishers and traditional bookstores, make it a very competitive sector. (Castilo, 2012)

i. Key Players in Digital Publishing

In the Philippines the key players in digital publishing include i) The **Philippine Daily Inquirer**, a broad sheet offering on-line access to newspapers and magazines (including archives) in addition to the sale of printed newspapers; ii) **Summit Publishing Company, Inc.** –offers digital media, outside-of-the-home media and consumer events services; iii) **Vibal Publishing**, In support of its on-line publishing product line, particularly for educational materials, the company has established a hub for parents to promote e-learning; iv) **C&E Publishing**, on the other hand, primarily serves the medical and science books markets through its re-printing and distribution services.

Although electronic publishing is but an emerging industry in the Philippines, within the ASEAN region, Singapore has a well-developed, competitive and steadily growing

interactive digital media (IDM), for which digital publishing is a sub-sector. The Singapore IDM sector is composed of three sub-sectors: 1) firms involved in “creating, publishing, production, display, and distribution of IDM-related content” (Deloitte, 2012); 2) related industries engaged in production, manufacture, and sale of devices and equipment that enable consumers to access to IDM products and services; and 3) enterprises “that are involved in the development and purchase of IDM-related services” (Deloitte, 2012 as cited in Castillo, 2012).

According to the Deloitte (2012) study, the critical success factors of the enterprises comprising Singapore’s IDM sector are: 1) “increasing adoption of applications that are provided by Singaporean IDM companies to key players, such as **Singtel, StarHub, Maxis, and TelkomSel**”; 2) the attractiveness of the industry to foreign investors owing to the soundness, dynamism and future profitability of Singapore’s IDM industry; 3) the availability of talent and expertise, both local and foreign, in Singapore, which are essential inputs to all aspects of the IDM industry; and 4) increasing global reach, which is manifested through the “expanding [] international presence” (Deloitte, 2012 as cited in Castillo, 2012) of Singapore-based companies.

Finally, global players are recognizing Singapore’s potential as a means to reach the vast market in the Asia-Pacific region. **Amazon** is now hosting services in a data center in Singapore to expand their customer bases and explore possibilities in the interactive digital media in the region. **Indigames**, in fact, has already signified their intent “to launch a Facebook game based on the Indian Premier League (IPL), an extremely popular cricket league in India and around the world” (www.datacenterknowledge.com/).

3.2.3. Some Issues on Trade in Creative Services in the Region

a. Enhancing Value Added

The creative industries in the region whether fashion design, interior design, animation or printing and publishing share a common characteristic. They are relatively small in terms of their contributions to national income, employment absorption and export earnings. Despite this relative smallness and early stage of development it has a number of strengths and opportunities for growth and development as well as potentials for becoming the base for the services hub in the region in the future. In this light, the challenge for these industries is how to expand their value added and strengthened their linkages with other sectors of the economy particularly the manufacturing sector. Fashion design is essential in improving the competitiveness of the textile and garments industries. Similarly, interior design is intimately

linked with construction materials and furniture which has huge export potentials. Animation, on the other hand, has numerous applications beyond entertainment and education services for the domestic and global markets. Digital publishing is connected with a host of services industries including education, media and advertising. To this end, the value added and linkages of these sectors can be enhanced by expanding its horizon including revisiting the past for product development, discovering the global market for niches, exploring the potentials of the information and communication technology (ICT) for its varied applications and improving human capital for its productivity contributions.

b. Revisiting the Past

Many of the products and services in the creative industry can expand its contributions to the national income and its linkages by revisiting and rediscovering the rich cultural heritage of each country and drawing from it vast resources for the enhancement of the creative services. In animation for example, the value added is very limited since the artists are mainly confined with drawings from outsourced storyboards. Greater value added, however, can be created if the animation firms have control over a sizable portion of the production to distribution activities from conceptualization of the storyline to the marketing of the finish product. In this light, the artists and animation companies can source their stories from the wealth of folklores and local literature in the region. The success of the cartoon Ipin and Upin and its acceptance within and outside the region is rooted on the use of local color with a universal message. Similarly, fashion and interior designs can learn from the indigenous designs and transform them to be marketable in the global markets for textiles, garments, fashion accessories, construction materials and furniture among others. In printing and publishing the local literature in several countries in the region can be a rich resource of materials for books to be marketed domestically and internationally.

Although local materials have been used, and cultural heritage has been widely utilized in countries like Vietnam, Indonesia, Thailand and Malaysia, primarily for the domestic market the challenge for the creative services industries is to differentiate and transform these traditional designs, folklores and indigenous materials so that they can gain market acceptable in highly sophisticated and mature markets outside. Aside from spatial differentiation of market, the creative services sectors can also explore the application of these traditional designs and materials in other fields. For example, creative artists should explore the possible application of Batik in interior design and not only on textiles and garments.

Thus, the application of a country's cultural heritage as well as the spatial and sectoral differentiation of such applications can greatly enhance the contributions of the creative services sector to the economy.

c. Discovering the Global Market

Part of widening the horizon of the creative services industries is to explore the potentials of the global market. Technical capabilities and language skills may hamper the penetration of the global market now but the creative services sector should try harder in understanding the exacting demands of the global market. Once they understood it they can tailor their creative services to these tastes and create a market niche in a vast global market. What will differentiate the products and applications of these creative services is the rich cultural nuances that the region can offer in our designs, animation and print outputs. We can draw lessons from the success of our tourism industry in the region. The popularity of Thailand, Malaysia and Indonesia is beyond the beautiful beaches but the rich and unique cultural features flavoured in these destinations.

In addition, the global market should not only be seen as a potential market but also as an important site for securing modern production and distribution technologies. To this end, creative services firms will need to partner with some big players in their fields to assist them in the conduct of discovering opportunities in the global markets. It can be a vast space for sourcing for funds, networking with potential investors, venue for trade fairs and other purposes beneficial to the creative services sector.

d. Exploring the Potentials of ICT

With the rapid improvements in ICT and the extensive utilization of the internet, it is imperative that the creative services firms should explore this avenue in cyberspace. Understanding the global market through the internet is an efficient avenue for knowing changes in market demand and trends as well as sources of raw materials. This rich resource of information and possibilities can expand the production and distribution horizons of the creative services sector. The production of e-books can decrease the cost drastically and can have access to a wider distribution network. The rich cultural heritage can be tapped to be marketed abroad through the internet. For example, the English translation of major literary masterpieces in the region can be done electronically and circulated within the region and across the globe. In animation, there is an extensive use of computers and software that

explore the new developments including 3D animation. Fashion and interior design can use modern information technology in creating designs by using computer software.

e. Improving Human Capital

The quality of workers particularly the artists are important for the competitiveness of the creative services as well in expanding its horizon. The region can boast of a reservoir of creative talents but beyond innate talents they should be trained technically specifically in the use of modern technology, in extracting themes, ideas and designs from the tradition, and lastly the skills in managing business enterprises. The artist-owner may be creative but does not understand the management of business. On the other hand, you have an able entrepreneur but does not appreciate the temperaments of creative individuals. This inadequacy is one of the reasons attributed to the failure of some creative services enterprises and the inability of many to expand and become big players in the market.

One way of addressing this issue is to establish a regional training center for creative traditional arts. The center can be a cooperative initiative of the countries in the region to understand tradition of creative arts of various cultures in this part of the world. The center will likewise explore possibilities of applying indigenous games, traditional designs, folklores, and other aspects of cultural identity in the creative services sector including fashion, interior design, animation and publishing. It can draw students and artists from all over the region to be trained similar to the training programs in design centers in Europe, the US and Japan. Aside from training in design, the center can be a training ground for managers on how to manage human resources including artists and combine them with physical and financial resources to make the firm viable and grow. The center can create its niche in the market based on the quality of its graduates and in the way these graduates respond to global demand and manage their enterprises.

Although cheap labor has been a major strength of doing business in Vietnam, it serves as threat in the interior and fashion sector since Vietnam is considered as the “producer of last resort”. With cheap labor as their main objective in coming to Vietnam, there is little room for the cultivation of creativity and development and marketing of new design ideas. In addition, the infrastructure bottlenecks makes it expensive doing business in Vietnam especially the small and medium enterprises. Lastly, the competition coming from China can likewise threaten the interior and fashion design sector. (Thanh, *et al.*, 2012)

4. Options for AEC as a Global Services Hub

4.1. Possibilities of the Sectors in Trade in Services

4.1.1. Cross Border Transactions

In health and medical services supply Mode 1 or cross border transactions opens opportunities for medical transcription and telemedicine, among others. Given the higher wages in Singapore and Malaysia this may not be option for these countries. However, for the Philippines this mode is currently being implemented with a huge volume of sourced services to the BPO companies from the US, Canada and Australia. In addition, Vietnam and Thailand can likewise explore the potentials of this mode of supply in enhancing trade in health services. The key requirements in the supply mode include cheap and reliable telecommunication facilities, low wages and facility of agents in the English language. Mode 1 is not viewed as relevant for Thailand since “the country has already secured a niche market for cosmetic surgery and is considering to be a key player in more complex treatments”. (Supakankunti & Herberholz, 2012)

In creative services industries there is a number of opportunities open to animation, fashion design, interior design, digital publishing. Many of the animation companies in the Philippines are engaged in cross border transactions since they produce the drawings in the country and transmit their outputs to their foreign partners electronically. In design, it may be limited since most of the outputs of this sub-sector have been intended for the local manufacturing sector primary garments. Similarly the major animation and game developers in Indonesia are engaged in cross border transactions especially those whose outputs are meant for the international market. The outputs of digital publishing end up with the consumers accessing primary through cross border transaction flows.

These industries should explore the potentials of cross border transactions of outsourced components of a product and service. However, as mentioned in the previous section, the outsourced service has a limited value added. The challenge for these creative services is to increase value added by expanding the coverage of their activities and take advantage of the possibilities of performing a larger proportion of the production and distribution activities using Mode 1.

4.1.2. Consumption Abroad

For health and medical services the region has become a hub for this mode via health and medical tourism. The market is segmented with three major players establishing their market niches. Singapore has a competitive advantage in high-end and complex medical procedures and chronic diseases because of the presence of modern medical equipment, expertise of health professionals and the quality of service comparable with the best hospitals in the world. Thailand, on the other hand, is leading regional players in Mode 2 accounting for the highest number of medical tourists in the region with their specialization in cosmetic surgery, among others. Malaysia's competitive advantage in medical tourism is based on the low cost of medical treatment and the locational advantage of key cities with their primary foreign market, the Indonesian. In addition, Malaysia offers traditional and complementary medicine derived from various cultures. The Philippines has signified its intention to develop health and medical tourism on cost consideration and available alternative medicine. Although segmented, there is a need to explore creating market for the middle. (Phua & Pocock, 2012)

Although this supply mode has huge potentials in the healthcare and medical tourism, it has its downside too. The major disadvantage is the emergence of a dual market structure worsening the mal-distribution of health resources across urban and rural areas and in terms of specialization. (Supakankunti & Herberholz, 2012). In addition, because of national security reasons the immigration officials may adopt stringent measures and cumbersome background checks on a potential foreign patient. This may deter foreigners to seek medical treatment in countries with very strict immigration rules. To address this issue, the issuance of a special medical tourist visa can contribute in expanding the country's market share of foreign patients in the region and globally. (Phua & Pocock, 2012)

Aside from health and medical tourism this sector has possibilities in Mode 2 with medical education and training. With some of the best universities offering medical education young doctors in the region can take their specialization and graduate studies in these universities. This avenue is governed by immigration policies as well as the policies of the Ministry of Higher Education in countries providing educational services. This alternative should be supported by the region not only in enhancing trade in medical services but more so in improving the quality of doctors and other health professionals. Similarly, consumption abroad in the form of training in alternative and complementary medicine should be encouraged.

For the creative Industries there is very limited option for design, animation, and digital publishing for Mode 2 since the services of these creative industries are imbedded in products like furniture, fashion accessories, garments and printed materials which can be transported to the residence of the consumers through importation of the commodities rather than supplying it under consumption abroad. On the other hand, the establishment of national or regional training centers in creative arts can encourage artists to undertake training in traditional creative arts. The institutionalization of exhibits, annual fairs and competition across the region to showcase the artistic talents and creative outputs of the region can likewise enhance consumption abroad.

4.1.3. Commercial Presence

Establishing commercial presence is another viable option in expanding the trade in health and medical services in the region. A network of hospitals in the region can establish branches and establish commercial presence in various key capitals of the region. For example, the big health providers in Thailand and Singapore are establishing commercial presence in some key cities in the region by partnering with local doctors and businessmen. Given rising income of the middle class in the region and the demographic changes, key players in the US market may consider establishing presence in the region.

The business model built by Parkway Pantai Ltd, Raffles Medical Group and the Thomson Medical Pte Ltd., leading holding companies in healthcare in Singapore can expand the mode on commercial presence through the expansion of their branches in the region. Singapore can expand the reach of its renowned regional brands in the health sector in the region by building hospitals and medical centres in the region. This has the benefit of mitigating the cost of training due to migration of highly trained health professionals and the cost of seeking medical treatment overseas. (Phua & Pocock, 2012)

In Malaysia, except for general practitioners (GP), foreign doctors are not allowed to open up general practice clinic, foreigners, however, are allowed to set up hospitals. However, APHM is yet to decide on the size of hospital that can be set up. (Dahlui & Aziz, 2012). Parkway Pantai Ltd of Singapore owns **Pantai Holdings Berhad** which operates nine **Pantai** Hospitals and two **Gleneagles** Hospitals in Malaysia. (Phua and Pocock, 2012)

For the creative services the potentials for Mode 4 is very extensive. To avail of the cheap cost of labor, access to the raw materials and integration with their manufacturing linkages some of these design industries may establish commercial presence in the region. However, the business environment must be favorable to them before they decide to establish

commercial presence. More than cheap labor these companies may be looking for ample supply creative talents, reliable supply of electricity and an infrastructure that will support their business enterprises.

Most of the animation companies in the Philippines have foreign partners that have established commercial presence in the country. Similarly, companies in design. Commercial presence is likewise established as in the case of digital publishing to explore the market in the region as in the case of Amazon.

4.1.4. Movement of Natural Persons

Movement of natural persons is likewise favorable in health and medical services. With the liberalization in trade in health services, the health sector of some countries may expand rapidly that they will experience shortage of health professionals including nurses and doctors. The temporary entry of health professionals may be attached to the establishment of commercial presence of foreign-based hospitals in the region. This movement of human resources is quite different from the migration of health professionals to explore wage gaps across region. The entry of workers including health professionals is subject to the immigration policies of the country as well as the regulatory measures on the practice of profession.

In Thailand, there are laws that govern the practice of medical and other health professionals All foreign medical, dental and other health practitioners wishing to practice in Thailand must possess a basic qualification approved by the appropriate professional division, register and obtain a license from the appropriate Thai professional health council, and pass the examination set by the relevant professional council in Thai language. In addition, a foreigner applying for a nursing license must hold a license to practice from the country where he graduated. (Supakankunti & Herberholz, 2012)

In Malaysia, foreign doctors are not allowed to practice as general practitioner (GP); however foreign specialists are allowed at the private hospitals, provided they register with Malaysian medical authority. (Dahlui & Aziz, 2012)

In creative services the temporary movement of workers is allowed particularly if these technical staff or managers are attached to foreign firms establishing commercial presence in various capitals of the region. In this industry the movement of artists that has been observed is not temporary movement but permanent movement to reap the attractive compensation package overseas. In addition, the movement is not into the region but an egress of artists to major sites of key players in the field including the US and Europe. Moreover, unlike in

health and medical services the movement of artists in the creative services is only governed by immigration policies since there are no regulatory measures governing the practice or artist except for architecture and probably interior design which are regulated professions in some countries.

4.2. Improving Competitiveness of the Sectors

4.2.1. Investment in physical capital

In health and medical services investing in modern medical technology, particularly on high-tech medical equipment can make the sector globally competitive. However, acquisition of this equipment, which is mostly imported, can be prohibitive and has implications of the way it will be financed. Internal funds may be available for huge private hospitals but otherwise hospitals will need to borrow or infuse equity from foreign partners. The use of costly equipment in the provision of medical service may likewise increase the cost of medical services. This may further highlight the dualism in the provision of health and medical services and may have equity implications.

In creative industries, investments in new equipment are imperative to reduce production cost, promote efficiency and be at par with the key players worldwide as experienced by those in digital animation and design, and electronic publishing. Although it may lower unit cost there must be an appropriate scale of production required to reap these economies. For small and medium enterprises with limited projects and contracts, acquisition of high powered computers and software can be very prohibitive. The option for these small businesses is to borrow or partner with some big players if they want to acquire modern equipment.

In this light, the role of government is to provide an environment that will facilitate the importation of this equipment. Whether they will be exempt from import levy is another question. If the equipment is going to be used for the provision of public health service it is understandable to give tax exemptions. However, if the equipment is going to be used for activities for profit then it becomes problematic. In addition, the government should nurture an efficient capital market where private hospitals can easily get credit to finance their investments in equipment. The implementation of liberal foreign investment policy by allowing key players in the region to partner with domestic players can expand and further differentiate medical tourism beyond Malaysia, Singapore and Thailand.

Meanwhile, small and medium enterprises in creative services may be given access to subsidized credit for their potentials in making significant contributions to the economy in the medium and longer term. The government can also actively participate in the production of animation to address the lack of funds of the small firms or initiate co-production projects with key players in the global market. The improvement of telecommunication facilities including the expansion of the broadband internet service can benefit animation and digital publishing. The government can also promote public-private partnership in production and distribution in animation. The government can likewise facilitate in the establishment of technology centers for sharing of expensive state of the art capital equipment in animation. Lastly, the government should pursue a liberal policy that will encourage foreign investment that can partner with domestic artist-entrepreneurs.

At the regional level, sharing of best practices can be pursued on financing acquisition, management of technology and improvement in facility and service. For example, the region can devise a program on how to insulate the public health sector from the price impact of consumption abroad in the expansion of health in services. In addition, the region work out a mechanism on the accreditation of hospitals as well as the portability of health insurance from the US, Japan and Europe to hospitals across the region. Since the insurance companies will have to pay the cost of medical treatment or health services the cost advantage of hospitals in the region may further expand the demand for health and medical tourism.

For the creative industries regional cooperation can be crucial in the establishment of mechanism for exploiting the cultural richness of the region and cooperative measures towards joint production of animation

4.2.2. Investment in human capital

The quality of equipment in the medical equipment can only be appreciated if the quality of human capital is also present to have an excellent delivery of health and medical services. There are two levels of improving the quality of health professionals; general medical education and specialization. In many countries, medical education is provided by the state through public universities. Many of the private hospitals are reaping the benefits of the productivity of these professionals with little participation in their medical education. In addition, the higher compensation in private hospitals has encouraged internal migration from public to private hospitals and from rural to urban hospitals. For medical specialization, there is internalization of training cost since it can be financed by private hospitals and other donors.

Another critical issue in private hospitals is the quality of managerial talents available. Apparently, based on key informants, they do not level up to the quality of doctors and other health professionals. It may be that medical doctors are assigned as managers of these hospitals. In such a case, these doctors may be excellent specialists but they may not be made to be hospital managers. There is a special talent and skills needed in managing medical centers competing with the global market for health and medical services.

Another human capital issue confronting private hospitals is the quality of other health professionals particularly nurses. With the liberalization of trade in medical services, as well as the huge demand for nurses globally, many nursing schools may not be adequately prepared to meet this demand thus comprising quality of nursing graduates.

In the creative services, the supply of artists in the region is not wanting. However, the qualified and trained artists who are technically proficient in the use of computers and modern technology may be problematic. In this light, there is a need to train artists to be technically proficient and in the utilization of modern equipment and computer software. Where the artist is likewise the entrepreneur, there should be training on how to manage creative services companies on all aspects of the business from production to distribution.

At the national level, the disparity of compensation in the dual health system can be addressed through several initiatives, like bonding, offering financial incentives, and tax cum subsidy measures. For example, a tax can be imposed on private hospitals to compensate the state in the education of their health professionals and in draining public hospitals of doctors with their attractive compensation package. The government can also promote public-private partnership to address the asymmetries existing between public and private hospitals. To address the shortage of specialists and other health professionals the government may adopt a more liberal view and regulation on the movement of natural persons to address labor market imbalances and not just to accompany Mode 3 or establishing commercial presence. The entry of foreign medical doctors should be allowed based on MRA and other recognition protocols.

For the creative services, the government can provide fiscal incentives for costs in-house training artists and technicians. It can also support technical skill training programs in design, animation and digital publishing. Lastly, it can implement a certification system of technical qualifications for artists in the creative services.

At the regional level, aside from sharing best practices measures to establish regional centers for the training. The region can identify universities under the ASEAN University Network (AUN) to be centers of excellence in various fields in medicine just like the

SEAMEO regional programs. These universities can be funded and serve as regional centers for advanced and specialized training. In addition, health and hospital administration can be included as one of the fields of specialization. It is also possible for the leading business schools in the ASEAN to offer the training program for hospital administration. If the region is going towards specialization in various fields in medicine and allows the liberal movement of natural persons, there is a need to craft Mutual Recognition Agreements (MRA) in many of the regulated professions in the health and medical services.

For the creative services, the regional training center for traditional arts and indigenous culture should be established where artists and entrepreneurs can be exposed to the wealth of culture and literature of the region which can be useful to the interior and fashion design, animation and digital publishing. This venue can likewise serve as a regional training center in business and entrepreneurship for artists

4.2.3. Exploring Market Niches

In health and medical services various countries may want to specialize in their respective fields. The supply mode and field of specialization will be determined by the country's interest, resources and strategy. Although the market is currently segmented and areas of specialization clearly marked, other countries should not be excluded but should be allowed to compete and find their market niches in the growing market for health and medical services. Currently, Singapore has an edge in high-end complex procedures and operations while Thailand has an advantage in cosmetic surgery and Malaysia has cost and locational advantages on major medical procedures and operations. In addition, many countries in the region are exploring the potentials of alternative and complementary medicine as well as wellness.

Best practices of these key players may be shared with other countries that may want to follow existing key players by benchmarking with their best practices. A healthy competition among countries and finding their market niches can definitely enhance the region as a global hub for medical services and health and wellness. However, the issues on public vs. private provision, health as trade vs. trade public health issue, or the efficiency vs. equity concerns should not restrict the country in denying foreigners to have access to quality health services. As long as the cost of provision including the public subsidy should be incorporated in the price that foreigners pay, the efficiency vs. equity issue on the expansion of trade in services will be adequately addressed.

On the movement of natural persons, some health professionals from other countries may have to be admitted in some countries if they have the qualifications, experience and appropriate training. It may be easy for nurses since the region is characterized with labor imbalances in nurses. However, movement of foreign health professionals can have impact on both the sending and receiving countries. From the sending country this is a form of brain drain since these health professionals are skilled and highly educated. If their education was highly subsidized by the government then the sending county may in effect subsidizing the provision of health and medical services in the receiving country. On the receiving country, question of recognition and qualification of the health professional may be questioned.

Similarly in creative services there is no point of segmenting the market and allocating various sub-sectors to ASEAN countries. That may be counter productive and may not address the country's competitive advantage. A healthy competition among countries should be pursued instead of allocating industries through their complementary values.

Given the need to explore market niches for these two sectors the government at the national level should support their marketing programs through policies, regulations and institutional support. For example, immigration policies should be tourist-friendly for those seeking health and medical services in the country. The infrastructure should be available for the tourist from pre-arrival, arrival, stay and departure. Support services from marketing of the country to visa processing, transfers to hospitals, side trips, and other support services should be readily available. The establishment of a special medical tourist visa can promote medical tourism in the region. The government should also assist the industries in language training programs since understanding the language of the foreign patients is crucial in the marketing of health and medical services of the country. More than marketing, there is need to focus on the business development since the industry is relatively mature. The government can likewise facilitate the establishment of branches of hospitals overseas and promote commercial presence instead of consumption abroad through liberal foreign investment policy. The government can create an environment where prices are transparent and customer friendly guidelines.

For regional cooperation in healthcare and medical tourism there is a need to work out strategies towards the portability of health insurance in the region, promote healthy competition among key players in the region and establish regional mechanism to allow competition among the players in the region.

For the creative industries, the government can encourage local networks to air animation series/films with original and indigenous content. It can also establish an environment for

sharing best practices of key players and promote healthy competition among countries and finding their market niche. The government can intensify the marketing of products of the design and animation services as well as the protection of intellectual property rights of creative artist and writers. In expanding the market and its contributions, the government can promote public-private partnership, encourage the use of local content, promote the expansion of the use of creative services in export industries, promote export industries using the outputs of creative services and develop supporting industries

In terms of regional cooperation, there should be regional support mechanism to allow players in each country to compete. The artists and entrepreneurs, for example, should be prepared not only in the production of their services but also on how to market and compete in the global market. In this light the region can intensify a marketing program in creative and other services. In creative services, the region can establish prestigious awards on creativity and sponsor frequent regional exhibits for outputs of designs and animation.

5. Conclusion

The objective of transforming the ASEAN Economic Community into a global service hub is not only to reap the opportunities in global and regional trade in services but ultimately to be one of the effective avenues that will link the economies in the ASEAN in realizing the goal of regional integration specifically the formation of an economic community.

The healthcare and medical services, on the one hand, and the creative services, on the other hand, were chosen in this study not only because of their potentials for income, employment and foreign exchange earnings generation but more importantly in contributing to the regional integration. Although the two sectors have huge economic potentials, these sectors are characterized with varied strengths, faced with different set of opportunities and exposed to differing weaknesses and threats.

The medical tourism sector is a mature industry while the creative services sector is a developing industry in terms of scope and depth of their current contributions in the domestic economy as well in regional trade in services. Medical tourism is a capital-intensive industry utilizing complex facilities, state of the art equipment and employing highly skilled, sometimes foreign-trained health professionals. This sector is dominated by few large holding companies that control a network of hospitals in the region. However, an incipient

component of the healthcare and medical travel industry is relatively labor-intensive and competitive including wellness and alternative medicine. The creative services sector, on the other hand, is composed of small firms in a highly competitive market. Although the industry uses information and communication technology including modern computer hardware and software it is relatively labor intensive employing skilled technicians, artists and writers.

In terms of their accessibility in supplying services, the healthcare and medical services utilize primarily mode 2 or consumption abroad with foreign and expatriates patients seeking medical treatment in internationally accredited hospitals in Malaysia, Singapore and Thailand. Mode 3 or commercial presence is likewise common in the healthcare travel industry with some of the huge holding companies based in the region managing a network of hospitals in the key cities of the region and beyond. Movement of natural persons or mode 4 is also noticeable in the sector mainly to address regional labor market imbalances of health professionals. Although there are potentials for cross border transactions or mode 1 like telemedicine, which is still underdeveloped, while the growing medical transcription services is categorized under business process outsourcing.

Trade in creative services, on the other hand, is primarily facilitated by cross border transactions with outputs of animation, electronic games, and digital publication transmitted to customers and foreign partners digitally. In addition, some of the outputs of fashion design and interior design are used in the garments and furniture industry whose products are exported to foreign markets. Consumption abroad is hardly relevant in this sector. Commercial presence is very evident with a large number of the key players in the creative industries operating with foreign partners. Many of these foreign partners establish commercial presence in the region to reap the benefits of lower labor cost and access to huge market of creative talents and skilled technicians. Movement of natural persons is also possible as some of the key artists are recruited abroad and within the region especially those companies that may not find it cost efficient to establish commercial presence in some of the cities in the region.

Another important difference is the impact of these industries on the other sectors of society. The health has a number of externalities because healthcare and medical tourism is not only a service to be traded regionally and globally but a public good for domestic consumption. The thrust of enhancing economic gains through efficient production in the expansion of trade in services as against the social benefits derived from an equitable delivery of a public good has become a significant dilemma in the promotion of healthcare and

medical tourism. This conflict is totally absent in the creative services where efficiency and reaping the economic gains of trade in services is a major consideration in the expansion of the creative services for the internal and external markets.

Given the differences of the two sectors in terms of their market structure, scale of production, factor intensity, utilization of the various modes of supply of services as well its impact on other sectors of society there will be differences in the approaches that government can take in promoting the sectors via the formulation of regulations, the provision of regulatory environment, and the extension of institutional support. In addition, the regional cooperative measures for the two sectors will likewise differ. Identification and implementation of these government measures as well as regional efforts are meant to strengthen the sectors, mitigate their weaknesses and threats in order to reap the opportunities that will enhance their contributions towards the transformation of the ASEAN as a global hub for services.

Government responses in healthcare travel industry must be crafted in the light of inconsistencies arising from trade and public service perspectives of medical tourism, inequities from the dual delivery system and varied financing schemes, imbalances and subsequent migration of doctors and other health professionals from the public to private hospitals resulting from compensation gap, the regulatory frameworks for healthcare provision, on the one hand, and the differentiated services in medical tourism, on the other hand.

The key is to make sure that the provision of services in medical tourism must be efficient and equitable by pricing the service at full cost for both citizens and foreigners alike. However, citizens can still avail of government subsidy through discounts from national health insurance schemes. Because of the public good issue, re-allocation and financing, the liberalization of the health sector will have to be selective for services whose cost can be privately internalized. A tax cum subsidy measure can be used to address the disparity in salary between sectors as well as the under-investment in public hospitals. In terms of regulation, the regulatory standards will be the same in the practice of any profession but will differ in the specialization of the health professionals and the quality of services.

In creative services the government can assist in addressing the sector's major concern: enhancing its contributions in the value chain. To this end, the linkages of the various industries can be explored by revisiting the rich cultural heritage of the country for product development, discovering the global market for niches, exploring information and communication technology (ICT) for applications, and improving skills of its human talents.

We have identified three broad categories of measures that the national government and the regional bodies can undertake to enhance the competitiveness of the healthcare and medical tourism, on the one hand, and the creative services, on the other hand. These are investment in physical capital, investment in human capital and exploration of market niches.

Table 8. Specific Recommendations for Healthcare and Medical Tourism

	Role of Government	Role of Regional Cooperation
Investment in Physical Capital	<ul style="list-style-type: none"> • exempt hospitals in paying taxes on the importation of medical equipment • develop an efficient capital market where private hospitals can access credit to finance their investments in equipment • establish a liberal policy on the entry of foreign investments that can promote medical tourism • allow key players in the region to partner with domestic players that can expand and further differentiate the medical tourism beyond the Malaysia, Singapore and Thailand 	<ul style="list-style-type: none"> • establish mechanisms in sharing practices on the operations of complex hospitals from financing, management of technology and service differentiation • devise measures to insulate the public health sector from the price impact of consumption abroad in the expansion of health in services • assist hospitals in the region attain international accreditation
Investment in Human Capital	<ul style="list-style-type: none"> • establish an open immigration policy that allows entry of experienced biomedical professionals, researchers and management staff • allow the entry medical doctors based on MRA and other recognition protocols • allow entry of health professionals to address labor imbalances • initiate bonding, financial incentives and tax cum subsidy measures to address the disparity in compensation among doctors • promote public-private partnership among hospitals 	<ul style="list-style-type: none"> • establish regional centers for training through the ASEAN University Network (AUN) • establish centers of excellence in various fields in medicine • link with the leading business schools in the region to provide training programs in hospital administration • craft a regional Mutual Recognition Agreement (MRA) for health and medical professionals
Exploration of Market Niches	<ul style="list-style-type: none"> • focus on the business development of the sector • facilitate the establishment of branches of hospitals overseas. • promote commercial presence instead of consumption abroad through liberal foreign investment policy • establish an environment where prices are transparent 	<ul style="list-style-type: none"> • work towards the portability of health insurance in the region • promote healthy competition among key players in the region • establish regional mechanism to allow competition among the players in the region

	<ul style="list-style-type: none"> • develop tourism industry and other supporting industries including transport and communication • improve administrative procedures and less bureaucracy in licensing • develop a transparent and customer friendly guidelines • transform immigration policy to be tourist friendly for those seeking medical treatment • establish a special medical tourist visa • assist in the foreign language training for the personnel in sector 	
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These specific recommendations although meant to address productive capacity, human resource development and market expansion that are crucial in enhancing the competitiveness of the sectors are likewise responding to the modes services are supplied. The encouragement of foreign investment and foreign partnership, for example, is akin to mode 3 or commercial presence while the creation of tourist friendly and immigration friendly policy are meant to address the concerns in mode 2 or consumption abroad in health and medical tourism. Similarly, the expansion of the telecommunication and infrastructure is meant to enhance mode 1 or cross border transaction which is very crucial in digital publishing and animation. On the other hand, allowing entry of foreign health professionals to practice and artists for training at the regional level are cases of mode 4 or movement of natural persons in healthcare and creative industries respectively.

Table 9. Specific Recommendations for Creative Industries

	Role of Government	Role of Regional Cooperation
Investment in Physical Capital	<ul style="list-style-type: none"> • provide access to subsidized credit for small and medium size enterprises • pursue a liberal policy that will encourage foreign investment that can partner with domestic artist-entrepreneurs • actively participate in the production of animation • improve telecommunication facilities including the expansion of the broadband internet service • promote public-private partnership in production and distribution • facilitate the establishment of technology centers for sharing of expensive capital equipment 	<ul style="list-style-type: none"> • establish mechanism for exploiting the cultural richness of the region • establish cooperative measures towards joint production of animation

	<ul style="list-style-type: none"> • initiate co-production projects with key players in the global market 	
Investment in Human Capital	<ul style="list-style-type: none"> • provide fiscal incentives for costs in-house training artists and technicians • support technical skill training programs in design, animation and digital publishing • implement certification system of technical qualifications 	<ul style="list-style-type: none"> • establish a regional training center for creative traditional arts • establish regional training centers for interior and fashion design, animation and digital publishing. • establish regional training center in business and entrepreneurship for artists
Exploration of Market Niches	<ul style="list-style-type: none"> • encourage local networks to air animation series/films with original and indigenous content • establish an environment for sharing best practices of key players • promote healthy competition among countries and finding their market niche • intensify the marketing program • protect intellectual property rights of creative artist and writers • promote public-private partnership • encourage the use of local content • promote the expansion of the use of creative services in export industries • promote export industries using the outputs of creative services • develop supporting industries 	<ul style="list-style-type: none"> • support marketing programs for creative services • establish regional awards in the creative arts • sponsor frequent regional exhibits for outputs of designs and animation

In addition, aside from relating these recommendations to the various modes of supply of services they are also linked with the policies, regulatory environment, and institutional support needed to enhance the competitiveness of the healthcare and medical services and creative services. The policies on credit, entry of foreign investments and immigration, for example, the regulatory framework for the protection of intellectual property and the practice of professions, as well as the institutional support in building the infrastructure for telecommunications and other support industries are all meant to reap the potentials of healthcare and medical tourism and creative services as venues towards becoming a global hub for services in the region.

In the end, these specific recommendations are intended to reinforce the strengths of the health care and medical tourism, on the one hand, and mitigate its weaknesses and threats, on the other hand. In doing so the industry can exploit optimally the opportunities offered by the huge tourism industry in the region, the changing demographic landscape, aging population,

rise of chronic and non-communicable diseases rising income and the growth of the middle class in making healthcare and medical services in the region globally competitive.

Likewise the opportunities in the creative services are numerous including the emergence of a knowledge-based economy, phenomenal development in ICT, enormous potential and actual demand in creative industries brought about by rising prosperity in the region and the varied applications of creative services. Managing these opportunities will require specific policies and actions on the part of the government and the regional bodies in expanding productive capacity, human resource talents and expanded market to realize the goal of transforming the region into a global hub in creative services.

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CHAPTER 2

Developing Health Service Hub in ASEAN and Asia Region Country Report on Healthcare Service Industry in Malaysia

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The health status of Malaysians has been comparable to some developed country, with her successful dual healthcare system and equal shares of healthcare financing. The government pro-industry orientation has boosted up the tourist industry in general and health tourist industry specifically, which has shown tremendous achievements since the last decade. Malaysia is the preferred destinations for medical tourism nowadays, given the low exchange rates, highly qualified medical specialist, high technology medical devices, international credentialed safety and quality services, and the comparable medical cost around the regions. Her multi ethnics, various respectable cultures, beautiful country with peaceful and politically stable environment, good climate around the year, friendly and English speaking population are among other factors that have made Malaysia popularly visited for health reasons. The market attracts not only the people from neighboring countries like Indonesia and Singapore, but also from Japan. The recognition of halal hub in Malaysia had widens the market to clients from the Middle East and African Muslim countries.

1. Introduction

Malaysia is unique with her multi-ethnic population and a diversity of culture. In 2009 Malaysia with a population of 28.3 million, had reached the level of health status that it can be proud of. The incidence of diseases related to lifestyles is at par with the developed world. The life expectancy of females and males, were 76 years and 72 years, respectively while the maternal and infant mortality rates were 0.3 and 6.4 per 1000 live births, respectively. In 2009, the principal cause of death for both females and males was ischemic heart disease (IHD) and cerebrovascular diseases (CVD), and the top 3 of disease burden were IHD, mental illness, and CVD (2006). In general, the health status of Malaysians is better than that of other developing countries and is comparable to the developed countries like Singapore. The total expenditure on health is only 4.45% of GDP (2009).

The achievement of health status of Malaysia was associated with its economic development. Since its independence in 1957, Malaysia's economic record has been one of Asia's best. Real gross domestic product (GDP) grew by an average of 6.5% per year from 1957 to 2005. Economic performance peaked in the early 1980s through the mid-1990s, as the economy experienced sustained rapid growth averaging almost 8% annually. In 2009 the GDP grew slightly low at 5.4%, amounting to RM562.6 billion. Both foreign and domestic private investment played a significant role in diversifying and modernizing the economy. Once heavily dependent on primary products such as rubber and tin, Malaysia today is a middle-income country with a diversified economy based on services and manufacturing. In 2009, the service and manufacturing sectors contributed to 55% and 30% of the total GDP, respectively. Malaysia is one of the world's largest exporters of semiconductor components and devices, electrical goods, solar panels, and information and communication technology (ICT) products. The per capita income stood as USD6,916 in 2009, and IN purchasing power parity terms estimated at USD17,549.

In order to be a developed country by year 2020, Malaysia undertook several strategies since the early nineties; some were successful while others were not realistic and had to be abandoned. Under the 10th Malaysian Development Plan, a new and comprehensive approach had been initiated to transform Malaysia into a

high-income nation by 2020. The Vision 2020 implemented through a strategy, named as the Economic Transformation Program (ETP), has been widely publicised by the Government and frequently debated by the public.

The programme provides strong focus on a few key growth engines; National Key Economic Areas (NKEAs) that would bring Malaysia boost up its economy and achieve the Vision 2020. The initial 12 NKEAs are expected to make substantial contributions to Malaysia's economic performance, and they receive strong public investment and policy support. The NKEAs are; Oil, Gas and Energy; Palm Oil; Financial Services; Tourism; Business Services; Electronics and Electrical; Wholesale and Retail; Education; Healthcare; Communications Content and Infrastructure; Agriculture; and Greater Kuala Lumpur/Klang Valley. The ETP is led by the private sector, while the Government continues to play the primary role of a facilitator. Most of the funding comes from the private sector (92 percent), with public sector investment being used as a catalyst to spark private sector participation.

To ensure that the program is carried out, 131 entry point projects (EPPs) were identified which outlined concretely the steps or actions required to grow the economy. The EPPs and other business opportunities identified under each NKEA are anchored on their contribution to Gross National Income (GNI); they were selected based on public and private sector contributions. Any public spending will be allocated on the basis of maximising GNI per ringgit of public expenditure. Finally, the ETP was designed to be rigorous and transparent, guided and monitored by the PEMANDU (Performance Management and Delivery Unit) within the Prime Minister's Department. The Unit reports to government leaders, the business community and the public on the progress of ETP in general, and EPPs, specifically.

The implementation of the ETP if successful will see Malaysia's economy undergo significant changes towards developed nation. Malaysia will continue her shift towards a service-based economy, with the services sector contribution growing from 58 percent to 65 percent by 2020. The expected incremental GNI impact in 2020 is RM66.7 billion with more than 3.3 million new jobs being created spread across both the urban and rural areas. The nature of these new jobs will result in a shift towards middle and high-income salary brackets. Greater Kuala Lumpur/Klang Valley will be transformed into a world-class city. Finally, growth will be achieved

in a sustainable manner, without cost to future generations, through initiatives such as alternative energy capacity and environment of conservation.

Tourism and Health are among the 12 NKEAs that will be discussed in this report since they are interdependent. On tourism, Malaysia is one of the world's top destinations, in the top 10 in arrivals and top 15 in global receipts. Tourism is our fifth largest industry, generating RM37 billion in GNI in 2009. The industry is expected to continue growing with arrivals rising from 24 million in 2009 to 36 million in 2020. The healthcare industry too has become a powerful engine of economic growth, due to demographic shifts such as extended longevity and a rise in lifestyle diseases, such as hypertension, cardiovascular ailments and diabetes. Malaysia's spending on healthcare, at less than 5 percent of GDP, is above her regional peers, and public spending is a disproportionate contributor to healthcare costs. Currently, the sector contributes to RM15 billion in GNI.

Given the potential economic gain from health tourism, the Malaysian Government has taken the lead in promoting the concept of health tourism. The Government has made aggressive efforts to market health tourism abroad via campaigns, road shows, and trade and investment missions so as to create and promote awareness of Malaysia as a medical destination. Countries in the Southeast Asian region and those in the Middle East have been identified by the Government as potential markets to sell the country's health tourism.

This country report is made in response to the call by EAC to propose Malaysia as the health service hub for the regions of ASEAN and EAST ASIA, if not on its own, perhaps together with Singapore and Thailand. The objectives of this report are to:

1. Undertake a SWOT analysis for the health care and wellness sector as well as in the creative services sector in selected countries in the ASEAN.
2. Undertake an analysis of policies/regulatory/institutional support for the above mentioned services sectors in selected countries in the ASEAN.
3. Develop a profiling of firms which are considered key players for the designated services industry.
4. Provide recommendations drawn from the results of the SWOT analysis as well as from the results of the analysis of policies/regulatory/institutional support on how country(s) could enhance its respective positions to be part of the global service hub in the region.

Some definitions:

Health Tourism: “the organized travel outside one’s local environment for the maintenance, enhancement or restoration of an individual’s wellbeing in mind and body” (Carrera and Bridges). It includes medical tourism, traditional and complementary medicine, spa and wellness salon.

Medical Tourism: a subset of health tourism, “the organized travel outside one’s natural health jurisdiction for the enhancement or restoration of individual’s health through medical interventions” (Carrera and Bridges).

2. Methodology

Numerous reports on medical tourism had been prepared by the Government and by the private sector affiliated to health industry on medical tourism. Certain sections of this report were actually the compilation of those reports and the authors would like to acknowledge the tremendous work performed by them under each section. Under the SWOT analysis section, the cooperation of all the participating agencies (government agencies, associations and industries) in the interview sessions is much appreciated. The findings of the interviews with various agencies had been grouped according to sub headings and were actually the summary of all feedback and opinion sought. The recommendations given were of the authors themselves and they were made based on authors’ perception on the applicability and the capability of the agencies in Malaysia to implement them.

3. Malaysia and its Healthcare System

To be the hub of health industry in the region, Malaysia has to prove that the welfare of her people with regard to health is well looked after before it can open up its health industry to the region or the world. The evidences are not difficult to see; the status of her people’s health, her healthcare system and the financing of her healthcare system are well developed and Malaysians can be proud of them.

Malaysia practices a dual healthcare delivery system. Both the public and private sectors are important players in Malaysia's healthcare delivery system. About 70% of healthcare services are provided by the public sector, and is considered one of the best in the region. The public sector is heavily subsidized and it focuses on healthcare promotion as well as on rehabilitative and curative care at the primary, secondary, and tertiary levels. The rapidly-growing private sector, on the other hand, offers mainly curative and rehabilitative services, and is financed strictly on a non-subsidized, fee-for-service basis. There are three types of public hospitals namely the general hospitals, district hospitals and specialised/referral medical institutions such as the National Respiratory Institute. Each of Malaysia's fourteen state capitals has a general hospital, with 600 to 700 beds each providing a full range of healthcare service. Because of their size, comprehensive range of care and low charges, general hospitals are the most preferred public hospitals in Malaysia. District hospitals, which are much smaller, consist of 250 to 400 beds each, providing more basic diagnostic and curative healthcare service. Finally, the specialised medical institutes/centres are dedicated for the treatment of specific diseases, such as heart diseases and tuberculosis. A network of health clinics provides primary healthcare to the population and a comprehensive referral system providing secondary and tertiary care is also in place in district and urban hospitals. Generally, the majority of big public hospitals together with 8 private hospitals are concentrated in urban areas, and they contribute to a total of 12,216 hospital beds. Nevertheless, Malaysia can be proud of its equitable healthcare delivery services which provide accessibility and balanced distribution of the healthcare facilities, comprehensiveness in its healthcare package, and the universal coverage of its healthcare system.

With the exception of some areas in Sabah and Sarawak, the geographical accessibility and transport system are good. The healthcare financing system of Malaysia is also a dual contribution and similar proportion; tax based public and private out of pocket or private health insurance financing. The public and private share of the total healthcare expenditure has been almost in equal proportions in the last decade.

The provision of public healthcare services is the responsibility of various ministries and local authorities, with the Ministry of Health (MOH) as the main

health care provider. It provides preventive, curative, public health services and rehabilitative services. The Ministry of Higher Education provides 3 teaching hospitals, which are affiliated to 3 public medical schools in the country. They provide hospital services, training of health personnel and research on health. Other Government agencies involved in care provision include the Ministry of Defence which maintains health facilities mainly catering to the health needs of the armed forces personnel and their families, the Department of Aboriginal Affairs of the Ministry of National Unity and Social Development which provides health services for the aborigines and the Ministry of Housing and Local Government which provides environmental health services within the local council boundaries. The Department of Social Welfare from the Ministry of Women, Family and Community Development provides long-term care for the indigent, old age in several Welfare Homes while the Ministry of Home Affairs manages several drug rehabilitation centres in the country (MOH provide medical service).

Consequent upon the equal roles of the public and private healthcare delivery services, there is a high competition for health professionals, especially on doctors/specialists between the public and private hospitals. The high pay and the better working environment at the private hospitals are the pulling factors for the private hospitals. In 2005, the doctor to population ratio for the nation was 1 doctor to 1387 populations. With her current population, Malaysia aims to achieve doctor to population ratio of 1:400. However, for the metropolitan Kuala Lumpur, the ratio had reached 1:397 in 2005.

The government had come up with various strategies to ensure that there is a fair distribution of doctors in the 14 states of Malaysia. In 2009, based on the annual practicing certificates issued by the Malaysian Medical Council, there were a total of 22,355 doctors registered, with 55% and 45% of them in the public and private sectors, respectively. In addition to increasing the intake of medical students in public and private universities (by a total of 34 medical schools in 2011), “high performance” students are also sent abroad to study medicine at several medical schools recognised by the Public Services Department, Malaysia. This is possible since the government offers full scholarships to all sponsored medical students to the public universities and those sent for study at Egypt, Jordan, Russia, Australia, New

Zealand and United Kingdom. Non-sponsored medical students at local private universities may apply for a low interest study loans, which they have to pay only when they start working.

Malaysian doctors working abroad had been encouraged to come back to Malaysia. In early 2000, the Government had offered various incentives to those who came home i.e by offering AP (approval permit) to import cars, exempted from house-man ship if they had been working as medical officer at overseas hospital, and also those with experience working as specialists overseas are freed of the 3 year compulsory service at public hospitals. Additionally, if their spouse is an expatriate, she/he will be given permanent resident status. There is also no restriction to offer foreign doctors to practice in Malaysia, as long they are able to register with the Malaysian Medical Council, i.e they must be graduates from recognized medical schools. They also must be under the supervision of a Malaysian specialist for six months before being allowed to practice.

The government allows locum practice from public to private, provided the locums are conducted at their own workplace and out of official working time; this means that doctors working at the public hospitals can earn extra income while serves the Government. The public hospital also invites specialist from the private hospitals to practice at the public outpatient clinics or team up with the public hospital clinicians in performing complex operation or special procedures on unique cases. Thus, both the public and private patients can benefit from the expertise of super specialists for unique and complicated cases (a good example was the team up of cardiac surgeons from National Heart Institute and Kuala Lumpur Hospital for the first heart transplant in Malaysia). As a social contribution, all private hospitals are mandated to open up one or two wards for the poor or economic class wards so that those who could not afford to pay for the luxury "hospital beds", but need the expert services from the specialist available only at the private hospitals, are able to get their services (usually the specialist would charge very little for this service; again as part of their personal social obligations). A good example was in the case of liver transplant which was performed by the specialist from Subang Jaya Medical Centre on a patient from the general hospital.

The Government had also allowed university hospitals to open private wings, granting the specialists to charge private patients for elective operations performed under the private wings, these are normally conducted during weekends. This consent had helped reduce the salary gap between specialists at the public and private sectors.

4. An Analysis on Overall Business Climate of the Sector

Over the past several decades, the tourism industry has become one of the fastest growing industries within the service sector. Backed by a steady rise in the number of tourist arrivals, especially those from countries like Singapore, Thailand, China and India, the tourism industry has rapidly become one of the prime sectors in the Malaysian economy. In a statement by Tourism Malaysia, in 2009 the country recorded a 4% increase in the number of inbound travellers, making tourism industry the second largest income spinner for the national economy and contributing nearly RM43 billion to the nation's Gross Domestic Product. The focus on the tourism sector as potential growth areas will certainly help to diversify the economy and reduce the over-dependence on manufacturing sector, which has suffered setback in these times of global economic uncertainty.

Previously confined to travel packages and tourist attractions, the tourism industry now covers a variety of new sectors, which the government has identified as key growth areas. Twelve potential areas for growth, including tourism and health tourism, have been earmarked by the government under the NKEAs (National Key Economic Areas) which are to become the key money spinner for the country. The government realises the large economic gain that could be reaped through health tourism. Neighbouring countries like Thailand and Singapore have already been aggressively promoting health tourism through various medical care packages. While the idea of mixing leisure together with healthcare is not a new concept in the tourism scene, health tourism is still relatively new in Malaysia and is in the early stages of development.

According to the Health Ministry, all healthcare cum-tourism activities, which can generate wealth to the local economy, are categorized under health tourism. Thus any healthcare programme, which covers medical care, wellness and fitness, are

included as components of health tourism. Simply put, health tourism can also be defined as travels for the purpose of enhancing the well-being of the mind, body and spirit of the individual, families and groups.

The focus on tourism and medical tourism was a right move. Tourist arrivals increased by 300% from 5.5 million in 1998 to 22.1 million in 2008, accompanied by increase in medical tourist arrivals by 856%; from 39,114 to 374,063. Revenue per patient has also grown 2.5 fold from 2 in 1998 to 41 in 2008, while the private hospitals' revenue grew from RM58.9 million to RM299.1 million in 2003 and 2008, respectively. This signifies the growth of foreign confidence in the advanced medical care services in Malaysia. Most international patients come from neighbouring countries, with less developed medical infrastructure (mainly Indonesia), and other developed countries from the West. Malaysia is also a preferred destination for these international patients due to the higher costs in Singapore and unstable political scene in Thailand.

The Malaysian Travel Health Council forecasts that Malaysia will receive about 689,000 medical tourists by 2012. The Ministry of Health reported that Malaysia has achieved US\$101.65 million from the medical tourism sector in 2010. The revenue is expected to further grow to about US\$ 116.5 million in 2011. The main markets for medical tourism have been Indonesia (72.0%), Singapore (10.0%), Japan (5.0%) and West Asia (2.0%). The majority of them travel to Penang (61 %), while Malacca and Kuala Lumpur received 19 percent and 11 percent of health tourists, respectively.

Malaysia is now looking for more new markets for medical tourism, competing especially with her neighbouring countries like Thailand and Singapore which have aggressively promoted health tourism. Malaysia is now focusing particularly on the Middle East market, given the large annual medical expenditures in these countries. As mentioned by the Malaysian Ambassador to Abu Dhabi, the United Arab Emirates alone spent RM3billion of medical expenses in 2002. With the advantages of being a Muslim country (giving some indication of Islamic practices at hospitals), and the recognition of Malaysia as one of the 'halal'hub in this region, Malaysia is able to ride on its Islamic credentials to attract medical patients from the Middle East. The government had long realized that Middle East is a lucrative market that could contribute substantially to the local health tourism industry, hence even in 2001, the

government had already undertaken trade missions to several Middle-Eastern countries to market its health tourism services.

Also working towards Malaysia's advantage is the current geopolitical situation. Malaysia is a preferred destination for medical tourists from countries, like United Arab Emirates, Kuwait, Bahrain and Bangladesh. The government has also organized trade missions to Southeast Asian countries, like Myanmar and Vietnam, to promote the Malaysia as a health tourism destination. Down the pipeline, MATRADE has announced plans to organize healthcare missions to Cambodia and Brunei.

So far, the efforts have been rewarding, based on the increasing number of foreign patients entering the country to seek medical treatment. A large majority of foreign patients, especially those from Indonesia, flock to Penang, Malacca and around Klang Valley to seek medical treatment in view of the availability of high quality healthcare facilities at competitive prices in these areas. Besides being hot tourist spots, both Penang and Malacca are also favourite destinations for patients from Indonesia mainly because of the proximity of the two states that are in close proximity to Indonesia. In recent years, the health tourism industry has also gained prominence in other states including Johor, Sabah and Kelantan.

The Malaysian government has set up several referral gateways to assist medical tourists. One of them is the health tourism website that assist medical tourists globally. The Malaysian Healthcare Travel Council (MHTC) was established by the Government of Malaysia to formulate strategic plan activities for Malaysian healthcare service industry. The council consists of various relevant government agencies (Ministry of Health, MATRADE, MITI) and private bodies (MSC, APHM) to promote smart partnerships between the government and healthcare travel industry. Serving as a focal point on all matters relating to healthcare travel, the council ensures the provision of quality healthcare. The Immigration Department has facilitated medical tourists to obtain visa which can be extended from one month to six months stay depending on the period of patient's recovery. There are many available flights for transportation at Kuala Lumpur International Airport and several others international airports such as in Penang and Kota Kinabalu. The low cost in/out bound flights of Air Asia are in favour of attracting more medical tourist.

5. Privatization OF Healthcare and Medical Tourism in Malaysia

Entrepreneurial innovation was one of the main drivers of growth for the Malaysian economy in the 1990s. The private healthcare industry too did not lack in its initiatives. The larger providers leveraged their unique strengths to successfully 'plug in' to the ever-increasing numbers of foreign tourists. Health or medical tourism, 'sold' through many creative screening tests and procedures, was identified to be one of the areas that promised sustainable revenue. The unprecedented growth of the private healthcare sector, seen by the increase in the number of private healthcare facilities in recent years, has wide-ranging implications on the public healthcare sector and overall healthcare costs.

The share of private ownership in overall healthcare expenditure began to rise from 1982, increasing from 5.8 per cent in 1981 to 7.6 per cent in 1982 and rising fairly rapidly from then on to reach 53.84 per cent in 2009, as reported in the Ministry of Health Report. Policy focus by then had shifted towards expanding the private sector, including in the provision of public utilities such as power, water and healthcare. The launching of the Privatization Master Plan (PMP) in 1991 after it was drafted in 1988 (Malaysia, 2001: 183-201) formally included healthcare for private ownership. Twelve public hospitals were among 149 agencies identified for privatization in Peninsular Malaysia. The Mid-Term Review of the Sixth Malaysia Plan published in 1993 indicated that: "While the government will remain a provider of basic health services, the role of the Ministry of Health will gradually shift towards more policy-making and regulatory aspects as well as setting standards to ensure quality, affordability and appropriateness of care"

The formalization of privatization in general had quickened the proliferation of profit-based private healthcare facilities from a total of 174 to 242 in 1992 and 2009, respectively. Parkway Holdings and Pantai Holdings have expanded throughout Malaysia since the 1990s, with the latter becoming one of the biggest healthcare providers in Malaysia after a decade. Khazanah Holding, an investment arm of the Government already has significant ownership rights in India's Apollo Hospital chain. Listed at the Kuala Lumpur stock Exchange (KLSE) in 1997, it operated seven hospitals with a capacity of 1,000 beds in 2005. With its recent acquisition by the

Malaysian government investment vehicle, Khazanah Nasional, the healthcare provider has embarked on further expansion of its participation in healthcare provision. Khazanah Nasional also acquired majority control of the International Medical University in 2006.

The promotion of healthcare, further expanded markets for private health care providers in the 1990s. Subang Medical Centre is increasingly targeting rich tourists who contributed RM0.9 Billion of revenue in Malaysia in 2005, an amount expected to rise to RM2 billion by 2010 (Malaysia, 2006). In fact, medical tourism has become an important business in Asia since the 1990s and has seen aggressive expansion.

In terms of revenue, the private hospitals' revenue grew from RM58.9 million incurred by 103,000 medical tourists in 2003, to RM299.1 million in 2008 spent by around 374,000 medical tourists. Among the factors making Malaysia the preferred healthcare travel destination of choice, are its friendly and highly professional medical staff; internationally accredited, world-class hospitals with state-of-the-art medical facilities; affordable costs of procedures; English-speaking population, and a safe and friendly environment for visitors. In addition, cultural similarities and short distance attract Indonesians while the halal hubs attract the Arab Muslims.

The recent announcement by the Government of Singapore to allow its residents to use Medisave for hospitalization and day surgeries at 12 hospitals in Malaysia is testament to the growing reputation of Malaysia's quality healthcare services in this region. In 2006, the bulk of foreign patients came from Indonesia (65-70 percent), followed by Japan (5-6 percent), Europe (5 percent) and India (3 percent). There are an increasing number of patients from Middle Eastern countries (particularly U.A.E., Qatar and Saudi Arabia). Major hospitals in Malaysia are targeting new markets such as Vietnam and Cambodia. Africans are now coming to Malaysia because it is cheaper to do so rather than go to Europe where they used to go previously.

The major private hospitals had taken several efforts to promote their medical services; among which was the setting up of departments to deal with international patients. Gleneagles Intan Medical Centre and Pantai Hospitals are among those that have set up international customer departments specifically for the admission and support of international patients. KPJ Medical Group, Mahkota Hospital and Subang Jaya Medical Center have established tie-ups with several travel agencies and hotels

to provide comprehensive tourism packages in conjunction with healthcare services, as well as setting up representative or referral offices.

The formation of the Association of Private Hospital of Malaysia had team up most of the private hospitals which enable them to be equipped for competing with the international healthcare industry. Among other things is to ensure quality and safety in delivering healthcare. Fourteen hospitals had strived to achieve the Malaysian Society for Quality in Health (MSQH) accreditation. This continuous quality improvement effort is an imperative to compete in the market as more players recognize the potential of this industry.

In becoming the health service hub of the ASEAN region, Malaysia expects fierce competition from well-established players like Singapore and Thailand, the two traditional favourite medical tourist destinations in the region. Nonetheless, Malaysia still has the potential to become one of the popular centres for medical services in Asia. One of the main advantages that Malaysia is able to capitalize on is the cost factor. The cost of healthcare in Malaysia is by comparison cheaper than her regional competitors. For example, based on figures given by the Association of Private Hospitals of Malaysia, a cardiac bypass surgery at a top-notch private hospital in Malaysia costs an average of US\$6,300 as opposed to US\$10,400 charged in Singapore. Besides being lower in cost, the healthcare industry in Malaysia is well equipped with adequate, highly trained specialists, up-to-date facilities and supporting services that are comparable to overseas hospitals.

Over the years, with the current favourable currency exchange, Malaysia has seen a surge in foreign patients from Singapore, Australia and European countries seeking health services including those in the area of cardiology, haematology, dermatology and neurology. In addition, the short waiting period for surgery is also another key factor that enhances the ability of private hospitals to attract foreign patients to Malaysia. Around the region, Malaysia has also been successful in attracting patients from such countries as Indonesia, Vietnam, China, Myanmar and Cambodia where top-notch medical facilities are not readily available.

6. The Practice of Traditional and Complementary Medicine (TCM) in Malaysia

“Traditional medicine” has been defined by the World Health Organization (WHO) as the sum of total of the knowledge, skills and practices based on the theories, beliefs, and experiences indigenous to different cultures, whether explicable or not, used in the maintenance of health as well as in the prevention, diagnosis, improvement or treatment of physical and mental illness. The terms “complementary medicine” or “alternative medicine” are used interchangeably with traditional medicine in some countries. They refer to a broad set of health care practices that are not part of that country’s own tradition and are not integrated into the dominant health care system.

In Malaysia, the term “traditional and complementary medicine” (TCM) is used instead of complementary and alternative medicine (CAM). TCM is defined as a practice other than the practice of medicine or surgery by registered medical practitioners, as defined in the Medical Act 1971.

Traditional and complementary or alternative medicine in Malaysia includes both health care practices of the various cultures as well as those which are outside the society’s tradition but which have been imported and adopted as a matter of practice (Talib, 2006).

As in most developing societies, where complementary or alternative and traditional medicine is widely practiced, in Malaysia too, many individuals depend on these alternative medicines, whether as complementary medicine to be taken together with conventional medical treatment or as an alternative medicine, as their primary healthcare. Both alternative and traditional Malay, Chinese and Indian systems of medicine are practiced widely. Cross-cultural utilization of traditional systems of medicine is also popular.

A nationwide study conducted by Siti,*et al* (2009) on the prevalence and frequency of various TCM modalities that are being used by the Malaysian population showed that biological-based therapies, which included herbal use therapy, were most commonly used for health problems (88.9%) and for health maintenance (87.3%). Under this category, herb-based application/ herb-based

beauty product/ herb-based hygiene product was most commonly used for health issue (23.6%) while pure herbs were the ones most commonly used for health maintenance (29.6%). The dominant use of herbs in a variety of ways was naturally due to the fact that Malaysia is diverse in ethnicity that still follows generations of traditional healing practices supported by vast natural resources.

Meanwhile, the major complementary or alternative systems of medicine practiced in Malaysia include Ayurvedic, Siddha, Unani, homeopathy, naturopathy, aromatherapy, reflexology, chiropractic and traditional Chinese medicine. Traditional medicines provided by traditional medicine practitioners included traditional birth attendants, spiritualists, and others who use home remedies.

Integration of TCM into the Mainstream Healthcare

The official healthcare system that is adopted and implemented by the Malaysian government is the conventional western medicine. However, the practice of alternative medicine has been given recognition in statutory form. The role of the traditional and complementary medicine in the provision of a "formal alternative treatment" to western medicine has increased over the years with a total of 11,691 registered practitioners in 2009.

One of the objectives of the WHO Strategy on Traditional Medicine 2002- 2005 is the rational use of traditional medicines, which is to promote therapeutically sound use of such medicines by both providers and consumers. Existing conventional medicine practitioners are to be provided training in order to give them a basic knowledge in traditional, alternative and complementary medicine. Within the WHO definition of the different types of health systems practiced, Malaysia is said to practice what is described as a tolerant system, where the healthcare system is based entirely on conventional medicine but some alternative medicine practiced is tolerated by the law. It is arguable that Malaysia has reached the status of being an inclusive system, such system where alternative medicine is recognized but not fully integrated into the healthcare system, integration here encompassing delivery, education, training and regulation. In a system where both conventional and traditional medicines are integrated, both types of therapies would be available at both public and private hospitals and clinics. Ultimately traditional medicine will be

covered by health insurance and formal education on traditional medicine would be made available.

The objective is towards the integration of alternative medicine into the existing conventional medicine system. In 2000, the national health policy on traditional and complementary medicine was launched. The overall aim of the policy is to ensure the safety and quality of traditional and complementary medicine practices and products, which will be regulated by the Traditional and Complementary Medicine Council. In 2004 the Malaysian Minister of Health (MOH) said that Malaysia was actively looking into developing traditional and complementary medicines and the possibility of integrating them with mainstream medicines.

Hence, in 2007, the first Traditional and Complementary Medicine Unit was started in Kepala Batas Hospital, Pulau Pinang. This was the pilot project which provided traditional and complementary medicine services. Two more hospitals, Sultan Ismail Hospital, Johor Bahru and the Putrajaya Hospital started the traditional and complementary medicine units in 2008. The remaining integrative hospitals being Duchess of Kent Hospital, Sabah, Sarawak General Hospital, Port Dickson Hospital, Negeri Sembilan, Sultanah Bahiyah Hospital, Alor Setar Kedah and Sultanah Nur Zahirah Hospital, Kuala Terengganu. The numbers of hospital which have traditional and complementary unit have increased to 6 units by 2009.

Overall, traditional and complementary medicine is getting more popular in our community and it will become an important component in our healthcare system that will improve the level of health and quality of life of Malaysians in concert with modern medicine. The Malaysian government is striving to develop this field further since our country has an abundance of natural resources that could be developed into health products. Moreover, the Ministry of Health, Malaysia (MOH) has taken positive and proactive steps to make sure traditional and complementary medicine is of high quality and safe to be used by the consumers.

7. Malaysian Spas and Wellness Retreat

According to the Association of Malaysian Spas (AMSPA), Malaysia, with its diversity of cultures and abundance of natural resources, provides an excellent

backdrop for wellness rituals that are amongst the oldest in the world. Be it Malay, Chinese or Indian, Malaysian health rituals bring about the much needed rejuvenation and revitalization that is vital for overall wellness.

Traditional Malay body massage, herbal baths, facials and a host of treatments based on ancient healing rituals use a combination of various indigenous herbs and plants that contain natural vitamins, minerals and curative properties. Many of these herbs are found only in the region's 130-year-old rainforests. Traditional cream bath hair treatments which use a mixture of coconut milk, aloe vera and crushed hibiscus leave, the *jamu* experience where medicinal plants and local herbs such as *tumeric* are mixed with the natural sweeteners like honey or palm sugar, consumed for its detoxifying and health enhancing properties are some of the healing modalities found in traditional Malay spas. Besides, Malay traditional postnatal treatments are also known to be highly effective in bringing back woman's post natal figure to its pre-natal state and for restoring the new mother's wellbeing.

Ayurveda, believed to be the oldest system of medicine on earth, originated from India some 5,000 years ago. In Malaysia, while some establishments specialize in providing a range of Ayurvedic treatments for curative needs, some ayurvedic wellness modalities like Ayurvedic massage and the Shirodhara are also performed as wellness rituals in spas in Asia. Yoga and meditation are both enjoying great following as people need to find ways to unwind and to release their stress.

Chinese wellness modalities such as tuina massage, as well as acupressure massage in the form of foot reflexology and the Japanese Shiatsu massage are very popular treatments found in spas in Malaysia.

In conjunction with the "Malaysia Truly Asia" fashion, Malaysian spas besides offering treatments that are indigenous, there are spa modalities from around the region. Thai Massage, the Balinese Massage and Lulur, the Heliot Massage from the Philippines, even the Lomi-lomi massage from Hawaii have found their way into some Malaysian spas.

A case study of Spa Village Tanjong Jara, which has been awarded as Best Destination Spa during the Malaysia Spa & Wellness Awards 2009, is used to describe the uniqueness of Malaysian spas and wellness in terms of its physical facilities, philosophical concept, the use of local ingredients and integration of local

cultures and custom. Ultimately, the spa village is not a spa centre offering body treatment, but the total experience that make it special (Tanjong Jara Resort, 2000).

Wellness Retreat

The Banjaran Hot Springs Retreat which located at historic Tambun in the Malaysia state of Perak, is the Malaysia's first luxury natural wellness hot springs retreat within a 16.59 acre valley, in an area of remarkable natural beauty. It is a place of rest, renewal and rejuvenation as it is nestled amid lush tropical jungle and embraced by magnificent limestone cliffs.

The Banjaran Hot Springs Retreat is the place where the three strands of Malay, Chinese and Indians traditions intertwine, breathing new life into contemporary wellness practices and creating a unique and authentic wellness experience. It made use of its natural wonders which included hot springs, limestone cliffs, rainforest scenery and various caves to develop into a series of wellness packages for the visitors.

Borneo Massage

Massage is generic term that encompasses a wide range of touch therapies. Essentially massage is manipulation of soft tissue (Fritz, 1995). A wide variety of techniques are used in massage treatments including pressure, kneading, rubbing and mobilization (Hemmings, 2001). Many cultures have a touch-based therapy or form of bodywork. Cultural philosophy has influenced the evolution of therapeutic bodywork over time (Jahnke, 1985).

A case study of Jari-jari Spa in Sabah is used to describe an award-winning traditional Dusun Lotud Inan massage (also known as paddy field massage). This is an example of traditional treatments used by the indigenous population in Malaysia as a form of wellness therapy that passed down from generations to generations.

8. Malaysian Government Policies in Support of Health Industries

The government's pro-business political culture continued to lure more expatriates to the country and the top item on their list always seemed to be

healthcare. With the National Key Economic Areas (NKEAs) identified, various strategies had been planned under the Entry Point Projects (EPP) which, as a whole is to ease and enable the realization of the Economic Transformation Program (ETP).

To support the growth of industries in Malaysia in general, and the health industry specifically, various policies had been put in place while existing policies were changed to gear up the growth of health industry. In line with this, the government had come up with policies to enhance and facilitate the growth of the all the industries stipulated as the NKEAs (National Key Economic Areas); improving the infrastructure of the country especially the transport system, investing in high technology to increase the production of fuels, gas and electricity, reducing red tapes in government administrative procedures, redefine the roles and scope of the various ministries for an integrative and collaborative efforts towards enhancing each industry, encouraging more involvement by providing tax incentives, transparency in the provision and easily access government and conventional entrepreneur loans, took numerous initiatives in promoting the industry for exportation, providing clear and easily abiding rules and guidelines by the Custom Department on the importation of equipment and immigration, and many others.

The various ETPs (Economic Transformation Programme) under health tourism were to enhance the industry by widening the market and its usage; mandating private insurance for foreign workers, creating a supportive ecosystem to grow clinical research, reinvigorating health travel through better customer experience, proactive alliances and niche marketing, creating a diagnostic services nexus to achieve scale in telemedicine for eventual international outsourcing, and seven others which are inclined towards manufacturing of health devices.

Changes in government policy helped further the expansion of private healthcare providers. For example, enjoying control over the largest forced savings institution, i.e. the Employees' Provident Fund, the government instituted reforms in 1994 to allow contributors to withdraw up to 10 per cent of their balances for medical treatment. In addition, new taxation policies were introduced granting individuals tax relief on medical expenditures for self, spouse, children and even parents. Although these policies are for the welfare of the people in general, they have helped boost the private health services by increasing the domestic demand.

The Government is moving towards a more business friendly environment by setting up a special task force to facilitate business called PEMUDAH, which means "simplifier" in Malay. Highlights includes easing restrictions and requirement to hire expatriates, shorten time to do land transfers and increasing the limit of sugar storage (a controlled item in Malaysia) for companies. The efforts of PEMUDAH are beginning to show fruits as the economy's ranking improved to number 20 in 2009, with marked improvement in four areas: getting credit; dealing with construction permits; paying taxes; and enforcing contracts (World Bank Report).

Under the Eighth Malaysia Plan, the Government has targeted more private sector initiatives to promote Malaysia as a healthcare hub for both traditional and modern medical treatment. The consequences of these developments had resulted in a further outflow of doctors, laboratory technologists and nurses from public to private healthcare establishments. The private healthcare providers enjoy accounted for 45 per cent of the doctors, 22 per cent of the beds, 26 per cent of the admissions and 54 per cent of the overall health expenditure (2010). To overcome the imbalance in the distribution and to increase the supply of healthcare professionals, the Government had strengthened the Human Capital Development by implementing several strategies. Among which were the improvement in education quality and accessibility, introduced types of various youth programs to provide entrepreneur skills, and facilitates academia-industry collaborations for internships and training (train the trainers program).

The commitments by the Government of Malaysia on enhancing the growth of tourist industry in general and medical tourism in particular were evidenced by the budget allocation under 10th Malaysian Plan, whereby the government allocated a total of RM899 million in 2010 to implement several programs in boosting the industries. In particular to further promote the medical tourism industry, program to attract more participants from United Kingdom, Japan, Republic of Korea, Middle east, India and China to participate in the Malaysia 'My Second Home'; hence creating a foreign market for the health industry, also the provision of tax incentives for healthcare service providers who offer services to foreign health tourists and increased the income tax exemption from 50% to 100% on the value of healthcare exports had been realized.

The Government had also taken the initiative in establishing the Malaysia Healthcare Travel Council (MHTC), which is the primary agency to promote and develop healthcare travel. MHTC works with industry players to formulate strategic plans for the promotion of healthcare travel services and coordinates promotional activities for Malaysian healthcare providers and related stakeholders. The establishment of this council is testimony of the Government's commitment to work together with all relevant stakeholders to further develop the healthcare travel industry. In 2008, about 375,000 healthcare travelers visited our promoted hospitals, bringing in revenue of RM299 million from this activity (MTHC). During the first half of 2009, the promoted hospitals recorded 165,095 foreign patients with revenue of RM142.3 million. Compared to the first half of 2008, there is a reduction of 13 percent in foreign patients and a 2 percent reduction in revenue. But in terms of revenue per patient, we see a growth of 12 percent, from RM769 to RM862 per patient (MTHC).

9. Regulations pertaining to Healthcare Services and Healthcare Products in Malaysia

There are several Acts and Regulations in place either to protect the people/clients and the industrial sectors in Malaysia. Some Acts and Regulations are specific for healthcare industry (services and products) while others are indirectly applicable but important to ensure the compliance towards optimum safety and of highly quality healthcare services delivery and healthcare products.

1. Pharmaceutical Regulations

In 1998, Malaysia's Drug Control Authority (DCA) registered 22,085 drugs and traditional medicines out of about 40,000 applications received. Of the total number of registered products, 8,187 were prescription drugs, 5,415 over-the-counter (OTC) drugs, and 7,819 traditional medicines.

Over 65% of Malaysia's pharmaceuticals are imported, in part because most doctors are reluctant to switch to local brands as they prefer the higher quality imported drugs. Thus, compared to imported drugs, most local drugs are

common/general pharmaceuticals such as painkillers and antibiotics since it is not economically feasible to target a specialized segment.

Recently, the Pharmacy Board of the MOH has been encouraging additional improvements in the dose drug distribution system, clinical pharmacy component, total nutrition services, and patient medication counseling. It is also trying to increase the purchases of pharmaceutical preparations in the market, reduce the manufacture of pharmaceuticals in hospitals, and implement Good Manufacturing Practices (GMP) in hospital manufacturing laboratories.

2. Medical Device Regulations In Malaysia

Since the early 1990s, Malaysia's medical device market has been growing at 15 - 20% annually. The country's medical device market is currently worth about \$300 million, with imports accounting for more than 90% of this total. Because of the significant ringgit depreciation from the 1998 financial crisis and the subsequent increase in import prices, Malaysia's medical device market suffered a setback between 1997 and 1998. However, the economic recovery in Malaysia has rejuvenated import growth (particularly for electronics and high-technology products), and thus the outlook for medical device imports - especially high-technology equipment - is positive.

There are currently very few trade barriers or regulations for imported medical equipment in Malaysia. Only latex rubber products (i.e. condoms, surgical gloves) require certification by the Ministry of Health, and the government also maintains some safety-related regulations on certain devices - for example, it is government policy not to buy used/refurbished medical equipment, or allow new, experimental products into the country without FDA or other international standard approval.

Under the country's Atomic Energy Act (which among other things requires radiation-emitting equipment to be handled by authorized persons only), any x-ray equipment must be specially examined and approved by the Ministry of Health before being used by doctors and radiologists.

The Ministry of Health (along with the Association of Malaysian Medical Industries) is drafting a more comprehensive regulatory framework for medical devices that should be implemented by 2002. Reasons for this decision include the

government's growing concerns over the quality of imported devices as well as the urgency of meeting the European Union's new CE Mark approval standard for all medical devices in the EU (the destination for 39% of Malaysia's total medical device exports).

3. Public and Private Sector Medical Equipment Purchases

In the public sector, health equipment purchases are classified into two groups - those over and under RM50,000 (US\$11,800). For purchases greater than RM50,000 (which make up the majority of public medical device acquisitions), the MOH will issue a tender that is advertised in local newspapers. Distributors are then requested to provide specifications and prices for their products.

Once tenders are closed, an evaluation board (made up of one member of the MOH and at least two other members that are usually heads/department heads of the purchasing institutions) will consider the bids. In purchases less than RM50,000, hospitals and public institutions will tenders on their own.

In the private sector, tender processes tend to work somewhat differently. Where healthcare groups are the purchasers, equipment will be procured through a procurement arm or an equipment consultant firm. In this case, the equipment consultant will be a storehouse of information for their client and thus provide an important link for the supplier to access the market. Alternatively, they may allow their component hospitals to purchase equipment individually, with a member of the central office on the individual hospital board. Thus, the manufacturer and/or its distributors would be better off communicating with the department heads of the individual hospitals as well as the equipment divisions of the central office.

Public and private hospitals, while using different methods to procure medical equipment, maintain relatively similar standards for their purchases. While price is very important (and has played a greater role recently due to the ringgit's depreciation), the most important factor is still quality and the equipment's specifications. After-sales service (i.e., maintenance and training) offered by a firm is also very important, especially for purchases of electro-medical and other high-tech equipment. Finally, both sectors tend to favour local distributors and local companies registered with the Malaysian Ministry of Finance in cases where prices are similar.

Thus, if a foreign firm wants to concentrate on the public sector, it might consider aligning itself with a listed distributor that has extensive sales offices and maintenance facilities in the country.

4. Intellectual Property Protection

The Malaysian government plans to implement new measures in the enforcement of intellectual property rights, including the creation of new legislation and conducting reviews of existing legislation. These actions are intended primarily to conform to the Trade Related Aspects of Intellectual Property Rights (TRIPS) Agreement implemented by the World Trade Organization in 1995. They are also in response to growing concern over the widespread production, distribution and use of illegally produced software and technology. The implications of TRIPS for Malaysia are:

- i. Stimulating an increase in cross-border trade and investment as well as technology transfer.
- ii. Improved confidence would create a more favourable trading and investment environment in Malaysia.

However, changes on the existing IP laws are needed to enhance these efforts, with new IP laws will need to be created. The budget allocation should be increased for personnel and improved technology. Currently, the government measures that have been planned or are underway include;

- i. The recent transition from the United Kingdom Designs Protection Act 1949 to the Industrial Design Act 1996 (Malaysia).
- ii. Reviewing section 42 of the Copyright Act 1987 in an effort to establish a more practical method for proving copyright ownership, as well as making it easier to initiate legal action against copyright pirates.
- iii. Establishing an independent Intellectual Property Training Center in Malaysia designed for recognition and use by all ASEAN member countries.
- iv. Amending the Trademarks Act 1976 and Patents Act 1983.

- v. Creating a new law specifically to protect layout designs of integrated circuits, geographical indications and plant varieties.
- vi. The implementation of recent "cyberlaws": the Telemedicine Act 1997, the Computer Crimes Act 1997, the Digital Signatures Act 1997, the Communications and Multimedia Act 1998.
- vii. Implementation of the Technology Action Plan for industrial development programs: installing a document imaging system (DIP) to increase the efficiency of search and examination functions.

5. Patents

The current legislation governing patents is the Patents Act (Amended) 1983. This legislation currently requires that anyone applying for a patent must do so through a patent agent. The patent agent takes care of all the necessary paperwork; however, the "inventor" must fill out an Authorization of Agent Form to empower the patent agent to act on behalf of the applicant.

The application goes through several stages of examination, and it generally takes between 3 - 5 years before the patent is approved depending on the complexity of the invention. Once approved, the protection period for the patent is for 15 years from the date of patent approval. The patent owner has exclusive rights to exploit, assign or transmit as well as conclude license contracts in relation to the patent. This includes making, importing, offering for sale, selling, or utilizing the invention.

6. Utility Innovations

A "utility innovation" is defined as "any implement, tool, product or process which is of practical utility by reason of its form, configuration, construction or composition." A utility innovation does not have to fulfil the same requirement of inventiveness as a patent. Therefore, any invention that does not meet the inventiveness requirement may have the item registered instead as a utility innovation.

The application process for obtaining a Utility Innovation Certificate is the same as that for a patent. The certificate provides the same protection as that of a patent, but is only valid for 5 years from the date of approval.

7. Trademarks

Trademarks must be registered through the same application process as a patent, utilizing a patent agent. There is a three-stage approval process, which can take from 3 - 5 years. Currently, once registration is approved, trademark protection is granted from the date of filing for a period of 7 years, after which it is renewable for 14 years. The Trade Marks (Amended) Act 1994, which has not yet gone into effect, will extend the initial protection period to from 7 years to 10 years. The registered owner of the trademark has the exclusive right to utilize the mark in relation to the goods for which it is registered.

8. Industrial Designs

An industrial design only refers to the shape, configuration or pattern that has been applied to a particular article, not the article itself. In order to be registered, the design must be able to be "judged solely by the eye". The design must not have been used or published prior to the submission of the registration application.

Previously, industrial designs were covered under the United Kingdom Designs Protection Act 1949. However, the Industrial Design Act 1996 (Malaysia) will now allow applicants to file directly with the Malaysian government. Protection is extended for three consecutive (renewable) five-year terms, after which, anyone can use the design.

10. Quality Assurance of Healthcare Provision by Private Sectors

The setting up of associations pertaining to healthcare and various committees comprising of the government officials and representatives of the private healthcare providers had showed that there is commitment from both parties to ensure the safety of the people utilizing the healthcare services and products. In Malaysia, the Ministry of Health (MOH) is directly responsible for the healthcare regulatory system, with some help from several government bodies such as the Malaysian Medical Council (MMC), Malaysian Medical Association (MMA) and Association of Private hospitals of Malaysia (APHM). In 2003 and 2009, the system saw the establishment of Patient Safety Council of Malaysia (PSCOM) and the Malaysian Healthcare

Travel Council (MHTC), respectively. These bodies engendered from Malaysia's burgeoning private healthcare facilities.

The Malaysian Medical Council enforces the Medical Act 1971 into action by ensuring the highest standards of medical ethics, education and practice, in the interests of patients, the public and the profession.

The Malaysian Medical Association serves as the voice and arbiter for medicine and medical professionals. This non-governmental body organizes education events, promote social, cultural and charitable initiations in the industry as well as encourages business, trade, joint venture and other commercial openings for the association.

The Association of Private Hospitals of Malaysia's role includes guidance, promotions and representing private institutions on the formation, operation and management of healthcare related staff, patients, institutions, pharmacies, and facilities. It is also responsible for ensuring that patient's interest are served and are able to continue to receive effective, safe and appropriate treatment at all times.

The Patient Safety Council of Malaysia (PSCOM) was set up as directed by the Malaysian Cabinet. It is responsible for leading the national effort to improve patient safety by raising the awareness of patient safety issues while enabling, empowering and motivating the stakeholders about their rights.

The Malaysian Society for Quality in Health (MSQH), formed to through the initiatives of the MOH, APHM and the MMA is an independent, not for profit organization working actively in participation with healthcare professional to ensure safety and continuous quality improvement in the services provided by healthcare facilities in the country. The society conducts voluntary quality accreditation program for Malaysian Healthcare organizations, develop and review healthcare standards in consultation with the industry and professional bodies, conduct education program and provides information for accreditation. Other quality standards adopted by the private healthcare providers are the International Hospital Federation and the ASEAN Society for Quality in Healthcare, Asian Hospital Federation.

11. SWOT Analysis of Healthcare Industry in Malaysia

In listing the issues under SWOT analysis, recommendations are given where appropriate especially to overcome the identified weaknesses and threats of/to the healthcare industry in Malaysia. The recommendations given were based on the feedback and suggestions from the stakeholders and of the authors.

I. Internal factors

A. Opportunities

- i. Promising return of investments
 - Malaysia's private healthcare industry is a hidden jewel that has a strong potential to compete successfully and to be an earner of foreign exchange. The top 35 private hospitals of Malaysia's healthcare industry have been able to collectively see their revenue grow from RM58.9 million with around 103,000 medical tourists in 2003 to RM299.1 million in 2008 with around 375,000 medical tourists. In terms of growth, medical tourists grew at an average of 30 percent per annum while revenue grew at an average of 35 percent per annum during that period. This is despite the performance during the first half of the year which had been affected by the global economic slowdown and the Influenza A (H 1 N 1) pandemic. Most recent achievement was showed during first half of 2011 whereby the number of foreign patients grew from 22.6% (2010) to 26.1 %, with 255,291 (2010: 202,374), generating revenue of RM229.1 million (2010: RM202.5 million). For 2012, number of foreign is targeted to reach 440,000 with expected revenue of RM431 million (2010: 392,956; RM379 million). (Ref: Economic Report 2011 /2012, Ministry of Finance)
- ii. Strong Support from Government
 - Just like many other state-driven entrepreneurial efforts, health tourism initiatives in Malaysia are very much government driven. The Ministry of Health takes the driver's seat along with its traditional regulatory role. Tourism Malaysia heads the promotional subcommittee with backings from MATRADE and MITI. Down the line, APHM and MATTA as the implementers or the enablers had showed good outcome. During overseas

missions, the diplomatic missions have never failed to provide logistics and other necessary support. This synergy is further enhanced by the other pieces in the jigsaw namely the Immigration Department, Ministry of Finance, the National Economic Action Council and the Malaysian Association of Hotels.

- The government of Malaysia has good ties with almost majority of the countries in the world and has many bilateral business deals with countries in the ASEAN and Asia regions. These efforts should be doubled, especially to get more active involvement of the Association of Private Hospitals, Malaysia.
- The government of Malaysia had declared and taking steps on their support in favour of health tourism. There are many opportunities given by the government as incentives to boost the growth of Malaysia's healthcare travel industry; which includes tax exemptions for the expansion or refurbishment of participating hospitals, revising existing advertising regulations and guidelines related to hospital promotions, double tax deduction for hospital that apply for domestic or internationally-recognized accreditation, employment opportunities for spouse of specialists returning or coming from overseas to practices locally, and special permits for hospitals vehicles to ferry patients and relatives to and from the hospital, to airports and hotels.
- The Ministry of Health is continuously bringing potential buyers of healthcare travel services to Malaysia by providing foreign facilitators, insurance brokers and agents, and reportersexposure to the healthcare facilities and capabilities available in Kuala Lumpur, Penang and Melaka. Although the issue of medical insurance portability hinders many promoters of trans-border medicine, government-to-government arrangements could be set as the one seen in European countries. A more liberal approach by the insurers and third-party administrators will pave the way for a wider usage of healthcare funds. We can learn from the experience of the EU in the provision and consumption of modern healthcare across the national boundaries.

- iii. Malaysia has been declared as one of the Halal Hub in the region and in the world; this would attract more tourists from the Arab world and from other Muslim countries, apart from others. Agencies such as Tourism Malaysia and MATRATE should hold more healthcare exhibitions, promote healthcare service in these countries and develop bilateral ties to enhance easy entrance to Malaysia for health tourism.
- iv. People are now more concerned with maintaining/boosting health and wellness; they are more concerned and conscious about their own health, by practicing healthy lifestyle instead of only seeking medical treatments when ill. There is a promising shift of health and wellness users to family members instead of women and older visitors, and also a shift in the usage of spa and wellness salon, besides screening for medical illness. All these services are available in Malaysia at cheap price and of high quality.
- v. Malaysia is fast catching up with India, Indonesia and Thailand to cater for 'wellness tourism' and provide traditional and complementary medicine (TCM). Wellness or rejuvenation components include spa resorts, reflexology centres and sauna, aromatherapy and massage services.
- vi. The available and relatively cheaper healthcare labour market in Malaysia especially for specialised care for the elderly frail and those in need of rehabilitations, made Malaysia the best place for such cares. In addition the politeness and high respects to elderly in Malaysian culture, the varieties of food from many countries and the infrastructure designs could make foreigners feel at home.

B. Strengths

1. Multi-ethnics population

- Malaysia has multi-ethnics Malays, Indians and Chinese with multi-cultures that are of interest to many especially her mother language which is almost similar to Indonesia, India and China
- English speaking community (by all levels of people; even the retailers at the wet market are able to communicate with basic English), signage are dual language (Bahasa Malaysia and English) and customer friendly

- Tourist attractions for varieties of food "Food Paradise and Halal Hub especially to Muslim tourist
2. Peaceful and stable political environment - Which allows continuous foreign investments - Encourages foreign workers/immigrant - Tourists are secured and feels comfortable
 3. Geographical in favour
 - Main markets: Indonesia (72.0%), Singapore (10.0%), Japan (5.0%) and West Asia (2.0%) (UNESCAP, 2007).
 - The majority of medical tourists travel to Penang (61%), while Malacca and Kuala Lumpur received 19 percent and 11% of health tourists respectively (Ormond, 2011).
 - Penang is known as attracting primarily lower-middle income patients from the nearby Indonesian island of Sumatra (Ormond,2011)
 - Air Asia and Malaysia Airlines has spread its wings to every continent of the globe, making Malaysia one of the most accessible destinations among the emerging economies. All the states in the country are connected by excellent infrastructure and healthcare facilities are available at every tourist destination.
 4. The number and range of specialist hospitals, clinics and dental surgeries have increased tremendously all over the nation in the last decade. The health care services throughout the country, is of world class standard and the medical cost in Malaysia is one of the most competitive in the world. Today, with support from the Malaysian government, a large number of Malaysian private hospitals are actively participating in health tourism. The country offers medical services in a wide range of fields, including cancer treatment and pain management, cardiology and cardiothoracic surgery, fertility treatment, general screening and wellness, orthopedics surgery and rehabilitative medicine, to name a few. There are more than two hundreds private hospitals that are registered in Malaysia, providing almost 13,000 beds for inpatients.
 5. Promising human capacity in the delivery of healthcare service;

- The government had taken various strategies and steps to ensure enough and continuous supply of health professionals for this industry, as well as assuring their quality.
 - There are 35 medical schools and 18 allied health sciences colleges that are able to produce big volume of doctors, nurses and other biomedical personnel.
 - Every year, the Department of Civil Service provide about 200 scholarships to medical officers at the Ministry of Health to do clinical master program of various specialties at 3 top local universities; affiliated with teaching hospitals for the training of specialists. Some of these specialists will join the private hospitals once their bonded service is completed. Therefore, although there is an internal brain drain of the specialist from the public to private hospitals, the number of specialist at the public hospitals is always replenished by more medical officers becoming specialists.
6. Most private hospitals offer modern treatment with high technology medical equipment and all sorts of specialized medical treatment. Some of the private hospitals like KPJ has branches in Singapore and Indonesia and offers latest and updated treatment and investigations for certain diseases.
7. High standards medical care
- Having inherited the standards and system from the British gives Malaysian healthcare two distinct advantages - medical and nursing 'lingo' is still English, and the medical curriculum and qualifications are very much UK-orientated. Certification by the various Royal Colleges of the UK is a norm for the medical specialists. The effects of this 'inheritance' are seen directly in the mode of treatment and the medical technology available for the patients in the local healthcare delivery system (Hooshmand M Palany, APHM, 2010).
 - Another recent development in assuring quality and high standards medical care is the hospital benchmarking project jointly undertaken by the National Productivity Corporation and National University of Malaysia.

8. Relatively cheaper charge of medical treatment

- compared to many countries (developed and developing countries), Malaysia healthcare costs are very competitive. An angioplasty which costs around US\$57,000 in the US and US\$13,000 in Thailand, is only about US\$1 1,000 in Malaysia. A knee replacement procedure which costs around US\$40,000 in the US and US\$13,000 in Singapore, is only US\$8,000 in Malaysia. These indicate prices illustrate her competitiveness in the region. It is no surprise then that Nuwire Investors (2008) an online news source has ranked Malaysia amongst the world's top five medical tourism destinations in terms of quality, affordability as well as receptiveness to foreign investment. Indeed, our competitive cost of treatment, along with excellent service has enabled Malaysia to provide quality healthcare service.

9. Strong association of private hospitals

- There is a strong Private Hospital association which collaborates with the government agencies in ensuring the delivery of safe and high quality medical treatment, enhancing its growth and look after the well being of its members especially the practitioners in terms of providing the latest acceptable practice/treatment with continuous medical education

10. Traditional and Complementary Medicine (TCM)

- The country is blessed by various natural healing assets such as climates, caves, rainforests, sea, and waterfalls on hill. The dominant use of herbs and plants by the indigenous population that follows generations of traditional healing practices will further enhance the integration of traditional and complementary medicine into the national health system as well as the development of wellness industry in the country.

- The efforts of Ministry of Health (MOH) in promoting the use of traditional and complementary medicines for illness. Foreexample, the policy of integrating traditional and complementary medicines into the conventional medicine system.

- There are various types of TCM in Malaysia, some adopted traditional treatment from China and India, but most are uniquely from Malaysia i.e by the local Malays and Aborigines.
- The treatment mainly for illnesses related to mind and spiritual, i.e the famous Islamic Spiritual treatment; Darul Shifa which offer treatment and cure for those with mental illnesses, including mental disturbances related to drug dependences or drug addictions.

11. Established Quality Assurance program

- There are various safety and quality program that could be followed by the private healthcare providers in Malaysia. These are encouraged by the sectors for credentialing, accreditation and recognition locally and internationally
- The stringent qualifying standards were able to provide integrated or specialised tertiary care along with either ISO or accreditation as a quality benchmark.
- It is worth noting that the number of medico-legal cases in this country is still negligible, though there are sufficient provisions in the law to protect the interests of the patient.

12. Malaysia's investment promotional agency; MIDA (Malaysia Industrial Development Authority), with over 25 branches worldwide is ready to promote investments in healthcare widely from foreign investors. MIDA has a complete set of incentives, for example tax concessions, for this purpose (research and development, training and tax holidays).

13. Cost of energy is cheap especially for social purposes like the hospital.

14. Hotels are also cheap especially it is priced in Ringgit compared to other countries price in US Dollar.

C. Weaknesses

i. Internal and external brain drain

Malaysia is not free of this issue on brain drain especially of the specialist moving from the public to private sectors due to higher pay and better working environment (with modern facilities and less taxing workload and ability to

focus or master on a specific illness). However many strategies had been taken by the government to reduce this migration as mentioned under the strengths in the SWOT analysis. In addition, there are several strategies specially developed to prevent or reduce the migration of public doctors to private or to overseas such as;

- the government has revamped the salary scheme for doctors with a special promotion incentives i.e “Time Based Promotion” according to seniority, gives tax exemption on allowances (such as civil service, critical professional service, housing and entertainment allowances) which could be of equal amount to their basic salary.
- The government also allows the public sector doctors to do locum at their own health premises after the normal working hours or do locum at private health facilities.
- Those working at public hospitals are offered scholarships to do their Master in their choice of specialty at the local tertiary/university hospitals.
- Issue on external brain drain is not as serious as internal brain drain since those practicing abroad are mainly those who had been doing their under graduate medical studies overseas as private students and continued their education for specialization and training at overseas. They would eventually come back especially with the incentives given by the government, unless they had decided to apply for permanent residence or citizenship in other country.
- Of really a concern is the challenge faced by the universities (which provide training to medical officers to become specialist), to look for experienced specialist to train the young doctors.

Most experienced specialists that had decided to stay with the public hospitals preferred to practice in the Ministry of Health hospitals, rather than the university hospitals, although university hospitals are also public hospitals. This is because as lecturers they are expected to do research and publications other than providing patient service and teaching/training while the pay is similar at both hospitals, since they are all civil servants. To overcome this, the government should allow the university hospitals to pay their specialist with

their own scheme of salary or provide more incentive such as teaching and research allowances or provide several career pathways for the specialist; such as pathway for those who prefer to provide services and training at higher time weight age or pathway for those interested to do research and publication more than service and teaching. The university hospitals should also be allowed to employ more foreign specialist at their own terms.

ii. TCM is not well organized and expanded

- No full registration or database on this sector in the country
- The establishment of this sector has no specific support from the government
- There is no strong association on this sector; the existing associations of each TCM do not merge as a strong body
- No established regulations for this sector on its practice in the country
- The safety and quality of this sector lacks assurance from Ministry of Health
- The over saturation of a certain wellness segment in the country, for example, wellness services that concentrated in physical healing (e.g. spa, massage) but not spiritual and emotionally well-being.

iii. Concern on the quality of health professional

- The mushrooming of private nursing colleges with massive production of nurses raised concern on their quality especially the fairly loose lenient intake criteria; anyone can get admitted after secondary school, and on the curriculum of the nursing certificate. The Nursing Board and the Association of Private Hospital of Malaysia have proposed that the minimum intake to get admitted at nursing school be set and that the curriculum should not contain less than 5 credits.
- Of concern is also the training for medical doctors. There are quite a big number of fresh medical graduates either from local or overseas medical schools and the infrastructures as well as the qualified trainers are not able to cope with the training for house men/interns in Malaysia.

D. Threats

- i. Malaysia is engaging herself to reform to a social based healthcare financing scheme following the privatisation of her primary and secondary healthcare.

With this reform, the domestic demand would be competing with medical tourist, with the market/supplier in favour of the latter.

- ii. Bio-security and nosocomial risks to both the patient's home country and the medical tourism destination. Higher rates of cross infections, spread of pandemics, transplant failures.
- iii. Concern on legal issues with regards to the negligence of medical service providers in developing nations

In conclusion, the evolving economic forces have created an opportunity for Malaysia to move up the value chain of economic activities. Malaysia potential is being recognized both at home and abroad and we need to seize the opportunity. The factors leading to the growth of global healthcare travel will keep evolving and challenging healthcare travel industries around the world to remain competitive.

II. External factors

A. External market environment

- Singapore and Thailand are competitors for Malaysia for medical tourism as Singapore is well known for its high technology while Thailand for longer history of medical tourism
- China and India are well known with their ancient traditional and complementary medicine

B. Domestic market environment

The domestic environment of healthcare industry in Malaysia is very oriented towards the growth of health tourism, given the evidences on its return of investment and potential economic boost.

Pro health industry policies

i. On the healthcare providers to facilitate and encourage them:

- a) Tax exemption on health sector companies
- b) Setting up of Medical Tourism Council to promote medical tourism
- c) Special medical tourist visa for easy entry and longer stay

ii. On the people of Malaysia in spending for health:

- a) The people of Malaysia is allowed to withdraw their Employee Provident Fund for them or their dependents to pay for medical expenses at private hospital
- b) There is about RM5,000 of tax exemption on premiums paid for medical insurances for everyone who have to pay income tax
- iii. On boosting the growth of industries in general:
 - a) Improvement in the government administrative procedures and less bureaucracy i.e licensing, development of transparent and customer friendly guidelines
 - b) Better transport and communication system; no restrictions on advertisement in internet

Modes of Delivery of Health Services Trade (Malaysia)

Mode 1: Cross border supply of services

- There is free movement of healthcare services, Malaysian is allowed to obtain healthcare services at overseas, without boundaries and

Mode 2: Consumption of services abroad

- Foreigners are allowed and welcome to buy the services in Malaysia.

Mode 3: Commercial presence

- Except for general practitioners (GP), (foreign doctors are not allowed to open up general practice clinic), foreigners are allowed to set up hospitals. However, APHM is yet to decide on the size of hospital that can be set up.
- MIDA is ready to promote investment while Matrate is ready to do marketing.

Mode 4: Movement of natural persons

- Similarly, the practice foreign doctors as GP are not allowed in Malaysia, however foreign specialists are allowed to practice at the private hospitals, provided they register with Malaysian Medical. Again, APHM is to set the qualification and type of specialties that can be imported (e.g. nuclear med, traumatology, brain surgery).

12. Profile of some of the Prominent Private Hospitals in Medical Tourism of Malaysia

i. Gleneagles Intan Medical Centre

Gleneagles Intan Medical Centre located at Ampang comprises a 330- bed tertiary care hospital and a separate Medical Office Building which hosts 110 specialists of various specialties and sub-specialties for outpatient services. The patients are regarded as important individuals and each patient's needs, well being and comfort is their priority. Their specialties are: maxillofacial/facial cosmetic surgery, neurosurgery, plastic & reconstructive surgery and many more.

ii. KPJ AmpangPuteri Specialist Hospital

Ampang Puteri Specialist Hospital (APSH) is owned and managed by KPJ Healthcare Bhd. APSH is one of the most modern of its kind in Malaysia and South East Asia and obtained MSQH accreditation and MS-ISO 9001:2000. The hospital is surrounded by the lush greenery of the Ulu Kelang hills from afar providing patients an ideal, interactive and serene environment in which to recuperate. With 226 beds, both private and semi-private patients can enjoy the privacy and comfort managed by expert managerial and medical staff.

iii. National Heart Institute (IJN)

IJN was corporatized and established as a specialist entity committed to delivering the most advanced standards in cardiovascular and thoracic medicine for adult and paediatric heart patients in August 1992. It is an integrated one-stop centre offering comprehensive cardiac services under one roof. They have an experienced and committed team of specialist cardiologists, surgeons, anaesthesiologists, paramedics and clinical support staff to deliver the highest standards of clinical excellence. The 390-bedded institute performs angiogram and angioplasty procedures via radial artery, implantation of AICDs, bypass surgery on "awake patients and many more.

iv. Sime Darby Medical Centre Subang Jaya

Sime Darby Medical Centre Subang Jaya (SDMSJ) was opened in 1985. This award winning tertiary-care hospital has 393 beds, 93 clinic suites and 14 operating theatres. Majority of the 160 specialists were trained in UK, Australia or the US and many international patients from various countries seek treatment at SDMC. The hospital's International Patient Services Centre serves the special needs of medical travellers. SDMC offers complimentary interpretation and translation services to

foreignpatients upon request. It has obtained JCI accreditation, ISO 9001-2000, MSQH accreditation etc.

v. Sunway Medical Centre

Sunway Medical Centre (SUNMED) is a private hospital offering specialized tertiary healthcare services located within a well-developed township in Selangor. The Medical complex is an eight-level building with 240 beds and 45 specialist consultation suites. They provide professional clinical expertise and patients will have access to a wide range of inpatient and outpatient specialised healthcare facilities, health promotion programmes and 24 hour emergency services.

vi. Loh Guan Lye Specialists Centre

Established in 1975, is a 265 bedded private hospital. It is located in the heart of Georgetown, Penang, about 30 minutes from the Penang International Airport and 20 minutes from the pristine beaches at Batu Ferringhi. LSC is a "One-Stop" Medical Centre providing a very comprehensive and up-to date quality healthcare services and facilities ranging from prevention, diagnosis and treatment of a wide range of diseases and medical conditions to aesthetic procedures and health screening packages in a warm and caring environment ideal for rest and recovery.

vii. Columbia Asia Hospital, Seremban

Columbia Asia Hospital Seremban is a premier specialist medical centre located within 5 minutes of town. In addition to 77 beds, the centre provides multidisciplinary healthcare services covering outpatient and inpatient specialist services, 24-hour clinic and emergency services utilizing the latest, effective and affordable medical technology. The centre is well-prepared to deliver on its motto - Columbia Cares.

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APPENDIXES

Malaysian Healthcare Facilities in 2009

Public Healthcare Facilities		2009	
*Hospitals (MOH and Non MOH)		138	
*Special Medical Institutions		6	
Health Clinics		808	
Mobile Health Clinics		196	
Dental Clinics		2,952	
Community Clinics (Klinik Desa)		1,920	
*A total of 41,249 beds			
Private Healthcare Facilities		2009	
Licensed	Specialist Hospitals	187 (11,689)	
	Maternity Homes	12 (102 beds)	
	Nursing Homes	12 (273 beds)	
	Hospice	3 (28 beds)	
	Ambulatory Care Centre	21 (108 beds)	
	Blood Bank	5	
	Haemodialysis Centre	75 (848 beds)	
	Community Mental Health Centre	1	
	Registered	General Practitioners	6,307
		Dental Clinics	1,484

List of Universities and Colleges with Medical Faculty

(Some offer two programmes per year)

- 1) University Malaya (UM)
- 2) Universiti Kebangsaan Malaysia (UKM)
- 3) Universiti Sains Malaysia (USM)
- 4) Universiti Putra Malaysia (UPM)
- 5) UiTM
- 6) University Sains Islam Malaysia (USIM)
- 7) Universiti Darul Iman
- 8) Universiti Sarawak Malaysia (UNIMAS)
- 9) Universiti Sabah
- 10) Universiti Malaysia Kelantan
- 11) Melaka-Manipal Medical College: 2 programmes
- 12) Monash University Malaysia
- 13) International Medical University (IMU)
- 14) SEGI University College
- 15) Alliance College of Medical Sciences (ACMS): 2 programmes
- 16) Penang Medical College (PMC)
- 17) Mahsa University College
- 18) Masterskills University College of Health Sciences
- 19) Royal College of Medicine Perak (UNIKL) : 2 programmes
- 20) Universiti Islam Antarabangsa (UIA)
- 21) Newcastle University Malaysia
- 22) Perdana University : Graduate Medical School
- 23) Perdana University : RCSI
- 24) Inssaniah University College
- 25) Quest International University Perak (starting soon)
- 26) RCSI Trengganu (starting 2012)
- 27) KPJ University College (starting soon)
- 28) Cyberjaya School of Medical Sciences
- 29) AIMST
- 30) Taylor's University College
- 31) Management and Science University (MSU)
- 32) University Tunku Abdul Rahman (UTAR)
- 33) University College Sedaya International (UCSI)
- 34) Lincoln University College(started in 2011)
- 35) University Pertahanan Nasional Malaysia (started in 2009)

Hospitals Participating In Healthcare Tourism In Malaysia

1. Assunta Hospital
2. Bains Physio Columbia Asia Hospital (Bkt Rimau)
3. Dental Pro Group
4. Fatimah Hospital
5. Gleneagles Intan Medical Centre
6. Gleneagles Medical Centre
7. Global Doctors Specialist Centre
8. Golden Horses Health Sanctuary
9. How□s Orthodontics & Dental Surgery
10. HSC Medical Centre
11. iHeal Medical Centre
12. International Specialist Eye Centre(ISEC)
13. Island Hospital
14. KPJ Ampang Puteri Specialist Hospital
15. KPJ Damansara Specialist Hospital
16. KPJ Ipoh Specialist Hospital
17. KPJ Johor Specialist Hospital
18. KPJ Kajang Specialist Hospital
19. KPJ Penang Specialist Hospital
20. KPJ Selangor Medical Centre (S'gor Specialist Hospital)
21. Lam Wah Ee Hospital
22. Lifecare Diagnostic Medical Centre
23. Loh Guan Lye Specialists Centre
24. Mahkota Medical Centre
25. Mawar Renal Medical Centre
26. Mount Miriam Hospital
27. National Heart Institute
28. Pantai Hospital Ayer Keroh
29. Pantai Hospital Ipoh
30. Pantai Hospital Penang
31. Pantai Medical Centre Sdn Bhd
32. (Pantai Hosptal K. Lumpur) Penang Adventist
33. Hospital Prince Court
34. Medical Centre
35. Pusat Tawakal
36. Hospital Puteri Specialist
37. Hospital (Johor) Putra Specialist

38. Hospital Sabah
39. Medical Centre Sentosa
40. Medical Centre Sime Darby Medical
41. Centre Subang Jaya
42. Sunway Medical Centre Taman Desa
43. Medical Centre Timberland
44. Medical Centre Tropicana
45. Medical Centre Tun Hussein Onn
46. National Eye Hospital Tung Shin Hospital
47. UM Specialist Centre (UMSC)
48. NCI Hospital
49. Normah Medical Specialist Centre

CHAPTER 3

Transforming the ASEAN Economic Community (AEC) into a Global Services Hub: Enhancing the Competitiveness of the Health Services Sector in Singapore

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1. Introduction

Singapore was the first country in the region to officially articulate an aim to attract medical tourists and promote the export of health services overseas. In 2003, the Healthcare Services Working Group (HSWG) of the Economic Review Committee recommended that Singapore attract one million foreign patients by 2012. To achieve this goal, the Singapore Tourism Board (STB), along with the Economic Development Board (EDB) and International Enterprise (IE) Singapore, launched SingaporeMedicine in 2003, a multi-agency initiative that aims to promote, develop and maintain Singapore as an international medical hub. However, in recent years, the push for medical tourism has been muted.

Section one of this paper summarizes the Singapore context for a past medical tourism hub policy, followed by an overview of the health system, with policy implications for the system should medical tourism become a major growth area. Methodology is then described in section two, followed by the findings of the SWOT analysis conducted among stakeholders in the health services sector.

The objective of this paper is to:

1. Undertake a SWOT analysis for the health services sector in Singapore.
2. Undertake an analysis of policies/regulatory/institutional support for the health services sector in Singapore.
3. Develop a profiling of firms which are considered key players for the health services industry.
4. Provide recommendations drawn from the results of the SWOT analysis as well as from the results of the analysis of policies, regulatory and institutional support on how Singapore could enhance its positions to be part of the global service hub in the region.

1.1. Singapore context

The biomedical industry is featured in the Singapore government's strategy as one of the pillars of the new economy, and going into the new millennium, it is targeted to be one of the major engines of growth. Singapore has always played a significant role as a financial centre, where there has been a traditional focus on the services sector, but it has recently positioned itself as the hub for medical services in the region. Singapore is pro-active in seeking out innovative investments by providing generous support to attract talent from all over and by paying world-class salaries and incentives. There is a strong political will to establish or restructure the major public agencies that are responsible for driving economic development, along with the integration of the manufacturing and biotechnology industries. This is also part of a broader strategy to promote Singapore as a global city, building upon its position as a regional business hub.

1.2. Biomedical Industry in Economic Development

Four areas have been categorized under the biomedical sciences cluster by the Economic Development Board (EDB) of Singapore –namely pharmaceuticals, medical devices, biotechnology and healthcare services. Essentially, the economic development policy undertaken is related to strengthening the value chain of the entire healthcare industry. By developing Singapore into a regional hub for healthcare through aggressive marketing, the strategy is also to integrate the value chain forward into

medical services and backwards from production and manufacturing of medical technologies. In the recent past, the EDB has also launched a massive promotion to attract the big pharmas and managed to do so quite successfully. Many of the largest pharmaceutical companies have located large active product ingredient (API) plants in Singapore and invested hundreds of millions of dollars within the last five to ten years.

1.3. Pharmaceuticals

From the small trickle in the 1970s, investments in the biomedical industry did not grow much until the 1990s when major investments began flowing in. Over the last ten years or so, biomedical development has really taken off. Many pharmaceutical companies have relocated their manufacturing plants to Singapore and are spinning off more start-ups to do clinical trials and basic R&D activities in the region. Pharmaceuticals contributed over \$8 billion or 82% of the total manufacturing output in Singapore in 2002, while generating employment growth of 31%. Pharmaceuticals have actually monopolized the new investments in the biomedical industry. There is considerable success in getting the big pharmas to integrate their production processes backwards by conducting more clinical trials along with the requisite supporting infrastructure. The intention is to promote basic R&D to be done locally so that medicines can be developed for the region to tackle endemic diseases, while tapping resources such as raw materials from the region. Recent targets for the industry are \$25 billion in manufacturing output, with total value-added of \$12.5 billion and employment of 15,000 workers by 2010 (Phua, 2007).

1.4. Research and Development

The government has been very instrumental in putting up venture capital for investments in the biomedical industry. More than \$10 billion dollars have been raised over the last twenty years, along with the creation of many funds for joint ventures. In 2007 there was the launch of another \$7 billion for the following five years, after expending \$5 billion over the previous five years. Singapore has also been very successful in attracting the big names in biotechnology to invest locally. A huge

science park for biomedical R&D, the Biopolis, was developed with all the latest state-of-the-art technology and infrastructure.

Expenditure on R&D has correspondingly taken off in the past decade. As a percentage, this has gone up to about two per cent of the GNP, and the Singapore government's current policy is to push it up even higher. This is also reflected in the growing number of research and training institutes within the recent decade. Many of these, including the key ones, are all set up by the government with very strong links to industry, thus serving as models of public-private partnerships. In the universities, more attention is given to the life sciences and the focus is on endemic diseases and the relevant platform technologies, linking education and research with training. Besides dishing out a stream of training scholarships, the government has also sent many of the top scholars to all the major R&D centres throughout the world. Singapore has been attracting foreign talent from the region and elsewhere - including India, China and the West. Singapore has developed knowledge technologies in many areas of cutting-edge research. For example, there is a team that is doing world-class research work on stem cells technology at the National University of Singapore. Recently, even philanthropy and the private sector have been tapped to donate huge endowments for medical research and education at the NUS medical school, as well as the joint Duke-NUS Graduate Medical School. Development of the biomedical industry is rationally coordinated with education, training and research to ensure allocative efficiency and policy integration.

While the Singapore environment is kept conducive and open to promote innovative research, on the other hand, the authorities have also to ensure that important social, legal and ethical issues are also addressed. Thus there is a strong regulatory structure in place, which as part of good governance, is really the secret behind Singapore's success. Transparency and accountability are present with the necessary checks and balances, and the total system has to be seen to be well-regulated. Otherwise, potential investors would not come to Singapore to risk having their products being copied and their intellectual property stolen. So, this is one area in which the Singapore government really performs quite well, that is to protect intellectual property rights (IPR). The other factor in Singapore's favour is quality assurance and quality control, where high standards and processes are always

guaranteed to guard against inferior or defective products, and to prevent fraudulent and corrupt practices.

Thus Singapore's recent development of the biomedical industry exemplifies an interesting model of a strategic national policy of major investments into value-added medical and related services to leverage on its regional role as an entrepot and service centre. Riding on the new wave of interest that has been generated by the life sciences, many regional countries have aspired to modernize their agricultural sector with newer manufacturing and innovative services sectors like the pharmaceutical and healthcare industries, through a common biotechnology platform with medical tourism (Phua, 2007).

1.5. Singapore Medicine

In healthcare services, there had been a concerted joint initiative by the government and the Singapore Tourism Board (STB) in a global marketing exercise to promote the "Singapore Medicine" brand name. This arose from the recommendations of the Economic Review Committee's Health Services Working Group in 2003. Based largely on economic projections, the aim is to attract one million foreign patients with 1,000 daily admissions by 2012; generating \$3 billion in health expenditure or \$2.6 billion value-added to the economy; creating 13,000 new jobs; and growing the market share from 1% to 3% of GNP. These ambitious targets for healthcare services have also spilled over to the biotechnology sphere, with the expected creation of new employment and value-added growth. The business imperative has thus driven the prospects of developing Singapore into a hub for medical tourism. However in retrospect, such projections are not based on realistic evidence, but have been generated merely as optimistic marketing targets.

Among the major health care corporations in Asia, a couple of Singapore-based companies are placed on top of the league tables in value creation. But they do not have higher turnover in terms of the number of patients reported as their competitors in neighbouring countries. For example, the top international hospital in Thailand (Bumrungrad) is reported to have serviced more foreign patients than the total number in Singapore. But Singapore is competing on the basis of quality and value-added

services, and not so much on the volume of basic health care. Thus it is a different business model, which is of course, related to the vision to develop Singapore into a global and not just a regional hub, providing a comprehensive range of world class and high-quality medical and related services.

1.6. Medical tourism policy

It is important to note that the Ministry of Health has not explicitly promoted or endorsed a medical tourist hub policy. The policy has been driven mainly by the STB in the form of SingaporeMedicine since 2003. This is due to possible political sensitivities about promoting the health sector to foreign patients, which is also not in line with the MOH's mandate to provide affordable and accessible health services to local patients. This relates to what the authors label as a "disconnect" between trade and health institutions at the international, regional and national levels. Trade and tourism ministries are primarily concerned with increasing economic growth and facilitating international trade in the services sector. In contrast, a health ministry's aim is to improve overall population health and ensure equity in health service access and delivery (Pocock and Phua 2011). Whilst Singapore has one of the most integrated inter-agency stances on medical tourism amongst ASEAN countries, the low profile of the MOH is telling in revealing potential conflicting goals between trade and (public) health interests.

Under the ASEAN Framework Agreement on Services (AFAS), several commitments have been made in healthcare. In the seventh package of commitments, these have included:

- Medical services, specifically general medical services (cpc 93121)
- Specialized medical services (cpc 93122)
- Dental services (cpc 93123)
- Veterinary services (cpc 932/9320), deliveries and related services
- Nursing services, physiotherapists and para medical personnel (cpc 93191)
- Hospital services (cpc 9311/93110)
- Ambulance services (cpc 93192)
- Acute care hospitals, nursing homes and convalescent hospitals as defined by private hospitals and medical clinics act, run on a commercial basis (cpc 93193)

- Laboratories licensed under the private hospitals and medical clinics act (cpc 931991)

Compared to other ASEAN countries, Singapore has already made the most commitments in the health sector, reflecting the country's pro-liberalization of trade in other sectors. As noted by a key informant in the MOH, there is currently a shortage of healthcare facilities and personnel throughout the full range of healthcare services. The government's awareness of this problem is therefore seen in the policy to open up the sector to foreign players in this package of commitments.

1.7. Singapore's Health System and Policy Implications of Medical Tourism

The government has encouraged the introduction of market mechanisms in the healthcare sector aimed at making providers more competitive, such as the corporatization of public hospitals since the 1980's and a near fully privatized primary health sector. With an ageing population, rising incidence of non-communicable or chronic disease and an increasingly educated middle class prompting higher demand, healthcare is set to be a major growth sector in Singapore and within the region, with or without foreign patient growth.

Corporatized public hospitals are autonomous and provide most secondary care in Singapore, at around 80.6% of total beds (Table 1). In addition, 30% of beds in public hospitals consist of highly subsidized beds. Not more than 10% of beds are Class A beds to be used for private patients, although it must be noted that the majority of demand for private care in public hospitals comes from Singaporeans, not foreigners. The MOH retains indirect control of autonomous hospitals by selecting board members and CEOs, ensuring that public hospitals fulfil their mission to provide affordable services to local patients. It should also be noted that public hospitals in Singapore are Joint Commission International (JCI) accredited. Given that these hospitals are publicly owned, revenues accruing to medical tourism are taxable and thus profits can be reinvested back into the public health system by the government (Pocock & Phua 2011).

Table 1. Public versus private provision

	Public (%)	Private (%)
Hospitals (2009)	63.6	36.4
Beds (2009)	80.6	19.4
Primary care clinics (2007)	1.5	98.5

Source: Pocock&Phua 2011

The government-organized health financing scheme offers universal coverage in theory via medical savings (Medisave), insurance (Medishield) and a means-tested fund for vulnerable groups who do not have access to either savings or insurance (Medifund). Total health spending is one of the lowest among developed countries in the world at below 4%, although this is set to grow with an ageing population. Out-of-pocket payments (OPPs) as a regressive financing mechanism, dominates private health spending. More OPPs for services leads to more competition in private healthcare markets, as providers are more likely to compete for patients based on price, especially given the price transparency made possible by the internet. Medical tourist payments are dominated by OPPs, but these payments are becoming more organized as part of insurance coverage. For example, as part of a policy to inject further competition since March 2010, Singapore's Medisave can also be used for elective hospitalizations and day surgeries in hospitals of two partner providers in neighbouring Malaysia (Pocock&Phua 2011).

Table 2. Health Expenditure, 2008

Total health expenditure as % of GDP	3.4
Government expenditure on health as % of total government expenditure	8.2
Government health expenditure as % of total health expenditure	35
Private expenditure as a % of total health expenditure	65
Out of pocket expenditure as a % of private health expenditure	93.9
Private prepaid plans as a % of private health expenditure	2.8

Source: Pocock&Phua 2011

Singapore's government has invested significant resources in training healthcare workers, even as the country experiences the highest out-migration of doctors to OECD

countries amongst the ASEAN countries (Bhargava *et al.* 2010). Public medical schools have been establishing partnerships with reputable universities overseas. The National University of Singapore (NUS) for example, opened a joint medical school with Duke University in 2005, and the Nanyang Technological University (NTU) plans to open a similar joint venture with Imperial College London in 2012. Importantly, such partnerships also signal quality of medical resources, crucial to the promotion of medical tourism (Turner 2007). Past Singaporean policies have previously rationalized that in order to recruit and retain specialists in a country with a small local population, the country must attract a high volume of medical tourists. But, within the country, prospective growth of medical tourism may exacerbate public to private sector brain drain, particularly of specialists who provide elective services demanded by foreign patients. Already half of all doctors in the city state work in the private sector (Table 3). However, Singapore has managed to maintain competitive public sector salaries, meaning that public to private brain drain has not been as pronounced as in other ASEAN countries. Going forward, the MOH and the Singapore Medical Association (SMA) will need to establish and promote salary and fee guidelines for doctors in both sectors to avoid denuding the public sector of doctors, particularly if foreign patient volumes increase.

Table 3. Human Resources, Latest Year

	Public (%)	Private (%)
Doctors (2009)	54.8	45.2
Doctors per 1000 population (2003)	1.5	
Nurses (2009)	68.5	31.5
Nurses per 1000 population (2003)	4.5	

Source: Pocock&Phua 2011

2. SWOT Methodology

The authors had already undertaken research detailing the potential impact of medical tourism on health systems in the region and barriers to trade, affording insight into strengths, weaknesses, threats and opportunities at the macro level (Pocock & Phua 2011). To contextualize this prior work, the authors sought more detailed micro-level

qualitative input from local small and medium enterprises (SMEs) and government officials on the strengths, weaknesses, opportunities and threats to the competitiveness of the health services sector in Singapore. A survey instrument for health services providers (HSPs) was constructed and administered to a sample of 17 small and medium enterprises (SMEs) (see Appendix 1). In addition, interviews with key informants in the government sector allowed triangulation with prior work to conceive a preliminary SWOT analysis. Our findings are preliminary and based on a small sample size, so the survey results in particular should be interpreted with caution.

2.1. Strengths and Weaknesses

The internal characteristics of the health sector and HSPs in Singapore are summarized below, followed by external factors affecting HSPs such as supporting industries. These combined factors define a favourable business climate for the provision of competitive health services.

2.1.1. Internal Factors (HSPs)

Human resources: strength lies in quality of medical professionals and weakness in quality of management staff

Results from the survey with SMEs (n=17) indicated that business owners are either ambivalent or not confident about the quality of their overall workforce, with 65% of the sample neither agreeing nor disagreeing with the statement “the overall quality of our workforce is high”. This applies more to managers than to medical professionals - whilst 88% agreed or strongly agreed that “My firm has enough high quality medical professionals to be competitive in the health services sector”, 59% neither agreed nor disagreed that “My firm's managers are highly prepared to compete in the global market for Health Services”. Singapore’s medical training industry is a highly supportive of the expansion and competitiveness of the health services sector, but our survey indicates a gap in management capacity that would enable firms to become more competitive in the sector. This corroborated feedback from a key informant that Singaporean health administrators were not up to international standards, a current weakness of large and small HSPs.

Appropriate medical technology

Half of SMEs surveyed either agreed or strongly agreed that their firm used state of the art equipment, that they upgraded medical equipment often, and that their firm benchmarks with leading global players in the use of medical technology. The remainder were ambivalent rather than in disagreement about these statements. This indicates that the state of medical technology is generally high amongst SMEs, as can be found amongst the large corporate HSPs.

Internal financial resources for expansion

76% of SMEs agreed or strongly agreed that they have sufficient financial resources for expansion. This is fitting as there was ambivalence (35%) and some disagreement (17%) in our sample in response to the statement “It is easy for my firm to raise funds externally / access external credit”. In contrast, the availability of credit to corporate healthcare players is generally high, so limited access to external funds / credit could pose a potential threat for SME expansion in healthcare.

2.1.2. External Factors (HSPs)

The domestic and external market environment in which HSPs operate is largely supportive of expansion of the health sector. Singapore HSPs avail of good transport, communications and energy infrastructure. These external factors are not directly influenced by decisions of the firms, individually and collectively, but they shape the business environment.

Business climate

Singapore’s overall business climate is highly competitive; the city state ranks first in the World Bank’s ease of doing business index as well as first in trading across borders (World Bank 2011). Singapore’s health sector is highly competitive with access to credit and tax exemptions for health services providers (HSPs). HSPs also avail of well developed infrastructure in telecommunications and electricity, although the high cost of these services to SMEs may present a threat to the competitiveness of the sector overall.

Highly regarded health system

Generally, Singapore's health system is reputed for its high quality and strong regulation. Singapore ranked sixth globally in the World Health Organization's first attempt at ranking health systems in 2000. Whilst there has been controversy about the WHO's methods, this placing is indicative of the high quality of care available to both foreign and local patients.

Medical tourist hub policy & SingaporeMedicine

The medical tourist policy initiated in 2003 and SingaporeMedicine's subsequent creation has provided free publicity for HSPs promoting Singapore as a hub for high quality medical services. This arguably has helped firms to gain access to rising numbers of foreign patients. In 2007 the STB noted 571,000 patients spending an estimated S\$1.7 billion (US \$1.2 billion) mostly from the region, especially Indonesia, Malaysia, as well as patients from Middle Eastern countries, reflecting SingaporeMedicine's links there. Popular surgeries include high-end, complex procedures including cardiac and neuro surgery, joint replacements and organ transplants (UNESCAP 2007).

Given the political sensitivities in promoting medical tourism and the government (particularly the EDB's) decision not to explicitly promote the policy, SingaporeMedicine has been disbanded in manpower terms and now operates as a web portal for prospective patients seeking information about healthcare in the city state. Its role in enhancing the competitiveness of the health services sector in Singapore has been significant but factors such as the upturn of the global economy since SingaporeMedicine's inception and a growing middle class in ASEAN countries also help to explain why Singapore has seen a sustained rise in foreign patients since 2003.

Human resources: a growing base

Local training institutes and universities are building local capacity to provide skilled medical professionals. The NUS Yong Yoo Lin School of Medicine trains undergraduate doctors for the MBBS degree, complemented by the Duke-NUS Graduate Medical School who have been training graduate physician scientists since

2005. Nanyang Technological University will soon be launching a third medical school in partnership with Imperial College London. The Singapore government provides numerous competitive training and scholarship programs for local students in biomedical and related studies. In addition, the Health Manpower Development Program (HMDP) allows doctor and health personnel to undertake training overseas, often in Australia, UK and USA. The high quality of medical professionals in Singapore is a major strength in attracting foreign patients and in promoting confidence in the health system as a whole.

Biomedical research hub: a marker of quality research and development

Singapore has a supportive institutional infrastructure for biomedical research and development. Driven by the Economic Development Board (EDB), National Science and Technology Board (NSTB) and the Singapore Productivity and Standards Board (SPSB) since 2005, the biomedical hub initiative aims to firm up coordination between scientific infrastructure and industrial capability. Presently, Singapore is a major base for contract research organizations. A physical hub for biomedical research, Biopolis is home to several government agencies and publicly-funded research institutes, as well as the corporate labs of GlaxoSmithKline, Novartis, Eli Lilly and private companies, such as Bio*One. The hub aims to facilitate peer review and collaboration between the public and private scientific communities. Companies have easy access to state-of-the-art facilities, scientific infrastructure and specialised services, allowing them to cut R&D costs significantly and accelerate the development timeline. Partnerships between the biomedical sector and local HSPs is a major strength that acts a quality marker and indicator to potential healthcare consumers that they will benefit from the latest in medical technologies and treatments.

Government commitment to healthcare and low barriers to entry

With a changing disease profile from infectious to chronic, non-communicable diseases (NCDs), the government has emphasized NCD prevention, treatment and management via Ministry of Health and Health Promotion Board (HPB) initiatives as demand for services related to NCDs grows. There is clear policy coherence with a burgeoning health sector of local and foreign HSPs, who benefit from a supportive

institutional infrastructure for health services and encouragement of entrepreneurialism in the health sector. A key informant stressed that barriers to entry to new players in the health sector were relatively low, with the Economic Development Board (EDB) assisting in advisory services for setting up a HSP in Singapore. However, they offer no financial assistance to do so unless a specific program is initiated by the government.

2.2.1. External market environment

Opportunities and threats presented by regional competition in the health sector and demographic and epidemiological changes are described in this section.

Competition from regional players

Thailand, Singapore and Malaysia have been identified as the key regional hubs for healthcare services in prior research (Pocock & Phua 2011, Chee 2011). However, true estimates of medical tourist numbers are actually unknown due to differences in data collection in these countries. Thailand bases its figures on the number of patient encounters with different specialists, whilst Malaysia utilizes figures from a survey of private hospitals. Singapore's Tourism Board collects this data via an exit sampling of outgoing tourists. Without comparable estimates going forward, it is difficult to assess Singapore's position in the market for foreign patients relative to Malaysia and Thailand. Furthermore, estimates from other ASEAN countries that have expressed an interest in expanding their market share of foreign patients (such as Philippines and Vietnam) are unknown. What is clear from key informants and rough estimates is that Singapore's share of foreign patients hail largely from ASEAN countries – notably Indonesia and Malaysia. This is generally followed by patients from Middle Eastern countries, partly due to Singapore Medicine's business development efforts in that region. Patient numbers from western countries are low and we can expect that ASEAN nationals will continue to form the bulk of medical tourists in Singapore in the near term. Furthermore, in terms of qualitative comparison between countries, Singapore offers high-end, complex and comparatively more expensive services relative to its regional neighbours, with a substantial market share of high-income patients.

When we asked SMEs “how is the growth of global players in your industry affecting your firm?”, 47% had had to carve out a niche area, ranging from “*high quality medical services, niche industry e.g. brain lab, targeting the expatriate market, focusing on building a stronger brand*”. A further 36% had had to lower their prices due to price competition in the sector from Thailand and Malaysia. This indicates that regional competition is affecting the decision making of SMEs toward providing more targeted niche services and lowering prices to stay competitive.

Ageing populations and chronic disease

Chronic diseases have now overtaken infectious diseases as the main cause of mortality and morbidity in most countries—as well as contributing to escalating healthcare costs. Currently, chronic disease accounts for 78% of total deaths in Singapore and 70% of deaths in Southeast Asian countries (WHO GHO, 2008). The rising prevalence of chronic diseases presents significant opportunities for HSPs in Singapore, who can expect to see increased demand for chronic disease management services, surgical procedures related to chronic conditions and rehabilitative care for older patients following surgery. An informant from the Ministry of Health noted that there currently exists a gap in step-down care facilities (3 to 6-month stays) that would enable seniors to rehabilitate post-surgery, before being allowed to return home. Consistent with forecasted demand due to demographic changes, 70% and 53% of SMEs in our sample saw population ageing and rising chronic disease prevalence as an opportunity respectively.

Market segmentation of patients

A key informant suggested that the medical tourist market for Singapore is highly segmented, in that low income patients from the region or elsewhere cannot afford to come here and instead may choose Malaysia or Thailand. The Singapore market is at the high end of surgical complexity but this comes with an expensive price tag, which our informant suggested did little to deter very high- income patients from coming and willing to pay out-of-pocket (OPP) for services. What may be missing is a market for middle-income patients in Singapore. An external global trend of the growing middle class and their purchasing power may have implications for Singapore’s health sector,

which could miss out unless more is done to curb rising OPPs for services. Similarly, more could be done by HSPs to promote tie-ups with health insurance companies, who may be able to help promote Singapore to their clients as a first-choice destination for services.

Market saturation could be on the horizon

In our sample, 82% agreed or strongly disagreed with the statement “there are enough HSPs in Singapore to cope with demand from local and foreign patients”. This may indicate market saturation from an SME standpoint and poses a potential threat to expansion of the health services sector.

Foreign patients as a percentage of profits

Tourism constitutes around 5% of Singapore’s GDP, with approximately 0.5% going towards the health sector via medical tourist spending. In terms of overall GDP this figure is insignificant, but an informant suggested that the importance of medical tourists to the overall health sector was significant and is only set to grow, with a rough estimate of 10% of total revenues in the health sector coming from foreign patients currently. A key informant in the public sector noted that foreign patient flows are insignificant in government hospitals, which are mandated to serve the public good and provide health services to a Singaporean majority. Coupled with the lack of an explicit MOH medical tourism policy, this indicates that any further growth in the medical tourism market is likely to be driven by the private sector.

2.2.2. Domestic market environment

No significant barriers to market entry

A key informant noted that there are no significant barriers to entry for HSPs in Singapore, as the market is already highly privatized with a range of strong local HSPs, including Raffles Medical Group, Parkway Group and the Thomson Medical Centre. The Economic Development Board (EDB), a government statutory agency tasked with increasing foreign investment in Singapore, leads a joint initiative with the Ministry of

Health via the Health & Wellness Programme Office (HWPO). As the mission statement states:

“The HWPO seeks to further enhance Singapore’s healthcare system while driving innovation through key platforms that promote public-private partnerships to accelerate companies’ development of future solutions today. Through these innovation partnerships, HWPO seeks to entrench Singapore as a sophisticated lead market to develop more effective systems and solutions that can address unmet healthcare needs in Asia and global markets”.

Generous funding is offered by the Singapore government to promote the development of new medical technologies or processes in healthcare delivery. One such example is the Public Private Co-Innovation Partnership, launched in November 2010. This initiative aims to *“develop solutions for the government's longer-term needs. The Government will commit S\$450 million over the next five years to fund such collaborations. Each company can receive more than S\$1.75 million in funding for three key stages - proof of concept, proof of value and test-bedding of prototypes. Under this initiative, Singapore's Ministry of Health is calling for proposals for a remote monitoring solution for chronic disease patients, initially targeted for diabetic population. Advances in tele-health technologies can ease the burden of chronic disease management by allowing caregivers and physicians to monitor and administer care remotely. By reducing noncompliance and enabling painless testing, the new technologies can improve the level of care and quality of life for patients. Companies that are developing these solutions can further leverage Singapore as a reference site when commercialising and exporting the solution globally”*(EDB website). Thus, government encouragement of new ventures in the health sector via financial and advisory support from the EDB explicitly welcomes new entrants to the health sector.

Pricing transparency

Limited information available on the pricing of health services presents a threat to attracting both local and foreign patients and raising demand. As a key informant from a HSP noted, insurance providers often have to negotiate with doctors who charge 50% or more for surgeries relative to the market norm insurance companies are aware of, leading to delays in patient reimbursement and sometimes conflict between insurance

providers and patients. Publishing consultation fees is feasible for hospitals but efforts aimed at making surgical fees transparent (via publishing pricing lists) are likely to face resistance unless HSPs are mandated to do so. The recent high profile case of a Singaporean doctor charging exorbitant fees to a member of Brunei's royal family has brought this issue to the fore. The Singapore Medical Association (SMA) had in the past published price guidelines, but a recent ruling by the Competition Commission of Singapore led to its abolishment about three years ago. Now, new market entrants will face a highly diverse range of price and may face challenges in setting competitive prices to attract patients. One informant suggested that the Singapore government should not attempt to control prices, but instead provide guidelines for fees so that patients are at least aware of what the government considers to be a fair price for surgical and medical procedures.

Impact on the public health system and access for local patients

A key informant strongly advocated against a medical tourist policy, citing the high cost to the public sector and local consumers in terms of public to private health worker brain drain and rising medical costs induced by a fee-for-service payment model. This informant noted that private sector salaries were continually rising in contrast to largely rigid public sector salaries. In addition, GP salaries in the private primary care system are held down by highly subsidised government polyclinics, whilst at the tertiary end of care, fees charged by specialists are too high as are their salaries. This trend could be inducing public sector doctors between primary and tertiary care to transfer to the private sector attracted by higher pay. Ultimately, private HSPs have a vested interest to generate profit as equally as provide high-quality services, alongside government policies that prioritizes economic growth.

Healthcare financing

In our survey, SMEs noted that 70% of local patients pay OPPs, in contrast to 65% of foreign patients. The government's financing scheme, the 3Ms (Medisave, Medishield and Medifund), covers just 35% of costs in our sample.

Table 4. Survey Results for Financing

How do most local patients pay for services?*		
Out-of-pocket: 70%	Private insurance: 29%	3Ms (Medisave, Medishield, Medifund):35%
How do most foreign patients pay for services?*		
Out-of-pocket: 65%	Insurance (overseas): 47%	Insurance (local):18%

* n = 17. Percentages may sum to >100 as participants could tick more than one option

In a highly regressive healthcare financing system, where 94% of private healthcare payments are out-of-pocket, the combination of poor transparency of fees and high OPPs can lead to an ever-increasing spiral in healthcare costs (WHO GHO, 2009 data). This can only serve to deter local and possibly the mid- to high-income foreign market from consuming health services in Singapore.

2.2.3. Infrastructure

High cost of electricity/ telecommunications sector to meet future demand

Our sample of SMEs indicated some dissatisfaction with the cost of electricity and telecommunications services, with 37% disagreeing with the statement “My firm is satisfied with the cost of power sources (electricity) available to us”. In response to whether SMEs were satisfied with telecommunication facilities in terms of cost and technical capacity, 52% disagreed or were ambivalent. Furthermore, 42% disagreed or were ambivalent in response to the statement “the local telecommunication infrastructure has the capacity to meet the increased demand of the Health Services sector in the future”. High electricity costs and limited confidence in the telecommunications sector present potential threats to the expansion of the health sector, particularly for SMEs.

2.2. Macro Environment

This section describes aspects of the policy and regulatory environment in which HSPs operate, largely determined by government, that pose opportunities and threats to the expansion of Singapore's health system and its potential to become a major hub for health services.

2.2.1. Policies and Regulations

Strict controls on medical registration

An open immigration policy allows experienced biomedical professionals, researchers and management staff to enter the country, but medical doctors must either have been trained in medical schools detailed in a Mutual Recognition Agreement (MRA) with selected countries, only one of which (Malaysia) is regional, to practice in Singapore (Singapore Medical Council 2011). Otherwise, foreign applicants must pass a medical exam and apply for a temporary practising licence. This limitation is a threat to the expansion of the sector here, particularly as Singapore experiences the highest proportion of domestically trained doctors migrating to OECD countries amongst ASEAN countries (Bhargava *et al.* 2010).

One of our key informants noted that the stringent licencing requirements of the Singapore Medical Council (SMC) were hindering the ability of corporate HSP's to recruit doctors from overseas and by definition expand and provide quality services to patients. He hinted at the use of quotas to limit the inflows of medical practitioners but at the same time, insufficient numbers of doctors being trained domestically. He did however acknowledge the government's efforts in recent years to ramp up the supply of new doctors, exemplified by the creation of the new Duke–NUS medical school and the forthcoming NTU/Imperial College medical school. Currently, strict requirements for foreign doctors present a constraint to the competitiveness of the health services sector in Singapore.

Immigration restrictions as related to patient nationality

A key informant from a corporate HSP shared anecdotal accounts of some prospective foreign patients being subject to onerous checks from the Immigration and Checkpoints Authority (ICA). One such case was that of a Bangladeshi national who intended to undergo a surgical procedure by the HSP, but was subject to cumbersome background checks due to fears that he could pose a terrorist threat. Singapore does not yet offer a dedicated medical tourist visa and this could present a threat to expand its market share of foreign patients in the region and globally.

Land release policies

A key informant noted that the Singapore Land Authority (SLA) had on occasions refused to release land to HSPs, and when they did the location was in inaccessible places. In addition, he noted that the land often was not zoned appropriately by the Urban Redevelopment Authority (URA). Incoherent or unsuitable land release policies currently present a threat to the competitiveness of the sector.

2.2.2. Institutional support

Strong intellectual property enforcement

Singapore offers sound intellectual property protection and enforcement, thereby assuring foreign and local investors of reliable, continued support for medical technology development (enhanced by the biomedical hub policy).

Law and order

Singapore is one of the safest countries worldwide with a homicide rate of 0.5 per 100,000 inhabitants in 2009, the fourth lowest globally (UNODC). The rule of law is particularly strong with strict punishments for offenders.

2.3. SWOT Analysis of the Sector

2.3.1. Identification of Strengths, Weaknesses, Opportunities and Threats

<p>STRENGTHS</p> <ul style="list-style-type: none"> • High quality medical professional workforce • State of the art medical equipment • Sufficient internal financial resources for expansion • SingaporeMedicine online portal for prospective foreign patients 	<p>OPPORTUNITIES</p> <ul style="list-style-type: none"> • Singapore’s reputation for high quality care • Ease of doing business ranking • Population ageing and rising share of chronic diseases • Potential to grow market share in niche areas • Sustained government commitment to education and training of medical professionals
<p>WEAKNESSES</p> <ul style="list-style-type: none"> • Ambivalence about capacity of management staff to compete in global markets • Low confidence in SMEs that staff have the necessary talent to implement /use new medical technologies • Poor intra-industry collaboration and limited participation in international health sector associations 	<p>THREATS</p> <ul style="list-style-type: none"> • High cost of electricity and telecommunications • Potential saturated market for foreign and local patients • Regulation: either too lax regarding quality of care or too restrictive (hiring foreign doctors) • High cost to public sector in promoting private HSPs in terms of brain drain and rising prices for local consumers

2.3.2. Enhancing Strengths and Opportunities / Mitigating Weaknesses and Threats: Roles of Policies, Regulations and Institutional Support

Government should focus on business development, not marketing

SingaporeMedicine has been instrumental in developing relationships with governments and large corporations overseas to send their citizens / employees to Singapore for healthcare. Arguably, patients will want to remain closer to home for medical services unless it is made significantly easier or cheaper to do so. Developing relationships with foreign governments, corporations and insurance providers and highlighting Singapore’s strengths could lead to MOUs that would expand Singapore’s share of foreign patients. The business development recommendation applies equally to cultivating the domestic market.

Building branches overseas

Singapore could do more to expand the reach of renowned regional brands in the health sector (profiled below) in overseas markets by building hospitals and medical centres overseas –in other words, bringing services to the patient, rather than expecting the patient to come to Singapore. As a key informant from a corporate HSP put it, Singaporean health workers will migrate overseas, attracted by higher salaries anyway, *“you may as well recruit them under a domestic brand”* so that the cost of training health workers is not lost in foreign markets under non-Singaporean-owned companies. But there has been reluctance to move in this direction by the Ministry of Health, due to fears that this would exacerbate a perceived shortage of doctors in Singapore. With the rise in training medical staff, along with the potential to hire more foreign doctors if regulations are relaxed, this fear may be unfounded. International Enterprise Singapore could play a significant role in helping large domestic HSPs to build overseas branches. Given the small size of the healthcare sector in Singapore in general, this option would not be feasible for SMEs.

Other feedback received from SMEs regarding areas that need regulation to help them to become competitive global service players included:

- “Quality control / medical excellence”
- “Allow HSPs to provide insurance services”
- “Increase the ability of nurses to bridge skills gap”
- “Decrease restrictions for foreign doctors’ registration”
- “Allow advanced stem cell work”

Importantly, the Singapore government must be cautious in pursuing an export-lead growth model in health services to ensure that this does not skew the incentives for doctors to treat foreign patients over local patients.

2.3.3. Profiling Key Players in the Sector

Parkway Group

Capitalization: S\$3350 million (September 2011)

Workforce: 4228 doctors in Singapore based hospitals (some data unavailable, including data on management staff/nurses)

Sales/ revenue: 1H 2011, S\$621.2 million revenue, S\$78.3 million net profit

Market share: owns and operates network of 16 hospitals and more than 3000 beds across Singapore, Malaysia, Brunei, India, China, United Arab Emirates and Vietnam.

Type of services provided: comprehensive

Please see: <http://www.parkwayhealth.com/newsroom/factsheets/>

http://www.parkwayhealth.com/Library/1/Pages/316/ParkwayPantai_CorporateUpdates_H12011.pdf

Parkway Pantai Limited is the holding company which controls one of the region's largest integrated private healthcare provider with a network of 16 hospitals and more than 3000 beds throughout Asia, including Singapore, Malaysia, Brunei, India, China and Vietnam, and United Arab Emirates. From 2013 onwards, the Group will have 8 new hospitals with more than 2000 additional beds.

In Singapore, the Group owns **Parkway Group Healthcare Pte Ltd** and **Parkway Hospitals Singapore Pte Ltd**, which operates three of Singapore's premier healthcare providers: **Gleneagles Hospital, Mount Elizabeth Hospital, Parkway East Hospital**; all accredited by Joint Commission International (JCI). It also owns **Parkway Shenton Pte Ltd**, a major provider of primary healthcare services, **Parkway Radiology** and **Parkway Laboratory Services**. In Malaysia, the Group owns **Pantai Holdings Berhad** which operates nine **Pantai Hospitals** and two **Gleneagles Hospitals** with more than 700 accredited doctors. Parkway Pantai Limited also operates 40 **Parkway Health Patient Assistance Centres (PPAC)** across the globe.

Indonesia, Malaysia, Bangladesh, Vietnam and Myanmar were the top sources of foreign patients. Inpatient admissions grew 4.2% from 24,282 admits in 1H 2010 to 25,304 in 1H 2011. Day cases grew 6.8% from 18,590 cases in 1H 2010 to 19,854 cases in 1H 2011. Net revenue per adjusted patient day increased by 11%, due to more revenue-intensive, complicated cases in specialties like paediatric medicine, haematology, general surgery, orthopaedic surgery and renal medicine.

Gleneagles Hospital

A 272-bed private tertiary acute care hospital providing a wide range of medical and surgical services, it has a long history of serving the expatriate community throughout the region. Accredited with Joint Commission International (JCI), Gleneagles Hospital's key specialties are cardiology, gastroenterology, liver transplant, obstetrics & gynaecology, oncology and orthopaedics.

Mount Elizabeth Hospital

A 345-bed private tertiary acute care hospital, Mount Elizabeth Hospital is one of the largest hospitals in the region and has an established reputation in Asia for premier private healthcare. It provides a wide range of medical and surgical services and is well known for the depth of expertise of its specialists. Mount Elizabeth Hospital performs the largest number of cardiology and neurology surgeries in the private sector and in the region. The hospital is accredited with Joint Commission International (JCI) and is the first private hospital in Asia to win the Asian Management Award for exceptional people development and management in 1994.

Parkway East Hospital

A 118-bed private general acute care hospital with an outreach specialist centre that provides a comprehensive range of clinical disciplines and subspecialties, Parkway East Hospital (formerly known as East Shore Hospital) has built a niche for itself among residents in eastern Singapore. Parkway East Hospital is accredited with Joint Commission International (JCI) in 2007 and has clinical expertise in surgery, paediatrics, obstetrics and gynaecology, and cardiology.

Parkway Novena Hospital (scheduled to open)

A 333-bed general tertiary acute care hospital located in the newmedical hub at Novena, Parkway Novena Hospital offers a full spectrum of services with key focus on heart and vascular, oncology, orthopaedics and general surgery. The fully single-bedded hospital lies adjacent to the Parkway Novena Specialist Centre and provides integrated healthcare in one location. It has incorporated environmentally friendly features and is the first private hospital in Singapore to implement paper-less and fully electronic medical records.

Raffles Medical Group

Capitalization: S\$1194 million (June 2011)

Workforce: not available

Sales/ revenue: Q2 2011 S\$66.9 million revenue, S\$11.7 million net profit

Market share: owns and operates 74 clinics and 1 hospital in Singapore, 3 in Hong Kong, 1 in Shanghai

Type of services provided: comprehensive

Please see: <http://www.rafflesmedicalgroup.com/ImgCont/246/standchart-rfmd-27july11.pdf>

<http://www.rafflesmedicalgroup.com/ImgCont/2130/press-release-Q22011-25July2011.pdf>

Raffles Medical Group (RMG), established in 1976, is one of Singapore's largest private integrated healthcare providers. The group runs a network of clinics, hospitals, surgical centres, speciality units and medical laboratories throughout the island. It also provides specialised medical services such as evacuation and repatriation services. It owns a part of the Raffles Hospital and has diversified into other business activities such as consultancy services and manufacturing its own range of health care products.

The company expanded in a big way after its incorporation. In 1993, it moved into the HDB heartlands with its first neighbourhood clinic in Bishan and other similar clinics

soon followed in other estates. A 24-hour travel clinic was opened at the airport in 1995 and another travel clinic at Raffles Hospital.

RMG currently runs over 50 clinics across Singapore, operates medical laboratories and an imaging centre. It established its presence overseas in 1995 with a clinic in Hong Kong. RMG now runs three clinics in Hong Kong and one in Shanghai. Apart from local customers, the group targets patients from other countries and its customer base includes patients from the Gulf, Indonesia, Malaysia and Indochina.

Thomson Medical Pte Ltd

Capitalization: S\$204.5 million (April 2011)

Workforce: not available

Sales/ revenue: Q4 2010 S\$22.2 million revenue, S\$4.1 million net profit

Market share: own and operates 1 hospital in Singapore

Type of services provided: comprehensive, specialising in Obstetrics, Gynaecology and Paediatrics

Please see:

http://www.thomsonmedical.com/pdf/Q4_FY2010_Financial_Announcement_231010.pdf

Thomson Medical Centre (TMC), now known as Thomson Medical Pte Ltd, commenced operations in 1979, becoming a healthcare service provider known for its focus in the areas of Obstetrics & Gynaecology and Paediatrics. TMC provides a comprehensive range of fully integrated services including medical, surgical, therapeutic, diagnostic and preventive healthcare, and specialised services such as fertility treatment. Its other specialised services include pre-natal diagnostic fetal assessments and genetic and chromosome screening for optimal management of childbirth.

Thomson International Health Services Pte Ltd ("Thomson International") is the international arm of the Group to explore and develop strategic partnerships, healthcare

consultancy and management projects as well as investment opportunities in the region. It secured its first major hospital consultancy and management project in 2010 for the 260-bed HanhPhuc International Women and Children Hospital ("HanhPhuc Hospital") in Binh Duong Province, Vietnam.

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1 2 3 4 5

6. How do you recruit your workforce? (please tick ALL that apply)

- Recruitment agencies / head-hunters
- Advertise vacancies via online jobs databases
- Advertise vacancies via jobs fairs locally
- Advertise vacancies via jobs fairs overseas
- Advertise vacancies internally e.g via email to employees
- Other (please specify) _____

7. What percentages of your workforce are foreign?

MEDICAL PROFESSIONALS: _____% foreign

MANAGERS: _____% foreign

8. Which countries does your workforce come from? Please list in descending order (countries with most representation first)

MEDICAL PROFESSIONALS: 1. _____
2. _____
3. _____

MANAGERS: 1. _____
2. _____
3. _____

9. How does your firm train your workforce (both medical professionals and managers)? (please tick ALL that apply)

- Continuing human resource development program
- Arranges external training as and when required
- In-house courses arranged as and when required
- Other (please specify) _____

10. Is there a labor union in your firm?

- Yes (please see q.11)
- No (please see q.12)

For questions 11 – 16, please circle your response to the following statements:

11. My firm's labour union contributes to my firm's strengths.

Strongly disagree Neither agree nor disagree Strongly agree
1 2 3 4 5

12. The medical equipment that my firm uses is state of the art.

Strongly disagree Neither agree nor disagree Strongly agree

- | | | | | | |
|--|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 |
|--|---|---|---|---|---|
13. My firm upgrades medical equipment often.
- | | | | | | |
|-------------------|---|---|----------------------------|---|----------------|
| Strongly disagree | | | Neither agree nor disagree | | Strongly agree |
| 1 | 2 | 3 | 4 | 5 | |
14. My firm benchmarks with leading global players in the use of medical technology.
- | | | | | | |
|-------------------|---|---|----------------------------|---|----------------|
| Strongly disagree | | | Neither agree nor disagree | | Strongly agree |
| 1 | 2 | 3 | 4 | 5 | |
15. My firm has the necessary human talent to implement new medical equipment and technologies.
- | | | | | | |
|-------------------|---|---|----------------------------|---|----------------|
| Strongly disagree | | | Neither agree nor disagree | | Strongly agree |
| 1 | 2 | 3 | 4 | 5 | |
16. My firm has sufficient internal financial resources to finance expansion in the Health Services sector.
- | | | | | | |
|-------------------|---|---|----------------------------|---|----------------|
| Strongly disagree | | | Neither agree nor disagree | | Strongly agree |
| 1 | 2 | 3 | 4 | 5 | |

B. Supporting Industries (external factors)

For questions 1 – 4, please circle your response to the following statements:

1. There is a good degree of coordination between different players in the Health Services sector in Singapore.
- | | | | | | |
|-------------------|---|---|----------------------------|---|----------------|
| Strongly disagree | | | Neither agree nor disagree | | Strongly agree |
| 1 | 2 | 3 | 4 | 5 | |
2. There are enough Health Services providers in Singapore to cope with demand from local and foreign patients.
- | | | | | | |
|-------------------|---|---|----------------------------|---|----------------|
| Strongly disagree | | | Neither agree nor disagree | | Strongly agree |
| 1 | 2 | 3 | 4 | 5 | |
3. It is easy for my firm to raise funds externally / access external credit.
- | | | | | | |
|-------------------|---|---|----------------------------|---|----------------|
| Strongly disagree | | | Neither agree nor disagree | | Strongly agree |
| 1 | 2 | 3 | 4 | 5 | |
4. My firm is satisfied with graduates of local technical schools and higher education institutions that we hire as workers and managers (local workforce).
- | | | | | | |
|-------------------|---|---|----------------------------|---|----------------|
| Strongly disagree | | | Neither agree nor disagree | | Strongly agree |
| 1 | 2 | 3 | 4 | 5 | |

5. Is your firm an active member of the following industry associations? (please tick ALL that apply)
- Singapore Medicine
 - Asia – Pacific Medical Tourism Association
 - International Medical Travel Association
 - Joint Commission International
 - Other (please specify)_____

For questions 6 – 8, please circle your response to the following statements:

6. My firm is satisfied with the cost of power sources (electricity) available to us.
- | | | | | |
|-------------------|---|----------------------------|---|----------------|
| Strongly disagree | | Neither agree nor disagree | | Strongly agree |
| 1 | 2 | 3 | 4 | 5 |

7. My firm is satisfied with telecommunication facilities in terms of cost and technical capacity.
- | | | | | |
|-------------------|---|----------------------------|---|----------------|
| Strongly disagree | | Neither agree nor disagree | | Strongly agree |
| 1 | 2 | 3 | 4 | 5 |

8. The local telecommunication infrastructure has the capacity to meet the increased demand of the Health Services sector in the future.
- | | | | | |
|-------------------|---|----------------------------|---|----------------|
| Strongly disagree | | Neither agree nor disagree | | Strongly agree |
| 1 | 2 | 3 | 4 | 5 |

C. Your clientele

1. What percentages of your patients are local and foreign?

LOCAL: _____%

FOREIGN: _____%

2. How does your firm recruit foreign patients? (please tick ALL that apply)

- Brokers / agencies
- Fairs held locally
- Fairs held overseas
- Partnerships with insurance providers overseas (please specify)_____
- Partnerships with governments / Ministry's of Health overseas
- Other (please specify)_____

3. What percentages of your patients are local and foreign?

LOCAL: _____%

FOREIGN: _____%

4. How do most local patients pay for health services? (please tick ONE)

- Out-of-pocket
- Private health insurance

- 3M's (Medisave, Medishield, Medifund)
 - Other (please specify)_____
5. How do most foreign patients pay for health services? (please tick ONE)
- Out-of-pocket
 - Private health insurance (overseas insurance provider)
 - Private health insurance (local insurance provider)
 - Other (please specify)_____

D. Policies / regulations/ institutional support (external factors)

1. Which government policies that promote the efficiency of supporting industries have benefitted your business? (please tick ALL that apply)
- Investment in technical training / higher education
 - Biopolis initiative
 - Policies to bring in foreign talent
 - Monetary and fiscal policies that permit access to credit at low interest rates
 - Other (please specify)_____
 - Other (please specify)_____
2. Which industrial policies have helped your firm to be competitive in providing health services? (please tick ALL that apply)
- Tax incentives for health service companies
 - Permission to construct health facilities on prime land
 - Public hospital corporatization
 - Other (please specify)_____
3. Does the government place restrictions on the entry of foreign health services providers?
- Yes (please see q.4) No (please see q.5)

For questions 4 – 6, please circle your response to the following statements:

4. Government restrictions on the entry of foreign health services providers are a threat to my firm.
- | | | | | |
|-------------------|---|----------------------------|---|----------------|
| Strongly disagree | | Neither agree nor disagree | | Strongly agree |
| 1 | 2 | 3 | 4 | 5 |
5. Tax rules for health services companies are consistent, transparent and easy to follow.
- | | | | | |
|-------------------|---|----------------------------|---|----------------|
| Strongly disagree | | Neither agree nor disagree | | Strongly agree |
| 1 | 2 | 3 | 4 | 5 |
6. There is little red tape when it comes to release of imported medical equipment, business registration and securing permits.
- | | | | | |
|-------------------|---|----------------------------|---|----------------|
| Strongly disagree | | Neither agree nor disagree | | Strongly agree |
| 1 | 2 | 3 | 4 | 5 |

7. Are there any issues that need to be regulated to establish a competitive environment for local health services providers to become global service players?
-

E. Opportunities and threats: External Market Environment

For questions 1 – 4, please circle your response to the following statements:

1. Business process outsourcing to developing countries (e.g. the Philippines) is a threat to my firm.

Strongly disagree		Neither agree nor disagree		Strongly agree
1	2	3	4	5

2. Liberalization of the services sector within ASEAN is a threat to my firm.

Strongly disagree		Neither agree nor disagree		Strongly agree
1	2	3	4	5

3. Population ageing presents an opportunity for my firm.

Strongly disagree		Neither agree nor disagree		Strongly agree
1	2	3	4	5

4. Rising chronic disease prevalence presents an opportunity for my firm.

Strongly disagree		Neither agree nor disagree		Strongly agree
1	2	3	4	5

5. How is the growth of global players in your industry affecting your firm? (please tick ALL that apply)
 - Competition for consumers with Thailand / Malaysia has forced us to lower our prices to be competitive.
 - Input costs are lower as demand is higher from other industry players in Singapore.
 - My firm has had to carve out a competitive niche area (please specify)_____
 - Other (please specify)_____

F. Opportunities and threats: Domestic Market Environment

For questions 1 – 4, please circle your response to the following statements:

1. My firm welcomes the opening of the medical tourism industry to foreign players.

Strongly disagree		Neither agree nor disagree		Strongly agree
1	2	3	4	5

CHAPTER 4

Transforming the ASEAN Economic Community (AEC) into A Global Services Hub: Enhancing the Competitiveness of the Health Services Sector in Thailand

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1. Introduction

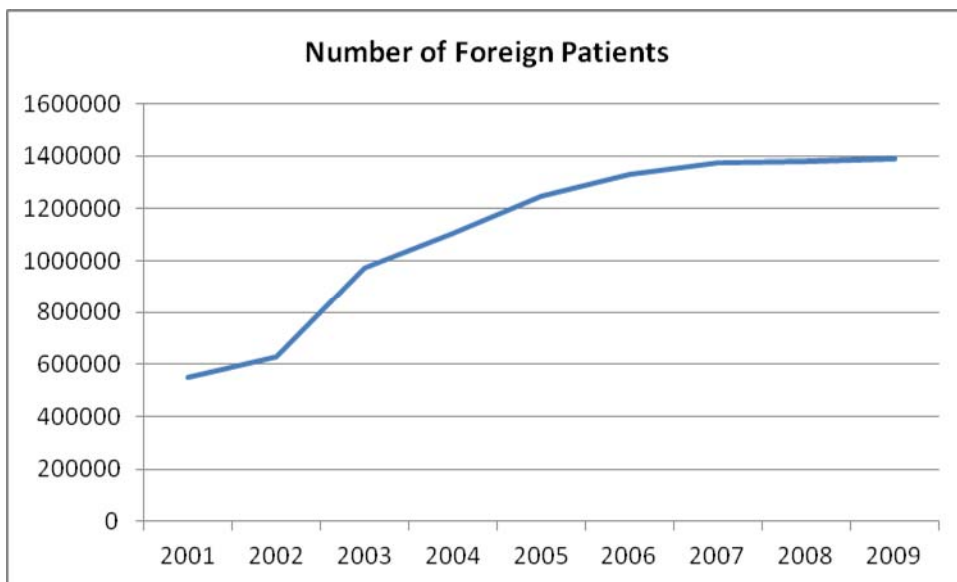
Over the past decades, Thailand has seen a strong trend towards globalisation of trade in goods and services, which was made possible through the evolution of the international trading system as well as advances in information technology and transportation systems. Thailand is classified as an upper middle income country and the country's economy is highly dependent on exports, with exports accounting for 71 percent of gross domestic product (GDP) in 2010. (World Bank) Thailand's GDP was worth USD (PPP) 591 billion in 2010, with per capita GDP reaching USD (PPP) 8,554 USD. (World Bank) Over the period 1961 to 2010, GDP growth was 6.4 percent on average. (World Bank) In 2009, however, GDP contracted by 2.3 percent due to the global financial crisis, which together with domestic political uncertainties also had an impact on the growth rate of international patients from abroad seeking medical treatment in Thailand.

While Thailand has been an open country and a well-known tourist destination for many decades, it was not until this present decade that medical tourism started to surge. In the wake of the 1997 Asian economic crisis, bed occupancy in most private hospitals significantly declined, prompting high-end private hospitals, which invested substantially

during the economic boom, to seek out medical tourists from abroad. Since then, every Thai government has announced various policy measures to promote medical tourism in order to generate revenues for the country.

Although medical travel is several thousand years old its more recent history dates back to the 1970s when (rich) individuals from developing countries started traveling to developed countries for medical care. At the end of the 1980s, with Cuba taking the lead, medical tourism emerged and under its present form sees developing countries serving international patients from developed and developing countries. (UN ESCAP, 2009) Thailand like many other countries followed and has sought to become an explicit “Medical Hub” for the past 10 years. The number of international patients was 1.4 million in 2009 including general tourists and foreigners who work or live in Thailand as shown in Figure 1, with medical tourists accounting for an estimated 30 percent (NaRanong & NaRanong 2011), reflecting that Thailand has become a leading destination for medical tourists from almost all continents. However, the growth rate of the number of international patients decreased during the past couple of years due to Thailand’s political problems and the global financial crisis as mentioned above.

Figure 1: Number of Foreign Patients Treated in Thailand



Data source: Department of Export Promotion, Ministry of Commerce in (MoPH, 2009), <http://www.thailandmedicaltourismcluster.org> (Retrieved on February 24, 2012)

Trade in health services was estimated to be worth 63,822 million THB in 2008, of which 62 percent was accounted for by medical services and 27 percent by health promotion. (MoPH, 2009)

The objective of this paper is to:

1. Undertake a SWOT analysis for the health services sector in Thailand.
2. Undertake an analysis of policies/regulatory/institutional support for the health services sector in Thailand.
3. Develop a profiling of firms which are considered key players for the health services industry.
4. Provide recommendations drawn from the results of the SWOT analysis as well as from the results of the analysis of policies/regulatory/institutional support on how Thailand could enhance its positions to be part of the global service hub in the region

Methodology

This study is a descriptive study and involves reviewing and analysing the literature dealing with international trade in health services, medical hub, its various dimensions and implications for national health sectors.

In addition, semi-structured interviews were conducted with experts from a small number of health facilities to give insight into strengths, weaknesses, threats and opportunities of the sector/industry. The findings are preliminary, based on the literature reviewed and analysed with small sample size, so the results should be interpreted with caution.

Background Information and Literature Review¹

This section analyses relevant existing studies. First, an overview of the Thai health sector and national priorities in the Thai health sector is given. Second, multilateral, regional and bilateral approaches to trade in health services negotiations and the issue of policy coherence are reviewed. Subsequently, studies concerned with medical tourism in Thailand and medical hub policy, barriers to trade in health services and implications of international trade in health services for Thailand are examined.

Thai Health Profile

Health policy and strategy in Thailand are based on a “*health for all, and all for health*” approach. Rights and obligations of individuals, the community, and the local

¹ This section is mostly from Supakankunti & Huerberholz (2011), but updated as indicated

and central government in promoting and protecting health are spelled out in the National Health Act of B.E. 2550 (A.D. 2007). Five-year National Health Development Plans are designed and linked to health plans for action, national development plans as well as Thailand's Millennium Declaration. The objectives of the Tenth National Health Development Plan 2007-2011 are *“(1) to promote good health as a lifestyle for all age groups, emphasizing health sufficiency at the family and community levels, (2) to create a good healthcare system, based on the human-being principle, with quality and friendly care, paying attention to the suffering of patients and the delicacy of human being, (3) to build a good society with wellness and health security for the people to feel warm and secure in normal, illness and critical situations and (4) to create a sufficient and sustainable livelihood that is peaceful with a culture that facilitates healthy lifestyle and leads to the attainment of the highest level of human potential.”* (MoPH, 2008) The overall health status of Thai people has improved over the past decades. Maternal mortality (48 per 100,000 live births in 2008) as well as infant (11 per 1,000 in 2010) and under 5 (13 per 1,000 in 2010) mortality rates have decreased, while life expectancy has increased (74 years in 2009), with female life expectancy outpacing male life expectancy (World Bank). The fertility rate was 1.6 in 2009 (World Bank) which is below the replacement level. This together with increased life expectancy has triggered significant demographic changes and results in Thailand facing problems of an ageing society. Thailand experienced a transition from communicable diseases to non-communicable diseases and the major causes of death as well as disease burden are non-communicable diseases, accidents and HIV/AIDS.

In 2008, total expenditures on health (in % of GDP) were 4.05 percent. This percentage has remained rather stable since 2002, but increased in 2007 and 2008. (World Bank)

While the Ministry of Public Health (MoPH) is the principal agency responsible for promoting, supporting, controlling and coordinating all health service activities, other agencies such as the Ministry of Education, the Ministry of Interior, the Ministry of Defence, the Bangkok Metropolitan Administration, state enterprises and private sector enterprises also play an important role since they operate health facilities. Hospitals are major health service providers and in 2008 the number of

hospitals reached 1,239, of which 78.05 percent were government hospitals and 21.95 percent private hospitals. (PReMA, 2010)

Seventy eight percent of private clinics and 70 percent of private hospitals, most of which are medium-sized with 51 to 100 beds, are located in provincial areas, while 21 out of 31 large private hospitals, with more than 200 beds, were located in Bangkok. (MoPH, 2011) However, most hospitals beds in Bangkok are in private hospitals while most hospitals beds in the provinces are under the MoPH, with MoPH hospitals having the highest bed-occupancy rate and hospitals under the Ministry of Defense and private hospitals the lowest. (MoPH, 2011) As reported in Sakunphanit (2006), private clinics in urban areas are mostly run by physicians from the public after work. The number of private hospitals increased rapidly between 1994 and 1997, concomitantly with financial liberalization as well as due to tax incentives, some of which experienced financial difficulties in the wake of the 1997 crisis and had to be closed. Most private hospitals are for-profit and 13 private hospitals were listed on the Stock Exchange of Thailand as of June 2011. (SET Market Analysis and Reporting Tool) The distribution of health personnel, however, still is a major problem in Thailand due to significant differences between Bangkok and other provinces and internal brain drain has remained a debated issue. Most doctors in Bangkok are under ministries other than the MoPH (42.5 percent), followed by the private sector (33.8 percent) and the MoPH (12.4 percent). In the provinces, most doctors are under the MoPH (64 percent in the North, 66 percent in the Central region, 71 percent in the South and 82 percent in the Northeast, Thailand's poorest region). (MoPH, 2008)

Thailand has continuously expanded health insurance under various schemes such as civil servants medical benefit (CSMBS), worker compensation (for work-related illnesses and injuries), social security (SSS), medical services for the poor and society supported groups, voluntary health insurance project, private health insurance, vehicle accident victim protection and eventually the universal coverage scheme (UCS). As of 2007, the CSMBS covered 5.1 million beneficiaries (MoPH, 2009), mostly civil servants, and is entirely paid from the general tax revenue. Payments are made based on fee-for-service and retrospective reimbursement for outpatient services and diagnosis related groups (DRG) for inpatient services. Public facilities are the main providers, but patients have a choice of public and private (subject to co-payments)

providers. (MoPH, 2009) The SSS is a contributory scheme that covered 9.6 million employees as of 2007 (MoPH, 2009), based on tripartite contributions made by employees, employers and the government. Payments for inpatient and outpatient services are made based on capitation. In 2009, the Social Security Office contracted with public and private hospitals and of the main contracted hospitals, 152 were public hospitals, 98 were private hospitals and 2,313 were network hospitals. (SSO, 2010) The UCS was launched in 2001 and its population coverage has risen to 46.7 million people or 75 percent in 2007. (MoPH, 2009) The UCS is also entirely financed through the general tax. Providers register with the governing agency, the National Health Security Office (NHSO) and as of 2010, registered providers included 831 hospitals of the MoPH (including more than 10,000 health centres), 75 other public hospitals, 49 private hospitals, 19 public primary care units and 169 private clinics. (NHSO, 2011) Provider payments are made based on capitation for outpatient services and DRG with global budget for inpatient services. The low participation by private facilities may partially reflect that capitation levels are inadequate to cover unit cost. Rapid implementation of UCS has raised serious questions of financial sustainability, especially in light of limited human health resources and funding, that need to be addressed urgently to ensure equitable access to quality health care. Since the introduction of the UCS, many public hospitals have faced very high occupancy rates and workloads, inter alia due to failures at the primary care level and resulting over-referrals (Carrin & Chamchan 2006), while around half of private hospital beds have remained vacant. In addition, the quality of medical services has remained a matter of concern.

With the introduction of UCS, some smaller and medium-sized private hospitals repositioned themselves towards social insurance, while large private hospitals continued to focus on affluent Thai and foreign patients. The number of foreign patients that entered Thailand in 2007 was 1,373,807, of which 17% from Japan, 12% from the Middle East, 62% from South Asia. (Department of Export Promotion, Ministry of Commerce, in MoPH)

Multilateral Trade Negotiations

The General Agreement on Trade in Services (GATS) resulted from the Uruguay Round, which came into force in 1995, and is aimed at establishing a system

of international trade rules based on the principle of non-discrimination. The basic obligations under the GATS are either of general or specific nature. Key components of the general obligations which apply to all members and services sectors are the most-favoured-nation (MFN) treatment as well as transparency. Specific commitments are commitments regarding market access and national treatment in specific sectors. Since member countries are free to determine coverage and content of specific commitments, these mostly reflect national policy objectives and constraints. Each WTO member is required to have a Schedule of Specific Commitments, which consists of horizontal sections that apply to all sectors listed in the schedule, and sector-specific sections that only apply to a specific sector. (WTO, 2011)

The GATS includes a category on Health and Social Services, which in turn includes hospital services. Medical and dental services and the services provided by e.g. nurses, midwives, physiotherapists and para-medical personnel are categorised separately as “Professional Services”. So far, few commitments have been made in the area of health services. Also, Thailand has not made any specific commitments as yet. (WTO, 2011)

Regional Trade Negotiations

The most important regional trade agreement for trade in services is the 1995 ASEAN Framework Agreement on Services (AFAS). Under the GATS-plus principle, ASEAN member states schedule commitments under AFAS that go beyond their GATS commitments or offer new sectors that have not been scheduled under GATS as in the case of Thailand. The Protocol to Implement the 8th Package of Commitments under the AFAS was signed in 2010. The health sector is one of the identified priority areas under AFAS and a Healthcare Services Sectoral Working Group was subsequently set up. In 2006, a Mutual Recognition Agreement (MRA) was signed on nursing services and in 2009, in line with the AEC Blueprint, on medical practitioners and dental practitioners. The first MRA took two years to negotiate, the main barriers being different standards of curriculum and educational institutes, different professional definitions and scopes of practice, different levels of education to enter into professional education programmes, different standards of regulatory systems and licenses to practice, differences in continuing education and

training, professional conservatism and protectionism, language barriers and cultural sensitivity. (Pachanee & Wibulpolprasert 2008) As noted in Pachanee & Wibulpolprasert (2008), the MRA do not really facilitate the movement of natural persons since “*doctors, dentists and nurses from the original countries still need to comply with the requirements of the domestic laws and regulations of host countries which may include, for example, permanent residence and licensing examinations in the local language*”. The AEC Blueprint also stipulates that under Mode 3, foreign (ASEAN) equity participation of not less than 51 % by 2008, and 70% by 2010 for the 4 priority services sectors; not less than 49% by 2008, 51% by 2010, and 70% by 2013 for logistics services; and not less than 49% by 2008, 51 % by 2010, and 70% by 2015 for other services sectors should be allowed. (ASEAN, 2007)

Besides, Thailand is committed through the ASEAN Free Trade Agreement (AFTA) and other regional trade agreements, such as ASEAN-China FTA (2002), ASEAN-India FTA (2003), ASEAN-Korea FTA (2003), BIMSTEC (2004), ASEAN-Japan FTA (2008) and ASEAN-Australia-NewZealand FTA (2009).

Bilateral FTA Negotiations

Thailand entered into bilateral free trade agreements with several countries, namely Laos (limited, 1991), Bahrain (as stepping stone toward an FTA with the Gulf Cooperation Council (GCC) countries, 2002), China (agriculture, 2003), India (2003), Peru (2003), Australia (2004), New Zealand (2005) and Japan (2007). Thailand’s pace of FTA negotiations has somewhat slowed down since 2006 in light of the political tensions.

Policy Coherence

Pachanee & Wibulpolprasert (2004) discuss the need for policy coherence between health-related trade and health-system development and present a review of the evolution of attempts to pursue policy coherence in Thailand over the past decade. This section summarizes key points from their work.

While the Ministry of Commerce was the single agency in charge until 1995, the structure of international trade negotiations was subsequently reformed and a multi-sectoral partnership started to evolve in 1997. The MoPH, through its Bureau of Policy and Strategy, for example worked with the Ministry of Commerce and the Ministry

of Industry in health-related trade issues. Many committees and subcommittees were set up, which utilized inputs of academicians and researchers, thus fostering networking among stakeholders.

With the shift from multilateral negotiations to bilateral trade negotiations the structure of trade negotiations was again reformed. A Committee on International Trade Policy, which includes the ministers of the Ministries of Finance, Foreign Affairs, Agriculture and Cooperatives and Industry in addition to the Secretary-General of the National Economic and Social Development Board, was appointed by the Prime Minister in 2003. The Committee on International Trade Policy, in turn can appoint chief negotiators for the teams negotiating with each country as well as subcommittees and working groups. While the MoPH is not a member of the Committee on International Trade Policy, it is invited to join meetings that deal with health-related issues.

In addition, since preparations for FTA services and investment negotiation positions involve country and sector preparations, the MoPH emerged as the focal point in sector preparations with relevance for the health sector, with the Bureau of Policy and Strategy being the central secretariat. To inter alia assess the implications of trade liberalization policies on the Thai health sector, the MoPH established the Committee on Trade in Health and Social Services in 2004. Besides government agencies, stakeholders from other sectors are also involved. As stated in Pachanee & Wibulpolprasert (2004) comprehensive and solid preparation as well as policy coherence is imperative for successful trade negotiations.

Medical tourism in Thailand and medical hub policy

The vision that “*Thailand will be a world class “Medical Hub. ”*” is explicitly stated in MoPH (2009) and includes the wellness sector and Thai herbal products, which entails collaboration with a number of agencies such as the Tourism Authority of Thailand, the Ministry of Education, the Ministry of Foreign Affairs, the Ministry of Commerce and the Ministry of Labour. The medical hub strategy in general is aimed at developing Thailand into a first-class destination for medical tourists. To provide world-class services, standards for hospital accreditation in Thailand were set and international standards such as ISO and Joint Commission International (JCI)

introduced. In addition, a controversial medical malpractice law is being discussed to strengthen the rights of patients.

The literature (Janjaroen, *et al.*, 1999; among others) identifies several pull and push factors that are conducive to international trade in health-related services. Most commonly cited push factors include, high cost of obtaining services in the home country, limited insurance coverage and long waiting queues. Pull factors discussed in the Thai context are low cost of obtaining services of similar/acceptable quality, price certainty through fixed package prices offered by medical facilities, well developed tourism-industry and other supporting industries (e.g. low cost of traveling, accommodation and food for a companion as well as other tourism activities, attractions and entertainment), excellent hospitality and low entry barriers. Thailand originally focused on tourism related areas such as spas, traditional massages, herbal treatments and other kinds of alternative medicine. In recent years, however, private hospitals have discovered niche markets in elective medical procedures such as plastic surgery.

Barriers to Trade in Health Services

ASEAN Member States compiled an inventory of trade barriers in 2008, a public version of which is available at the ASEAN Secretariat website. (ASEAN, 2008) The barriers to trade in health services for Thailand are reproduced below:

Medical and Dental Services

- Medical Profession Act B.E. 2525 (1982)
- Dental Profession Act B.E. 2537 (1994)
- All foreign medical and dental practitioners who wish to practice in Thailand must possess a basic qualification approved by Medical Registrar Division, register to and obtain a license from the Thai Medical Council or Dental Council and pass the examination set by the relevant Council in Thai language.

Services provided by midwives, nurses, physiotherapists and para-medical personnel

- Nurses and Midwives Profession Act B.E. 2528 (1985)
- Pharmacist Profession Act B.E. 2537 (1994)

- All foreign practitioners who wish to practice in Thailand must possess a basic qualification approved by Medical Registrar Division, register to and obtain a license from the Thai Nursing Council or Pharmacist Council and pass the examination set by the relevant Council in Thai language.
- In addition, a foreigner applying for a nursing license must hold a license to practice from the graduating country.
- Medical Profession License Act B.E. 2542 (1999)
- Practitioners are required to register and obtain a professional license from the professional body for services related to Physical therapy, medical technology, occupational therapy, radiological technology, cardio-thoracic technology and speech-language hearing therapy.
- In addition, a foreigner applying for a license must hold a license to practice from the graduating country.

Implications of International Trade in Health Services for Thailand

Implications from trade in health services are manifold and subject to a lively debate. However, few studies provide a comprehensive analysis of possible advantages and disadvantages. The main implications discussed for the case of Thailand can be summarized as follows (Janjaroen, *et al.* 2007; Arunanondchai & Fink, 2005; among others):

Mode 1

Possible implications of trade in health-related services are hardly discussed in the studies reviewed, reflecting the minor importance of this mode of entry for the case of Thailand.

Mode 2

The main advantage under this mode of entry seems to be the potential to generate foreign exchange earnings from foreign patients. A severe disadvantage, however, is the emergence of a dual market structure worsening the mal-distribution of health resources across urban and rural areas and in terms of specialization. Most studies base their assessment on the income gap between health manpower working in private and public hospitals.

Mode 3

The potential benefit is seen to accrue mainly in the form of increased supply of health services and investment. Trade in health-related services through mode 3, however, may result in a tiered health care system increasing inequality, not only through a diversion of resources to service foreign nationals, but also in education as well as internal brain drain problems. This in turn, requires more incentives to be set for rural doctors such as hardship allowance, no-private-practice allowance, etc.

Mode 4

While the movement in natural persons results in remittances, it causes an external brain drain, which implies loss of investment in educating and training.

Most studies reviewed provide a general discussion of the above advantages and disadvantages rather than quantifying these.

2. Framework of Analysis

2.1. Strengths and weaknesses

Below, the internal characteristics of the health sector and health services providers (HSPs) in Thailand are summarized, followed by external factors affecting HSPs such as supporting industries. Combined, these factors define a favourable business climate for the provision of competitive health services.

2.1.1. Internal Factors (HSPs)

As described earlier, Thailand has been assembling the various factor inputs necessary for a thriving medical tourism business. These internal factors can be broadly classified as (1) Human resources; (2) Modern medical technology; and (3) Internal financial resources for expansion.

Human resources: The strength lies in the quality of medical professionals and weaknesses are the problems caused by internal brain drain and insufficient language skills

Due to an emphasis on producing health personnel, the number of doctors, dentists, pharmacists and nurses per population has improved over the past years, but

still lags the infrastructure prevalent in countries such as for example Singapore. In 2009 for instance, the ratio of physicians to population was 1:3,182 (MoPH, 2010), ranging from 1:1,243 in Bangkok (MoPH, 2010) to 1:5,028 in the Northeast in 2008 (MoPH, 2011), reflecting regional disparities.

Representatives of the six mostly private health care facilities in Bangkok and the Eastern Seaboard interviewed identified internal brain drain as a major problem facing the Thai health system, given that doctors and nurses in the private sector earn 3 to 5 times as much as in the public sector. To overcome the internal brain drain problem the representatives recommended increasing salaries in the public sector. Another major challenge facing the Thai health system was seen to be the maldistribution of health resources among urban and rural areas. If Thailand fails to meet the demand of the population for quality healthcare services, the country will face serious social and political challenges as people will question why the best services are given to foreigners instead of nationals. Representatives recommended increasing the supply of medical professionals and attracting more people to work in rural areas.

While allowing foreign doctors to practice in Thailand could potentially reduce the internal brain drain problems, in practice foreign doctors, who could focus on treating foreign patients, are unable to pass the examination set by the Thai Medical Council or Dental Council and overcome language barriers. The main reason behind this regulation is that someone working in Thailand should be able to communicate in Thai with Thai patients as well as foreign patients.

Thailand's medical professionals consist of highly competent and internationally qualified doctors, nurses and technical staff and the medical capability of Thai medical professionals is generally considered equal to medical professionals in Western European countries and America. According to Suppradit (2010) among others, the only disadvantage of Thailand's medical professionals compared to their counterparts in Western Europe and America lies in the conduct of medical science research due to research funding constraints. Despite this, representatives of HSPs stated that English language skills, especially of Thai nurses, are insufficient compared with countries such as Malaysia, the Philippines and Singapore and need to be strengthened.

Modern medical technology

Modern facilities, medical equipment and medical technology have made Thailand a major destination for medical travel. Many Thai hospitals received Hospital Accreditation of Thailand and international accreditations such as ISO or JCI. In fact, according to the Private Hospital Association, Thailand is leading in standard medical technology. However, the use of modern medical technology, especially high-tech medical equipment, is confined primarily to large urban areas and private hospitals, rather than public hospitals, which explains why public hospitals cannot compete with private hospitals in this business.

Internal financial resources

Some representatives of the HSPs said that they have insufficient financial resources for expansion, especially if access to external funds/partners is limited, and therefore require support from government. This could pose a potential threat for SME expansion in healthcare.

2.1.2. External Factors (HSPs)

External factors consist of a set of features of the environment where the HSPs operate. These external features are not directly influenced by decisions of the firms, individually and collectively. These external factors include the external market environment, domestic market environment, presence of supporting industries and the state of infrastructure such as transport, communications and energy infrastructure.

External market environment

Opportunities and threats presented by global and regional competition in the health sector, demographic, epidemiological and economic changes as well as the expansion of trade in health services are described in this section.

Global and regional players in the health sectors

Thailand's main competitors in medical tourism are regional players, namely Singapore, India and Malaysia, all of which have different strengths and weaknesses. While Singapore and to some extent India focus on more complex medical procedures such as e.g. cardiac surgery, Thailand and Malaysia have traditionally been strong in tourism-related areas and thus rather simple medical procedures such as e.g. cosmetic

surgery, and have only recently started to move toward more complex medical procedures such as e.g. organ transplants and joint replacements in the case of Thailand. (UN ESCAP, 2009) In 2005 an estimated number of 500,000 international patients were treated in India, 370,000 in Singapore, 400,000 in Malaysia and 1,250,000 in Thailand (UN ESCAP, 2009), indicating that Thailand is leading in terms of international patients treated in the country. The Private Hospital Association and Business Council of Thailand assessed the comparative advantage of Thailand relative to its main competitors and their results are shown in Table 1 and discussed in the following paragraphs.

Table 1: Competitive Advantage of Health Facilities in Asian Countries Providing Health Care Services to Foreign Patients

Competitive Advantage	Thai	Singapore	India	Malaysia
Service & Hospitality	*****	**	*	*
Hi-technological Hardware	**	****	**	*
HR Quality	****	****	**	**
International Accredited Hospital	**	**		±
Pre-emptive Move	**	***		*
Synergy/Strategic Partner	*	**		*
Accessibility/Market Channel	**	***	*	**
Reasonable Cost	****	*	****	***

Source: Adapted from Private Hospital Association and Business Council of Thailand (2004) in MoPH (2009)

Singapore, the only high-income country, is generally considered Asia's leading medical travel destination due to its high technology and standards, research capabilities, high quality of human resources as well as international accreditation. In addition, government support for medical tourism can be considered exceptionally strong and Singaporeans generally view medical tourism positive. (UN ESCAP, 2009) Areas for future growth identified include heart, eye and cancer treatment. (UN ESCAP, 2009) Singapore's weakness is generally perceived to be pricing. A heart bypass surgery would for example cost USD 18,500 in Singapore compared with USD 11,000 in Thailand and USD 10,000 in India. (Deloitte) Besides, diversification to tourism-related activities like in Thailand or Malaysia is not possible.

India, which has only recently entered medical travel, is well-known for its inexpensive advanced medical procedures. In fact, reasonable cost of medical procedures can be considered the main advantage. (UN ESCAP, 2009) The cost of

medical procedures is approximately 10 to 20 percent lower than in Thailand and around 50 percent lower than in Singapore. India is catching up fast with other regional players and medical tourism receives strong government support. India's main weakness involves the prevalence of concerns related to treatment and care standards as well as the general infrastructure.

Malaysia is also a new entrant in this business and its medical travel industry is rapidly catching up with Singapore. (UN ESCAP, 2009) Much of the success is due to strong support from the Malaysian government, which is inter alia aimed at reducing the country's dependence on manufacturing. (UN ESCAP, 2009) It is likely that Malaysia will become a direct competitor of Singapore in certain markets such as e.g. the Indonesian market and perhaps share resources like doctors and nurses. Reasonable prices are also seen as Malaysia's main advantage together with the potential for tourism-related medical travel like in Thailand.

Thailand's main advantages are its high quality medical professionals and a hospitable and service-minded culture. In addition, the cost of medical treatments is reasonable. Besides, since Thailand has traditionally been a major tourism destination worldwide, its strengths are tourism-related medical treatment and wellness packages. Hence, the general tourism infrastructure like hotels, shopping malls and restaurants is also an important component of the hospital supply chain for international patients and supports Thailand to become a leading medical hub in Asia. However, there are several weaknesses as outlined in the previous chapters, including the unstable political situation.

Demographic and epidemiological changes

Fertility rates in Thailand have dropped to 1.6 in 2009, which is below the replacement level as mentioned previously. This together with increased life expectancy has triggered significant demographic changes. The population in Thailand aged 60 or over was 11.2 percent in 2009 and Thailand was ranked 69th in the country ranking by percentage of population aged 60 or over. (UN, 2010) Thailand has also experienced a significant epidemiological transition and nowadays the major causes of death as well as disease burden are non-communicable diseases, accidents and HIV/AIDS.

On the other hand, increasing demand for medical services in developed countries due to demographic change coupled with limited insurance coverage is one of the main drivers of medical tourism. (UN ESCAP, 2009)

Economic changes

Over the period 1961 to 2010, GDP growth in Thailand was 6.4 percent on average. (World Bank) In 2009, however, GDP contracted by 2.3 percent due to the global financial crisis, which together with domestic political uncertainties also had an impact on the growth rate of international patients from abroad seeking medical treatment in Thailand. Challenges also arise from the on-going European sovereign debt crisis.

Domestic market environment

In the context of firm strategy and rivalry, the private hospital sector in Thailand is exposed to intense domestic and international competition which pushes current players to maintain and upgrade their services. The number of private hospitals increased rapidly between 1994 and 1997, concomitantly with financial liberalization as well as due to tax incentives, some of which experienced financial difficulties in the wake of the 1997 crisis and had to be closed, however. With the introduction of the UCS, some smaller and medium-sized private hospitals repositioned themselves towards social insurance, while large private hospitals continued to focus on affluent Thai and increasingly foreign patients as mentioned before. Seventy eight percent of private clinics and 70 percent of private hospitals, most of which are medium-sized with 51 to 100 beds, are located in provincial areas, while 21 out of 31 large private hospitals, with more than 200 beds, were located in Bangkok. (MoPH, 2011) However, most hospital beds in Bangkok are in private hospitals while most hospital beds in the provinces are under the MoPH, with MoPH hospitals having the highest bed-occupancy rate and hospitals under the Ministry of Defense and private hospitals the lowest. (MoPH, 2011) Most private hospitals are for-profit and 13 large private hospitals were listed on the Stock Exchange of Thailand as of June 2011 (SET Market Analysis and Reporting Tool), giving them needed access to external sources of funds. In addition, there has been a trend towards cross-shareholdings of

the large hospital groups in Thailand to realize economies of scale and scope and strengthen their position in the region.

Supporting industries

Thailand's well-developed tourism industry is the main supporting industry for the medical tourism industry. Main players include travel agencies, tour operators, hotels, restaurants, operators of tourism attractions and entertainment. After medical treatment, during the recovery period, patients typically continue their stay in Thailand, enjoying 5-star hotels and resorts, shopping and sightseeing tours. But so far, unlike in Malaysia, no institution has been set up to coordinate among the key stakeholders, i.e. hospitals, professional associations, tourism sector and government agencies.

Other supporting players include medical research affiliations and educational institutions.

Infrastructure

Thailand's infrastructure is generally considered well-developed and hospitals serving medical tourists are typically located in Bangkok or other urban areas such as Pattaya on the Eastern Seaboard, which are within easy reach of Bangkok.

2.2. Macro Environment

This section describes aspects of the policy and regulatory environment in which HSPs operate, largely determined by government, that pose opportunities and threats to the expansion of Thai health system and its potential to become a major hub for health services.

2.2.1. Policies / Regulation

The vision that "*Thailand will be a world class "Medical Hub."*" is explicitly stated in (MoPH, 2009) and includes the wellness sector and Thai herbal products, which entails collaboration with a number of agencies such as the Tourism Authority of Thailand, the Ministry of Education, the Ministry of Foreign Affairs, the Ministry of Commerce and the Ministry of Labour. The medical hub strategy in general is aimed at developing Thailand into a first-class destination for medical tourists. To

provide world-class services, standards for hospital accreditation in Thailand were set and international standards such as ISO and JCI introduced. In addition, a controversial medical malpractice law is being discussed to strengthen the rights of patients.

One of the major problems that have remained is the policy incoherence discussed in inter alia Pachanee & Wibulpolprasert (2006) which results in continued competition for medical professionals caused by the universal coverage policy and the medical hub policy, potentially worsening the internal brain drain problem.

2.3. SWOT Analysis of the Sector

2.3.1. Identification of Strengths, Weaknesses, Opportunities and Threats The results of the SWOT analysis are shown in Table 2.

Table 2: Results of SWOT Analysis

STRENGTHS	OPPORTUNITIES
<ul style="list-style-type: none"> • High quality medical professional workforce • Hospitality and service mind • Low cost of medical treatments • State of the art medical equipment • High quality and standard of medical care • Variety of services and continuous new product and service development • Good physical infrastructure (hospitals, research centers, educational institutions, tourism sites, transportation etc.) • Large private hospitals run by experienced management teams • Thai medicines, massage, and herbal products 	<ul style="list-style-type: none"> • Increased contribution of medical tourism to economic growth • Increased competitive pressures (which may help improve medical infrastructure and increase the quality of medical professionals further) • Demographic change, rising prevalence of chronic diseases and cost escalation in developed countries • Trend toward health and wellness tourism and use of herbal medicine and traditional treatment alternatives • Strong local demand for cosmetic surgical procedures.

WEAKNESSES	THREATS
<ul style="list-style-type: none"> • Production and distribution of human resources • Possible negative impact of medical tourism on (i) internal brain drain and (ii) equitable access to quality health services for Thai people and (iii) medical expenses for self-paying Thai patients • Lack of foreign language skills • Intense competition among domestic and regional hospitals • Few strategic partnerships • Policy incoherence and lack of cooperation among key stakeholders • Weak medical malpractice law • Most medical equipment and medicines are imported • High energy dependence • Political instability • Lack of funding, especially for SMEs 	<ul style="list-style-type: none"> • Intense competition among domestic and international medical and tourism providers triggering consolidation of the sector • Emergence of new players such as Malaysia • Demographic change in Thailand • No clear dominance in technological or basic research • Lack of support from the population and prevalence of inequities • European sovereign debt crisis

2.3.2. Enhancing the Strengths and Opportunities and Mitigating Weaknesses and Threats: Roles of Policies, Regulations and Institutional Support Government Policy

Investing in modern medical technology, especially high-tech medical equipment as well as establishing a clear dominance in technological or basic research and providing funding for new entrepreneurial ideas will make Thailand a leading destination for medical tourists subject to favourable external factors.

In addition, pull factors such as low cost of obtaining services of similar/acceptable quality, price certainty through fixed package prices offered by medical facilities and well developed tourism-industry and other supporting industries should be strengthened further.

Most important, however, is the identification of government agencies involved, so that a dialogue and cooperation among all stakeholders can be encouraged.

Response to the shortage of medical professionals

To deal with the shortage of medical professionals, the retirement age of doctors could be prolonged as suggested by one of the hospitals interviewed. A related problem is that medical education is largely subsidized, while private hospitals who are recruiting medical graduates from the same pool of graduates, hardly share the costs of producing these. Bonding and offering financial incentives have been employed to prevent the internal brain drain from rural public hospitals to urban private hospitals and more generally from rural to urban areas, which could be strengthened. Besides, given excess capacities in the private sector, attempts should be made to harness the existing private sector better to achieve health systems goals by implementing various strategies such as for example contracting to a fuller extent, which in turn, however, would require a move towards a regulatory framework that is more supportive of public-private partnerships. In addition, a non-prohibitive special tax on revenue earned from medical tourism could be imposed as *inter alia* discussed in Pachanee (2009).

2.3.3. Profiling Key Players in the Sector

Profile: Bangkok Hospital²

Bangkok Hospital is owned by the Bangkok Dusit Medical Services PLC (BGH). BGH is the largest private hospital operator in Thailand and has a very strong network of brand hospitals such as Bangkok Hospitals, Samitivej and Phyathai Hospital Group. (TRIS, 2011a) In 2011, the company owned 28 hospitals, of which 7 have achieved JCI accreditation, with a total of 3,929 registered beds. (TRIS, 2011a) A number of hospitals are highly specialized such as for example the Bangkok Heart Hospital. BGH hospitals predominantly serve the mid- and high-end market. According to TRIS (2011a) BGH's financial performance has been sound and the group realizes economies of scale and scope, especially through the centralized purchase of medicines, medical supplies and medical equipment. BGH is listed on the Stock Exchange of Thailand and therefore has access to capital

BGH's Bangkok Hospital in Bangkok is internationally recognized and considered one of the most technologically advanced hospitals. Having set new standards in patient-focused care, Bangkok Hospital has emphasized personalized attention of doctors, nurses and staff, which is essential to providing the highest quality care. In addition to medical services, a full range of ancillary services are provided for patients, which include limousine transfer to and from any destination in Bangkok, accommodation arrangements, visa extension services, and even tours for patients' families. Bangkok Hospital is one of BGH's hospitals, which is accredited by JCI.

Profile: Samitivej Hospitals³

Samitivej Hospital and its network facilities provide healthcare services for mid- and high-end patients. Like the Bangkok Hospital, Samitivej Hospital is a leading provider of medical care in Thailand and also serves international tourists.

² The information was retrieved from <http://www.bangkokhospital.com> on February 23, 2012 if not indicated otherwise

³ The information was retrieved from <http://www.samitivejhospitals.com> on February 23, 2012 if not indicated otherwise

Samitivej Hospital offers comprehensive health service through a team of physicians in all areas of specialty along with modern medical instruments and warm services. Samitivej Hospital is also accredited by JCI.

Profile: Bumrungrad Hospital⁴

Bumrungrad Hospital PLC operates a multi-specialty stand-alone hospital in Bangkok and holds a leading position in Thailand's private hospital market. The hospital was founded in 1980 and it is headquartered in Bangkok. It has a licensed capacity of 538 beds and 4,000 outpatients per day. (TRIS, 2011b) The hospital targets high-end domestic and international patients, which account for about 60 percent of total revenue (TRIS, 2011b), and competes on the basis of product and market differentiation. (TRIS, 2011b) According to TRIS (2011b), the hospital's financial performance has been strong and it benefits from the hospital's first-mover advantage and strong referral networks abroad. In 2008, the world's largest private outpatient center, the Bumrungrad International Clinic, opened. Besides, there are various medical centers and clinics in its hospital, including for allergy, breast care, dermatology and skin aesthetics, eye laser refraction, fertility and IVF, hypertension, nephrology, neurology and plastic surgery. The company is also involved in the rental of properties, provision of clinical research services and investment in healthcare and related business, in Thailand and abroad.

⁴ The information was retrieved from <http://www.bumrungrad.com/en/about-us/bumrungrad-factsheet> on February 23, 2012 if not indicated otherwise.

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CHAPTER 5

Enhancing the Competitiveness of the Creative Services Sectors in Indonesia

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1. Introduction

1.1. Global Interest on Creative Industry

In the world of interdependence of the 21st century, we face complex challenges, polarization, and inequality within and between countries. This situation requires strategy development to uncover the creative potential in order to meet the challenges—cultural, economic, social, and technological aspect—that we are facing nowadays. The concept of creative and cultural economy grows and thrives as a liaison among the culture, economy, and technology. The global development currently dominated by images, sounds, symbols, and ideas that create new jobs, prosperity, and cultures. Nobody disagrees that an innovative and creative idea is constantly changing as people always create and exchange goods, services, and cultures.

The development of the creative sector is one of the important and complex topics in a country's policy. For many countries, traditions and cultures have long been promoted as the main export sector and source of employment in their economic structure, along with the development of creative industries in their certain region.

Besides their role in the economy, these industries can also be used as a tool of foreign diplomacy and a local identity. Many countries such as Canada, Singapore, UK, Australia, France, and Germany use this creative sector as an instrument of international relations and soft diplomacy.

The responsibilities of industry to the creative products vary widely, but they have similarities. The industry benefits from the creative abilities of their workers and the generation of intellectual property known as the industry's intellectual property. Law can be a catalyst that converts creative activities into creative industries and protects the ownership of the idea of the author's property rights as the law protects property rights, land, and buildings.

Creative industries have a significant economic contribution to the economy, because it can create a positive business climate, strengthen the image and identity, support the utilization of renewable resources (central to the creation of innovation and creativity formation), and have a positive social impact. Based on these reasons, the creative industry has been a sector that should be developed within the concept of national building. To develop the creative economy, it is believed that the collaboration between various actors that play a role in the creative industries are important, which are scholars, business practitioners, and government (the triple helix). The term creative industry in the contemporary practice carries with it a perceived economic potential of production, employment, and income to meet the demands of consumers. Howkins (2001) defined the industry to include 15 subsectors which comprise advertising, architecture, arts and antiques, crafts, design, fashion, film, music, performing arts, publishing, research and development, software, toys and games, television and radio, and video games. With the formula, Howkins (2001) valued the global creative economy worth about USD 2.24 trillion in 2000 and grew at 5% a year. In view of the fact that the world's GDP in 2005, as stated by the World Bank as much as USD 44.4 trillion, the creative economy stood for 6.1% of the global economy.

A large piece of the global creative economy is currently driven by the developed countries, primarily by United States, United Kingdom, the European Union, and Japan. In many developing countries, commodity prices are decreasing, and populations are growing strongly. However, in many developed countries have used the opportunities brought about by globalization to either own or license a lot of the local assets. The

developing countries have incredible assets in their national and ethnic cultures and arts, and aspire to promote them in pursuit for their national pride and economic gain. They face several challenges. They do not have enough entrepreneurs who are familiar with business, law, and finance. In many countries, support from policy makers and government official is not strongly needed. In addition to a digital divide problem, they are facing a new creative divide. It does not imply that the people are required to be creative, but to have the capacity and skills required to convey their creative ideas in marketable products.

In general, Europe is powerful in creativity and innovation. The creative economy in the region employs no less than 5.8 million people. While works generally decreased in the EU between 2002 and 2004, it actually increased by 1.85% in the cultural and creative sectors. More importantly, people in the creative economy tend to be better educated than in other sectors. Nearly half hold university degree, compared with about one-quarter of the total labor force. They are also more likely to be self-employed which means they have to take control not only in their creative talents but also in financial and management skills.

Britain has relatively good outlook. According to Howkins (2001), UK has market a magnitude amounting to GBP 108 billion (nearly 10% of GDP), owing to the significant level of activity across all 15 creative industry sectors. The country has a respectable reputation for its originality and quality, although it has only few major companies. The British economy has continuously flourished faster in the copyright products. Its creative industries expanded at an average of 7% between 1997 and 2004, four times the growth of traditional manufacturing and two times as fast as traditional services. Over 1.8 million Britons define themselves as creative workers. The number of the workers has had a growth of 3% per year since 1991, much faster than the population growth.

1.2. ASEAN Potential for Creative Industry

Singapore (app.mica.gov.sg)

Ministry of Information, Communications, and the Arts (MICA) of Singapore is spearheading the Creative Industries Development Strategy (CIDS) to contribute to the vision of Economic Review Committee (ERC). Singapore economy is diverse,

entrepreneurial, and global. ERC identified creative industries as one of the three areas of new services and promises, besides education and health in 2003.

MICA adopts a national collaborative approach involving all relevant government agencies, industries, and stakeholders to develop a new industrial sector and the above-mentioned promise. The main focus is to build the foundations of this industry through the development of creative abilities, stimulation of sophisticated demands, and strengthening of industry players to become credible and significant players in the global creative field.

With a vision to develop the “a vigorous and independent creative cluster to encourage Singapore’s Creative Economy”, CIDS has the following blueprints:

1. Renaissance City 2.0: build Renaissance City blueprint to develop Singapore into a global city that is very innovative and multi-talented for arts and culture
2. DesignSingapore: build Singapore into Asia’s leading center for excellence of design, in which a cluster design is fully developed into a key driver of national competitiveness and creativity
3. Media 21: develop a media ecosystem rooted in Singapore with a strong international extension

Complementary to CIDS is a Creative Community Singapore (CCS), a major initiative of MICA which tries to position Singapore as the “Land of Opportunity”, through state support, for the creative industries. Officially launched in July 2005 in partnership with the private sector, community, and public, CCS adopts a bottom-up approach to revitalize the economy of Singapore, by nurturing creative talent, stimulating creative ideas, and fostering creative effort from the bottom to the top. CCS aims to empower individuals and organizations to initiate a pilot project that will provide the freedom for creativity and entrepreneurial spirit of individuals and communities and to build demand and capabilities for the creative industries. This is a public-private collaboration which provides different levels of support, including facilities, co-branding, marketing, and financing.

Thailand (Kenan Institute Asia & Fiscal Policy Institute-Thailand, 2009)

Thailand’s economy depends on labor-intensive manufacturing sector for decades, but now the country is in a stage of development of creative industries driven by

knowledge and information. Knowledge-based economy is considered as the basis for the development of creative economy. Thailand has sought to enhance its role in international trade with a more proactive and have shifted the focus to the knowledge and creativity-based production with the aim to add more value to his country. Thailand considers knowledge management as an important factor to promote economic development, in addition to managing the infrastructure and services, develop knowledge and technology, and promoting R&D and innovation to commercialization.

Software, animation, and games industry in Thailand is still small compared with other types of creative industries. Software market in Thailand was worth THB 67 billion in 2010, while animation and games respectively were worth THB 10 billion and THB 12 billion. The industry currently does not make a significant contribution to the GDP of the country, because they face problems related to financial supports, target markets, and human resources. However, it is believed that the software, animation, and games will play an important role in the future for the creative economy, because they are considered a real cluster in each type of industry and creativity of Thailand. In addition, the Software Industry Promotion Agency under the jurisdiction of the Ministry of Information and Communications Technology has been spearheading a national scheme to support industries ranging from financial support, marketing, and professional training programs. Currently, the government announced the creative economy as a national agenda. Thus the industry is still growing, even during the global economic recession. The needs of creative economy, public and private partnerships, international cooperation, government stability, government policies, and strong private sector will make the animation software and games become the main export products nationwide.

Thailand was ranked 17 of top 20 exporters of creative goods in 2005. Although not recognized as a major exporter in this field, Thailand is developing itself to become one of the significant exporters of creative goods and services. According to the Thailand government economic and social development plan as well as increased creativity is considered as part of measures for economic restructuring.

The main impacts involving a direct and measurable contribution of creative industries to the national economy includes the creative industries that directly contribute to GDP, value added, and employment. The survey results in 2008 on

information and communications technology industry showed that the creative industries contributed Thailand THB 1,067,987 million (approximately USD 32 billion). These industries accounted 9.53% of the total GDP by value added amounting to 2.86% of GDP in 2008. Revenue from the jewelry industry accounted for 4.73% of GDP.

In 2008, 875,500 workers (or 2.42% of the Thailand workforce) who worked in creative industries such as IT industry, had the highest performance. Creative industries, including IT industry, contributed an average added value of THB 750,000 (USD 22,522.5) per worker. Jewelry industry had a relatively high value added per worker of about THB 2.57 million (USD 77,177.2), while the printing and publishing industry had a value added THB 2,280,000 (USD 68,468.5) per worker. It was well above the average value added per worker, THB 309,230 (USD 9,286.2) and nearly three times of the value added per worker in manufacturing, THB 786,850 (USD 23,629). In terms of international trade, exports of selected creative industries amounted to THB 429,653 million (USD 12.9 million) in 2008, 7.34% of total exports, and, according to statistics of UNTAD this value continued to increase (5.1% per year from 2000 to 2005). IT sector is a major exporter, with value of THB 192,079.32 million (USD 5,768 million), and the export of articles of jewelry and of their related sectors valued at THB 157,730.65 million (USD 4,737 million).

ASEAN Economic Community

The ASEAN Economic Community (AEC) is schedule to be ratified in 2015. However, only a handful of countries such as Singapore, Malaysia, and Thailand benefited from the highly competitive economic arrangement. Initially, the AEC was in favor for Indonesia, Malaysia, Thailand, and Singapore, because, during 2007-2010, Indonesia experienced a surplus trade and it had always had an increasing trend. In 2010, Indonesia had a trade surplus amounting to USD 3.5 billion, although in 2005-2006 Indonesia was still in a trade deficit. Indonesia could turn its trade around in part due to the massive number of plantation commodities, marine harvests, electronics, and textiles. But, those industries are already starting to fall (sunset industry). Trades in these sectors are declining gradually. If it is not revitalized, then these sectors will be problematic. Therefore, Indonesia may be in disadvantaged in the future when the AEC

was set in motion in 2015. And this could result in other ASEAN countries like Vietnam, Philippines, and others overtake Indonesia.

The important thing to address is to resolve the problems that interfere with domestic economy. Indonesia must strengthen its agricultural and industrial sectors. These sectors are weakening from year to year. Up to 2015, Indonesia will be able to survive in the competition arena of ASEAN. But after that, Indonesia will have a lot of problems if no improvements are done, including improving the investment climate, competitiveness, infrastructure development, and consistency of government policy. Currently the best economic environments among ASEAN countries are offered by Thailand, Singapore, and Malaysia which have gained the most benefit from the AEC arrangement. Indonesia sits in mid-level, competing with Philippines and Vietnam. The countries that are most possibly harmed are countries with low competitiveness such as Cambodia, Laos, Brunei Darussalam, and Myanmar. Conversely, countries that mostly benefit from AEC are the countries that are most ready to compete, most efficient, and most prepared. If Indonesia does not prepare good labor force, other countries will likely send their experts to Indonesia. Thus, AEC will be very harmful for Indonesia, because it will be in the position of only providing unskilled and low income laborers. On the other hand, other ASEAN countries can get access to a much larger market, where Indonesia cannot do. Looking at the current lack of preparation, Indonesia could be harmed by the institution of the AEC. Although Indonesia has a comparable advantage from having cheap laborers, this advantage is a detrimental.

Malaysia, Thailand, and Singapore are clearly in the most advantaged position in AEC. For example, Singapore has high-tech advantages, compared to Indonesia, in electronic or other products. Indonesia is also importing fuel from Singapore. Management and services in Singapore are much better. It is also true for Malaysia. Only in crude palm oil (CPO) Indonesia can compete with Malaysia. But, in terms of value added and high-tech products, including in electronics, Indonesia cannot compete with Malaysia. Malaysia's industrial competitiveness is also much better than Indonesia because of its having good energy supply. Factories in Indonesia are having trouble in obtaining gas in the country, but Malaysia has been able to guarantee gas supply for its industry because this country has a long-term gas contract, up to 30 years,

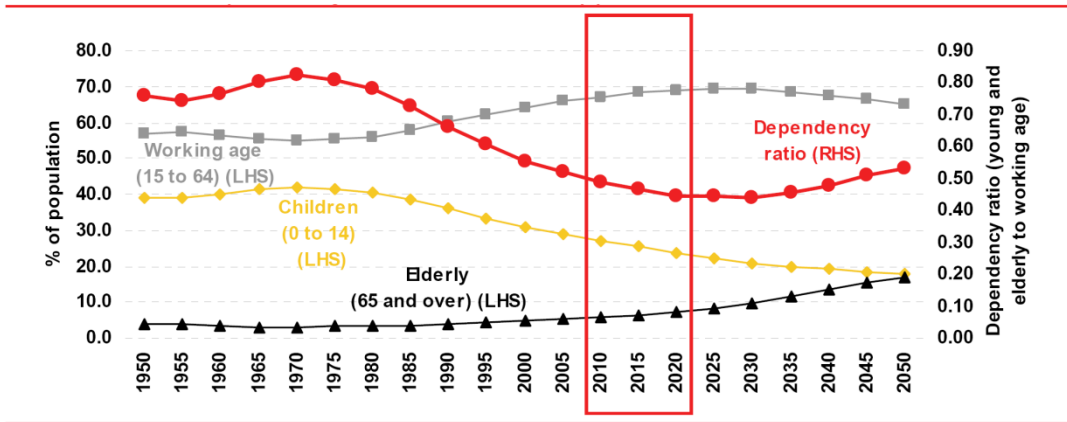
with Indonesia. Moreover, if compared with another Asean country member, i.e. Thailand, Indonesia is not as ready as Thailand in absorbing foreign investment. Thailand has become the center of Japanese car production, and therefore this has a multiplier effect to its other industries. In fact, factories in Thailand have sold the products to Indonesia.

Indonesia will also benefit from this competition if it can improve the investment climate prior to 2015. But, looking back at how things were in free trade, where government and employers underutilized the ASEAN market, things were not encouraging. The increase of Indonesian exports to ASEAN countries was not significant. The AEC result will be the same, if Indonesia is not careful in preparing itself for the launching of the AEC in 2015, the launching of which was previously scheduled to be in 2020. In other words, ASEAN has determined to immediately increase its economic growth and competitiveness to face the global competition. This decision has driven other people to work on the Indonesian market, while Indonesia does not. If Indonesia only serves as the subject of the ASEAN market itself, it will only hurt Indonesia in the long run.

2. An Analysis of Business Climate of the Creative Service Sector in Indonesia

Indonesia is a country in Southeast Asia, situated at the equator, and located between Asia and Australia as well as between the Pacific and Indian Ocean. It sits between two continents and two oceans. Comprising of 17,508 islands, Indonesia is the largest archipelago country in the world. With a population of 222 million people in 2006, Indonesia is also the fourth most populous country in the world. It ranked 44th of 139 countries on the Global Competitiveness Index, a survey conducted by one of the leading institutions based in Europe. A number of materials can become the elements of the competitiveness, including institutions, infrastructure, macro economy, health, education, market efficiency, technological readiness, business, and innovation. In 2005 the country only sat at 69th position, and in 2002 it was at 54th position.

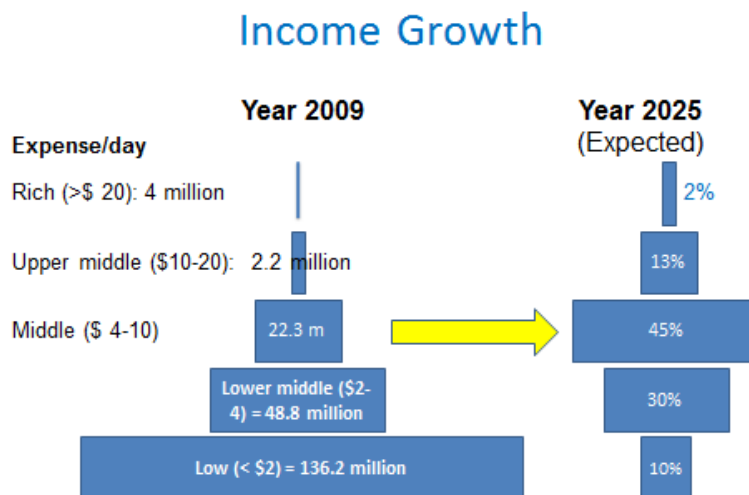
Figure 1: Indonesia Demographic Condition



Source: Indonesian Coordinating Ministry for the Economy (2010).

Currently Indonesia is not considered as advanced industrial countries in the world because there are still many problems in developing its industry, one of which is the number of new entrepreneurs in Indonesia. Only as many as 440 thousand entrepreneurs or approximately 0.2% of the total Indonesian people who are entrepreneurs, compared with advanced industrial countries like the United States (20%), Japan (18%), and the UK (18%). Even among developing countries, the rate of entrepreneurs in Indonesia is still considered low, for example Singapore (10%), China (5%), and India (5%). This is a dilemma because entrepreneurs have a major contribution in the development of industry.

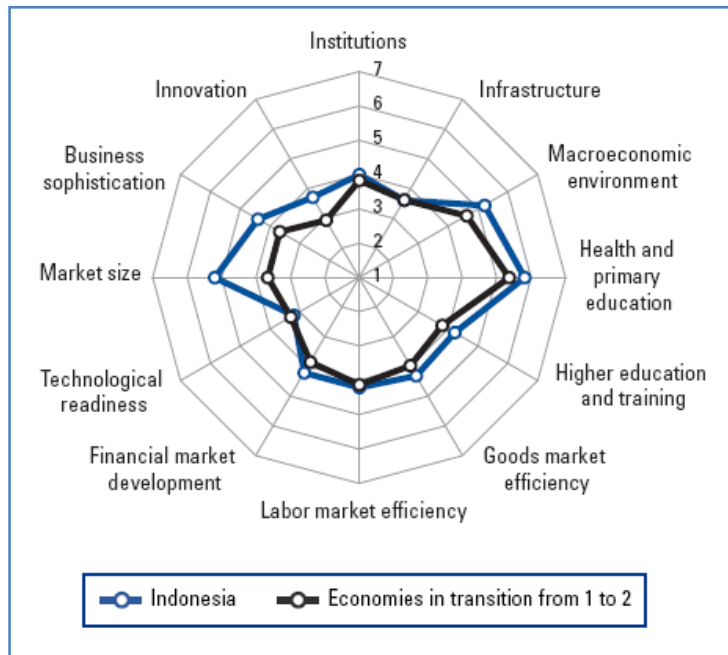
Figure 2: Indonesian Income Growth



One interesting findings in the Global Competitiveness Report 2010-2011 was the fact that the competitiveness of developed countries and developing movement towards

a single point. The World Economic Forum released a progress report each year of competitiveness which is based on a survey on business leaders and the latest economic indicators show the importance in Indonesia's competitiveness globally. Its rank climbed 10 levels to rank 44 of 139 countries. This is mainly due to an increase in macroeconomic indicators, health, and basic education, according to the report. The quality of overall infrastructure has increased from 96 to 90. The protection of intellectual property rights (IPRs) has increased from 67 to 58; the national savings rate has increased from 40 to 16, the effectiveness of antimonopoly policy has risen from 35 to 30, and the impact of taxation has ascended from 22 to 17. Meanwhile, business sophistication index has also increased, including the number of local suppliers, from 50 to 43, while the distribution value chain has decreased, from 35 to 26; the control of international distribution has declined, from 39 to 33, and the sophistication of the production process has also dropped, from 60 to 52. The ranking was based on a comprehensive survey on each the state. Indonesia was behind Portugal (46th), Italy (48th), India (51st), South Africa (54th), Brazil (58th), Turkey (61st), Russia (63rd), Mexico (66th), Egypt (81st), Greece (83rd), and Argentina (87th). Among ASEAN countries, Indonesia was ranked the fifth after Singapore (3rd), Malaysia (26th), Brunei Darussalam (28th), Thailand (38th), Vietnam (59th), Philippines (85th), and Cambodia (109th).

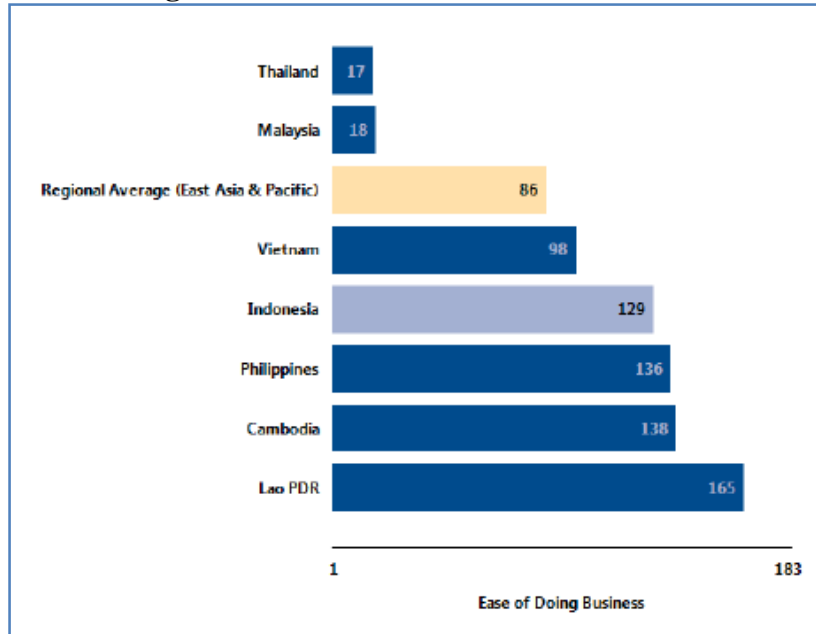
Figure 3: Indonesia Competitiveness (2011)



Source: World Economic Forum (2011).

On the other hand, at the World Bank report “Doing Business 2012”, Indonesia ranks 129 of total 183 countries. Nothing to be proud of, especially when considering that Indonesia’s position is down 3 ranks compared with the same data in 2011. Such factors as manufacturing companies, infrastructure (electricity, telephone, etc.), and the tax structure are the points where Indonesia is very weak compared to other states. The better points for Indonesia are policies for investor protection and interstate transactions, which are considered quite well in Indonesia.

Figure 4: Ease of Doing Business of Some ASEAN Countries



Source: World Bank (2011).

The rapid growth of the global market for unique products has made the creative industry become a major sector and grow rapidly. Digital technology and global networking have made the creative industries as one of the fastest-growing sectors in the world with average annual growth of between 5 and 20%. As seen on Table 1, the average GDP contribution of creative industries in Indonesia for year 2002-2010 was 7.74% of its total GDP. Creative industries export value reached IDR 131.3 billion, accounted for 10% of total national export (Simarmata & Adiwidjaja, 2011), employed 8.5 million workers, and contributed IDR 468.1 billion to GDP in 2010. As a comparison, in the United States about 11% contribution to GDP comes from the creative industries. In the UK, creative industries have become one of the fastest-growing sectors with computer games and electronic publishing as the sector's most successful industries. Currently the creative industry is estimated to contribute about 8% of the Britain's GDP.

Table 1: Indicators of Indonesia's Creative Industry (2002-2010)

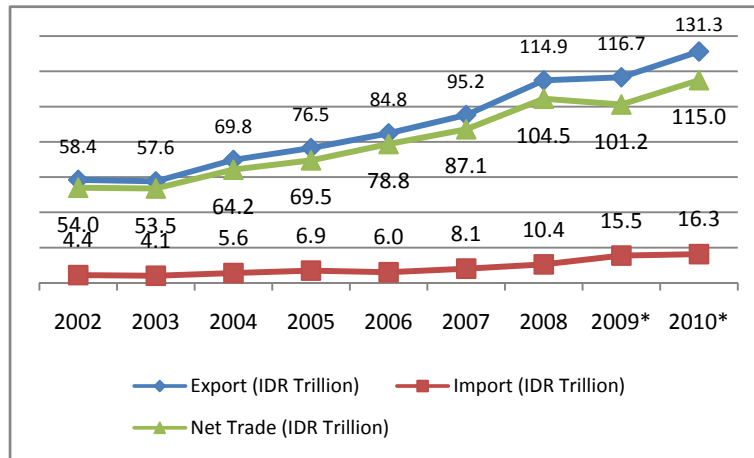
Indicator	Unit	2002	2003	2004	2005	2006	2007	2008	2009*	2010*	Average
Output Base											
Current Value Added	Billion (IDR)	160,3	167,3	192,1	214,5	256,8	293,2	345,4	394,9	468,1	276,9
		37	55	28	41	48	86	58	37	03	99
Constant Value Added	Billion (IDR)	132,4	131,0	138,6	135,3	142,0	145,9	145,2	148,5	157,4	141,8
		72	77	27	94	91	75	39	37	88	78
Value Added Growth	%	-	-1.05	5.76	-2.33	4.95	2.73	-0.50	2.27	6.03	2.23
National Value Added Contribution	%	8.80	8.31	8.37	7.73	7.69	7.43	6.97	7.04	7.29	7.74
Worker Base											
Number of Workers	Person	8,090,	6,700,	7,497,	7,360,	7,009,	7,375,	7,624,	8,207,	8,553,	7,602,
		276	589	885	032	392	116	643	532	365	092
Workers Growth	%	-	-17.18	11.90	-1.84	-4.76	5.22	3.38	7.64	4.21	1.07
National Participation Index	%	8.83	7.38	8.00	7.75	7.34	7.38	7.43	7.83	7.90	7.76
Workers Productivity	Thousand (IDR)	52,30	48,03	56,23	63,60	65,45	67,36	67,12	67,82	62,70	61,18
		1	8	0	6	8	1	9	9	1	4
Field of Business Base											
Number of Firms	Firms	3,192,	2,623,	3,099,	2,734,	2,576,	2,835,	3,035,	3,225,	3,350,	2,963,
		365	965	344	076	235	608	224	248	672	637
Firms Growth	%	-	-17.80	18.12	-11.79	-5.77	10.07	7.04	6.26	3.89	1.25
National Firms Contribution	%	7.52	6.34	7.24	6.57	6.09	6.41	6.64	6.94	7.11	6.76
International Trade Base											
Export	Billion (IDR)	58,41	57,59	69,77	76,46	84,84	95,20	114,9	116,6	131,2	89,45
		3	7	4	2	0	9	25	51	51	8
Export Growth	%	-	-1.40	21.14	9.59	10.96	12.22	20.71	1.50	12.52	10.90
National Export Contribution	%	11.43	11.32	10.49	9.08	9.33	8.86	7.52	10.65	9.25	9.77
Import	Billion (IDR)	4,445	4,060	5,560	6,915	6,045	8,077	10,44	15,49	16,26	8,589
								2	1	2	
Import Growth	%	-	-8.66	36.95	24.37	-12.58	33.61	29.28	48.35	4.98	19.54
National Import Contribution	%	1.59	1.50	1.29	1.22	1.10	1.15	0.82	1.70	1.33	1.30
Net Trade	Billion (IDR)	53,96	53,53	64,21	69,54	78,79	87,13	104,4	101,1	114,9	80,86
		8	7	4	7	5	2	83	60	89	9
Net Trade Growth	%	-	-0.80	19.94	8.31	13.30	10.58	19.91	-3.18	13.67	10.22
National Net Trade Contribution	%	23.33	22.54	27.58	25.30	21.99	23.34	41.65	54.68	57.83	33.14

* Preliminary figures.

Source: Simarmata and Adiwidjaja (2011).

Creative industry only supplied about 10% of national export; however the ratio between creative industry import values against the national import were only about 1%. The export value of creative industry reached 7 to 10 times its import value (Figure 5). The products of the nation's creative industry had established themselves more in the global markets, better than how foreign creative industry established their products in national markets. This fact also proved that the creative industry's dependence on import were relatively small. Creative industry had an opportunity in establishing the national autonomy (Simarmata & Adiwidjaja, 2011).

Figure 5: Value of Export, Import, and Net Trade of Indonesia's Creative Industry (2002-2010)



* Preliminary figures.

Source: Simarmata and Adiwidjaja (2011).

Government of Indonesia realizes creative economic potentials for job creation, poverty eradication, increasing the national income, and nurturing of nationalism. As a sign of the government commitment, an action program by 27 ministries/institutions and local governments has been stated explicitly in the Instruction of President of the Republic of Indonesia No. 6 of 2009 regarding Development of Creative Economy, in which the government detailed the policy for creative economic development for the year 2009-2015. The development of economic activities based on the creativity, skills, and individual talents to create creative and inventive individuals who are economically valuable and influential on Indonesia's public welfare. Government has also launched the Vision and Mission of Creative Economy for 2025 as follows:

- Vision: The Indonesian nation with good quality of life and creativity in the world
- Mission: Empower Indonesia's human resources to:
 1. Increase the contribution of creative industries to the GDP of Indonesia
 2. Increase the national exports of products/services based on the creativity of the nation that carries the spirit of contemporary local content
 3. Increase the employment as a result of the opening of new jobs in the creative industries

4. Increase a number of highly competitive firms engaged in the creative industries
5. Prioritize the the utilization of sustainable resources for the earth and coming generations
6. Create creative innovations, including those based on wisdom and cultural heritage archipelago, that hava economic value
7. Develop creative potentials in the areas and regionsof Indonesia
8. Develop creative branding on the products/services as national branding of Indonesia

In this instruction of president were disclosed six goals of Indonesia's creative industry, namely:

1. Nurturing creative human beings with a creative mind-set
2. Developing industries that are leading in domestic market and abroad,nurturing the local entrepreneurs
3. Developingtechnology that supports the creativity of Indonesian people
4. Utilizing domestic raw materials effectively for the creative industry
5. Encouraging Indonesian people to appreciate and consume local products
6. Winning high trust from financing institutions for the creative industries in the economic sector as an attractive industry

As the continuation of the government's commitment to develop the creative economy Indonesia in 2025, the Ministry of Commerce has conducted initial studies to map the economic contribution of creative industries that are part of the creative economy. This is then followed up by making "*Creative Economy Development Plan 2009-2015*", "*14 Creative Industries Subsector Development Plan 2009-2015*", and finally the next stage is planning "*Work Program 2009-2010 National Creative Economic Development, Ministry of Trade*". To direct and to carry out activities that can achieve the targets, the focus of activities undertaken will be divided into 5 main stages so that the targets can be achieved by 2015. Stages of the activities to be implemented are as follows:

1. Good data and information. At this stage activities will be focused on improving the quality and dissemination of information about the creative industries including

comprehensive studies of the industry, database development, and adequate information systems.

2. Service excellence. If the system has been developed with good information, then the service provided by the Department of Commerce is expected to increase significantly. Database that has been obtained can be the basis for policy studies to make rules that support the growth of creative industries.
3. Demand establishment, high productivity, and efficiency. At this stage, efforts should be well planned to create and stabilize the level of demand, improve productivity and efficiency of efforts to achieve the highest level to meet the level of demand and to stabilize a system of partnerships.
4. Design excellence. If the level of demand is relatively stable, then the focus of the next activity is the creation of product innovation by creating new designs, both of which have a local identity and contemporary nature.
5. Brand excellence. In order for creative products to be created and manufactured in Indonesia, it is necessary for intensive branding efforts to form a competitive advantage when compared with other similar products.

The reshuffle of the cabinet carried out by the President of Republic of Indonesia in October 2011 change the Ministry of Tourism into the Ministry of Tourism and Creative Economy, which is led by Mari Elka Pangestu, is expected to create new competitiveness for Indonesia in the creative economic sector. Ministry of Tourism and Creative Economy is the ministry within the government of Indonesia that is in charge of cultural affairs and tourism. After the reshuffle, at least there are three ministries whose duties are in direct contact with the handling of the creative economy. ministries are the Ministry of Trade, Ministry of Industry, and Ministry of Tourism and Creative Economy. All three must perform in order to generate synergies and better output. There should also be a coordination among them to avoid overlapping programs, butto complement and reinforce one another in the handling the Creative Economy. In the last 5 years, the function by the Ministry of Tourism and Creative Economy was performed under the Ministry of Trade. The Minister of Tourism and Creative Economy Mari Elka Pangestu said that the handling of the creative economy in three ministries

would not overlap, as each ministry has already had a blueprint that states their own tasks.

Along with the situation changes and rapid developments in information technology, a new generation is created to help shape the face of present day Indonesia, dominated by young musicians, artists, and designers. Through their hands, many brilliant works will be produced and managed to bring Indonesia to the global world arena.

In this study, we studied three subsectors of creative industries such as fashion, design, and games and animation. There are hundreds of creative activities carried out in Indonesia every year, some of which attract the attention of local communities and the world. They, based on areas, are:

- Bandung: Helarfest, Braga Festival, Kickfest
- Jakarta: Festival Kota Tua, PRJ, JakJazz, Jiffest, Jakarta Fashion Week
- Solo: Solo Batik Carnival, Pasar Windu Jenar
- Yogyakarta: Festival Kesenian Yogyakarta, Pasar Malam Sekaten, Biennale
- Jember: Jember Fashion Carnival
- Bali: Bali Fashion Week, Bali Art Festival, Bali Sanur Festival
- Lampung: Way Kambas Festival
- Palembang: Festival Musi
- Other creativeevent which has also been held regularly such as: Blogger Party and Java Jazz

2.1. Creative Service Sector: Games and Animation

The creative industries subsector of games and animation is creative activities related to the creation, production, and distribution of computer and video games that are entertaining, lively, and educative. The subsector of the games and animation is not solely for entertainment but also for education. According to some literatures, games industry has the following criteria:

- a. They are in the form of electronic-based software applications on the computer (online or stand-alone), console (PlayStation, XBox, Nintendo, etc.), mobile handsets, and arcade.

- b. They are fun and competitive.
- c. They provide feedback/interaction to the players, both among players or players with the tools (devices)
- d. They have a purpose or more and may carry one content / payload or more. The message has varied elements such as education, entertainment, product promotion (advertisement), and destructive messages.

Based on Britannica Concise Encyclopedia (answer.com), animation is process of giving the illusion of movement to drawings, models, or inanimate objects. From the mid-1850s, such optical devices as the zoetrope produced the illusion of animation. Stop-action photography enabled the production of cartoon films. The innovative design and assembly techniques of Walt Disney soon moved him to the forefront of the animation industry, and he produced a series of classic animated films, beginning with Snow White and the Seven Dwarfs (1937). The Fleischer brothers and the animators at Warner Brothers offered more irreverent cartoons that often appealed to adult audiences. In Europe new animation alternatives to line drawing were developed, including animation using puppets (sometimes made from clay). In the late 20th century computer animation, as seen in the first fully computer-generated animated feature, Toy Story (1995) moved the art to a new level.

The relative activities which are part of the games and animation industry groups are, among others:

1. Video sequences (using actors, directors, and crew)
2. Music soundtracks
3. Digital TV gaming
4. Gaming for mobile phones
5. Computer manufacture, distribution, and retail
6. Games console manufacture, distribution and retail

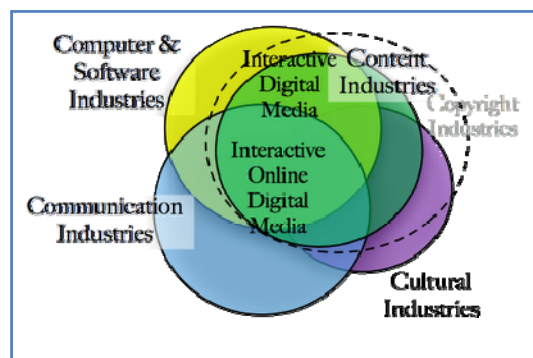
Games or 'interactive leisure software' in Indonesia satisfies the following main criteria:

1. Firms or entrepreneurs or individuals involved in game and anime development
2. Having a primary focus on development including

- Established game developers
- Established animators
- Emerging new game developers and animators
- Outsourcing in anime and game development

Recently, games and animation are part of software environment (see Figure 6), because they need software in designing and production.

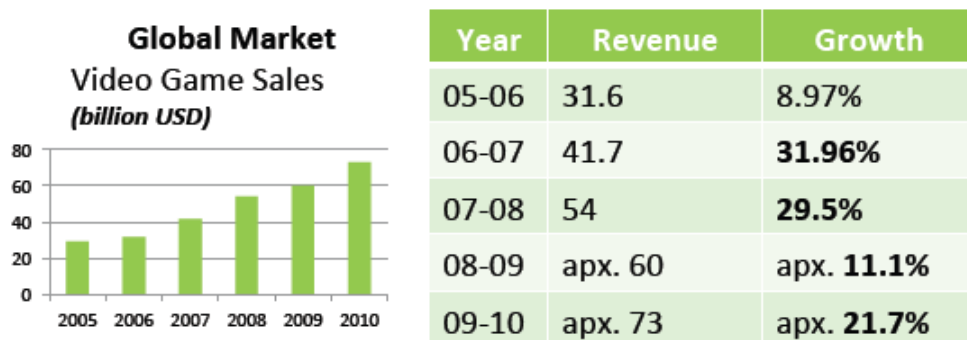
Figure 6: Software Environment



Source: bibliothekia.blogspot.com.

In 2010, the market capitalization of the world gaming industry was worth more than USD 100 billion and its value was predicted to continue increasing every year. The above figures do not include the conventional games such as board/card games whose supporting products were estimated to be more than USD 10 billion and to grow rapidly every year. These figures give an idea of how big and potential gaming industry is. This is a fact which should be known by many parties. Table 2 below shows the global market of game industry.

Table 2: Global Market of Game Industry



Source: Data calculated from NPD Group, ESA, MPAA, IGDA, RIAA, and IFPI.

Interactive or game developers are the major companies in interactive game-development industry. The companies are generally middle-sized according to the number labor employed. Even many of these developers are only informal firms consisting of 3 to 5 people. Interactive games developers are believed to have existed since the 1990s. The game developers usually make products as a hobby. But since January 2004, when the Divine Kids, a locally made game by David Setiabudi was awarded as the first game manufactured in Indonesia, the local interactive game industries began to start their businesses. Although the level of online game users has already reached 7 million users (data from the game publisher association in Indonesia) and nearly 30 people have accessed the internet, the gaming industry in Indonesia is still far from settled. The amount of usage of computers and electronic gadgets and telecom does not correlate directly with the game industries development, at least until now. Establishing software and hardware supporting industries for interactive games is therefore needed.

However, piracy of software and hardware in Indonesia is still high. This condition is often seen as an obstacle for developers of interactive games in running their business. Nevertheless, this obstacle can be solved by many ways. One of them is by commercialization activity. This activity is generally done through the dissemination of information on the websites. Another way is by joining international competitions although the events are still limited. Such events are good for company promotion. Thus, participating in the festivals can be used for introducing themselves to the world. This kind of festival in domestic level should be encouraged more. Besides strengthening the commercialization chain, it can strengthen the quality of human resources.

This industry can be divided into two types: computer game and conventional game. Computer game only requires low cost and raw materials; however, not every people can enter this industry as it requires a variety of expertise in programming, graphic design, and animation. This adds to the fact that business climate in Indonesia has not been supportive to the commercialization of software. One solution to market a computer game is to make it playable on the handset, although there is a risk of piracy.

But the games marketed with the help of content providers, at least help market the products. Another solution is to market the games online through social networking sites. Facebook, for example, offers considerable advantages to the manufacturers as each game is posted on it. Some economic figures of the subsector in Indonesia can be seen in Table 3:

Table 3: Economic Figures of Game Industry

Indicator	Unit	Amount
Gross value added	IDR billion	550
Contribution of creative industries	%	0.36
Labor absorption	Person	3,537
The contribution of labor to the creative industry	%	0.05
Labor productivity	IDR 000/labor/year	148,767
The number of business units	Company	764
The contribution of business units to creative industry	%	0.03
The export value	IDR billion	170.23
The contribution of exports to the creative industry	%	0.14

*Sources:*Data processing from Ministry of Trade of the Republic Indonesia (2009), and Creative Industry Research Team and Ministry of Trade of the Republic of Indonesia.

Some of the industries in Indonesia are, among others:

- Main Games Studio, Jakarta
- Sangkuriang Studio Bandung
- Indismart Kreatif Idea, Bandung
- Agate Production, Bandung

The industry associations in the games sector in Indonesia are:

Association of National Games and Electronic Sport (ANGELS), Asosiasi Penggiat Mainan Tradisional dan Edukatif Indonesia (APMETI), and Liga Game.

This study used a qualitative approach that begins on the data and lead to the conclusion using interview and secondary data analysis. The data were obtained from interviews. The Interviews were conducted in a conversation that has a purpose. The interviews were preceded with a few informal questions. The research also interprets or translates the discourses from the informants in the field. The research also used descriptive research, namely the kind of research that simply describes and summarizes the various

conditions and situations that exist. The interviews lasted for 90 minutes on average. The respondents who participated were:

1. Elitua Simarmata (Executive Director) and Yuda Kamsi (Community Relations); Indonesia Kreatif (indonesiakreatif.net)

Indonesia Kreatif is a working group for creative economy development initiated by Indonesian Trade Ministry in 2010 with the primary role as a hub agency, facilitator, and public outreach program in the development of creative economy of Indonesia. Indonesia Kreatif has 3 main programs, namely: Creativepreneur (creation and capacity building program), Creative City (creation and development of creative cities program), and Creative Network. Creative Network is a program for the creation and development of networks among creative leaders, creative businesses, communities, governments, academics, and investors as a driving force of creative economy both within and outside the country.

One important contribution by the working group is providing an online media for information, communication, and education of the creative economy in Indonesia for the creative economy stakeholders in Indonesia. The launch of this portal is a form of government intervention in providing a platform for the creative sector in Indonesia and building creative-preneurships and creative-networks.

2. Ferrie Budiansyah; Coordinator and Facilitator; I2TB (i2tb.web.id)

In 2008 Indonesian Ministry of Communication and Information built the first pilot project for telematics innovation incubator in Bandung, named Inkubator Inovasi Telematika Bandung (I2TB). The purpose is to create and increase the number of qualified ICT technopreneur in Indonesia. The agency is planned to be replicated in other cities in Indonesia, including Yogyakarta and Semarang. Its activities are directed to facilitate and nurture young creative technopreneurs and develop cooperation between stakeholders.

3. Djarot Subiantoro (President), Riyanto Gozali (VP), and Hidayat Tjolrodjojo (Treasurer); Asosiasi Piranti Lunak Indonesia—ASPILUKI/Indonesian Computer Software Association (aspiluki.or.id)

ASPILUKI is an association of software and IT companies in Indonesia. ASPILUKI was established in 1990 under the auspices of the Ministry of Industrial and Trade. This is an independent organization consisting of local companies in the software and information technology services industry. The main purpose for ASPILUKI is to create conducive and healthy business climate in the software and IT industry. Some members ASPILUKI are multinational companies such as Oracle and Microsoft, while other members are local software and IT companies from various areas in Indonesia. ASPILUKI provides a place for communication, consultation, development and coordination among its members. To participate in the development of the Indonesian information technology industry, ASPILUKI supports Government institutions in improving the business operating environment and regulations. It also actively promotes the dissemination and utilization of information technology in the industry, combats chronic problems such as software piracy, initiates programs such as RICE (Regional IT Center of Excellence) and National Software Developers Accreditation, and holds national software exhibition (IndoSoft).

4. Arief Widhiyasa; Game Developer, Co-founder, and CEO; Agate Studio (agategames.com)

Agate Studio is a game developer creating a wide range of games. Established in 2009, the company is growing quickly and becoming one of the biggest game developers in Indonesia. As per interview (October 2011), the company has more than 60 employees working on more than 120 projects for various overseas clients. The average age of employees of this company is 23-24 years old. Arief Widhiyasa, the CEO, is only 25 years old.

2.1.1. SWOT Analysis of the Sector

Strength

Flexibility to Respond to Market Trend (S1)

In the context of innovation and creativity in the creative industries, it requires an independent mental attitude to new ideas. The industry is distinct by its substantial progress, volatility and big prospect. The market has undoubtedly grown to its pioneer

days. With this, the industry structure and the principal dynamic influence the behavior of firms. The exceptional price-to-quality ratio of production and the low level resources entails the companies to operate efficiently empowered by the high level of technological expertise. Hobby, which powers the pioneering companies' spirit, becomes a trigger for tenacity and creativity. Meanwhile, the quality of the creations (art) has been internationally appreciated, and developer's passion generates investment. Economic scope is done by leveraging various sources. Some of businessmen often use self-developed technologies, such as self-assembled computer. Businessmen have a good network with local designers who have international class. As a result of new generation platforms and vast growth in global gaming industry demanded excellent technological competences from local companies. The technological and content capability of the companies has been principally essential in relation to the rapid advancement in technology. The growth of creativity and innovation brings new patterns and way of thinking which do not abandon local wisdom.

Attractive Design (S2)

The local cultural values should be appreciated, developed, traced, and analysed in its various aspects to be utilized and transformed into art forms as the foundation to develop high creative power and innovation toward the building of national identity and to compete in the global world. Art in different types and nature in the cultural context can not be separated from the environmental community sociology which supports and indicate a rich regional identity to be explored.

The views on the value-added enhancement to the design of consumer create market development that will provide support and pay for each design innovation. This will also inform the corporate sector and government to realize the value of design and design innovation and provision of skilled labor and improved business management skills among the designers to work on higher levels, with international clients, and has alliances strategis. This will increase the local supply chain and increased awareness of the technology to compete both nationally and globally and therefore increased financial flexibility.

Internal innovations and invention of intellectual property products is considered one of the main contributing factors for successful products. A strategy should be

developed to promote the creation, protection and practice of intellectual property which provide the stakeholder with simple and strong procedures to enforce the law. The plan should also address policies to expand the industries by preparing the creative environment, protection system, and promoting legal distribution. Companies being willing and able to create innovations. Today, the industry is not (yet) hampered by the issue of IPRs violations. Other facts to be addressed are that the salaries and the living costs of workers in the sector are low, so this industry will not be able to grow without facing financing problems.

Weakness

Lack of Working Capital (W1)

Various types of scale, cost, and quality of customer interaction are important for many companies. The cost of production and development and the cost of marketing campaign are expensive, while distribution and commercialization channels are still limited. These cause the local companies difficult to reach economies of scale. Technology is currently enough to satisfy any requirements that developer may have. Computer processing power is not a restraint anymore for creation of advanced graphics and games. High-speed internet connection services have increased many times over with wireless carriers adopting high-speed, next-generation networks. But whilst computer processors have declined in price, high-end computers and graphics chips are still expensive. Further, access to utilize of cross-cutting relationship between agencies and users is still limited.

So the question is, how is creative activity be supported in the early phases when profitability has not been achieved? The rising costs of developing, distributing, operating and marketing necessitate access to financial support is critical to nurture companies. Moreover, high risks factor associated in a business where success is extremely unpredictable require big importance to have financial capital support for the company or at least to have a portfolio of several products to mitigate the risks. In Indonesia companies in their initial and growth phase, especially the smaller ones, bootstrapping has always been sources of capital for expansion, as trust from the financial industries toward investing is not yet exist. The rising complexity of industry networks throughout the value chain with different financial models indicates that the

relational aspect of stakeholders becomes central. The network approach then will be even more important as a tool for analysis in the future as the industry expands further.

Lack of Managerial Skills (W2)

To be able to develop the creative industries, the character of the nation should be understood. Most importantly good character education and culture is very important. One aspect that has the potential to support the character nourishment is to develop creative and innovative capabilities. Problems faced by the businessmen of this sector are the lack of professional proficiency and lacking in innovation, so they have not been able to compete with big industries. Technical capabilities and language skills hamper the pace of international market penetration. Designers have a lack of knowledge and capacity in business and managerial skills. They also have limited confidence, English language ability, vision, strategies, and nationalism in design; in addition, they have a self-centered nature. Furthermore, they do not have a sufficient understanding of and access to financing institutions. Moreover, they cannot make a right decision to develop their infrastructure capacity.

Producers of creative products recognize that each use individual life experiences into the process of creation and the products reflect those life experiences, as well as ideas and beliefs. Indonesian workforce in creative industry therefore illustrates and reflects the diversity of ideas, experiences and preferences. However, concentration of business in various stages is not an anti-competitive behavior. Nevertheless, vertical integration continues to be a new entry barrier.

Infrastructure is the supporting mechanisms that distribute the products and associated services to the end user. Rapid technological advances and complex business environment in the industry require a holistic network method to catch up with the development and global market transformation. High-speed internet connection has driven the industry towards complex knowledge intensive services. On micro level, companies have to take advantage of these new possibilities. To captivate consumers and attract business, the whole value chain had to be more integrated. The company must also determine the best approach to offer product up-grades and potential technical problems. With bigger technical power from clients, this dimension of service is vital for business. The quality of the internet is not stable, thus inhibiting the development

of technology in terms of obtaining information that can support their business. Businessmen also do not give good attention to R&D, whereas R&D is needed to develop products and services.

However, ever since the rise of the industry there has been a sometimes ambiguous development policy from the government. On the one side the government aspire to create a strong domestic industry. But on the other hand, and more often than not at the same time, have concerns for the societal, cultural and political consequences. Sometimes these two nodes correspond, on other time they clashes.

Opportunity

Strong Domestic Market Potential (O1)

The value of art and culture on one side and the creative industries on the other hand often contradicted. The value of art and culture is a cultural expression. While creative industries are progressive culture. In other words, the first is an expression of tradition, while the latter is an idiom for economy and modernity. The success of one product is able to cover investment losses on other failed products (one hit out many) with adequate and cheap telecommunication, electricity, and energy that are available. Crafts and tourism potential are positively correlated to the development of design, and it is supported by the openness of society to develop the design. This condition will provide a positive influence for the development of design so that the design is able to compete in the international market. The existence of community associations is likely to be the forerunner of interactive games.

Game has tremendous potential for educate a generation. Given a positive values via a game, there will be a massive change in life. Games can also train concentration skills, thinking skills, reflexes and of course can foster self-confidence to the most extreme level. Immersed in a game, and have the brain stimulated, can encourage creative solutions and adaptations. These can then be useful to real life situations. The results can be surprisingly positive for individuals, communities, and society as a whole.

Further there is an international attraction regarding opportunities in gaming industry in Indonesia. Their interest in the market is understandable considering a huge population of Indonesia (which serves as a potential market and also for the talent of the

workforce (which is pretty cheap compared to other countries). One renowned international company, Gameloft, has entered Indonesia, soon there are many more who come.

Increasing of Subcontracting Markets (O2)

Asian countries, particularly Indonesia, have great advantage in labor-intensive development and subcontracting. But it is not enough. Other components are also needed, among them creation of Intellectual Property environment. Intellectual property is deeply related to creative industries as it comprises both industrial property (patents, designs, and trademarks) and copyrighted property (in sectors such as music, art, and literature). Some products, especially games, have a relatively short life cycle, which can accelerate the growth of the business. Entrepreneurial creativity to construct creative products must be able to affect the lives of the country and not only enjoyed by the business itself. Creative workers must find ways to encourage the development of creative industries that benefit many people.

Competition to draw the best creative and technically skilled employees is high, especially in a country where skilled and experienced labor is not many but less skilled workforce is in excess such as in Indonesia. Therefore education in design is becoming more popular, and it raises the level of salary. This condition will stimulate people to plunge into the design field. Standardization and certification of skills for design practitioners are necessary.

The government issued Government Regulation of the Government of Republic of Indonesia No. 20 of 2005 regarding Technology Transfer and Government Regulation of the Government of Republic of Indonesia No. 35 of 2007 regarding the Reduction of Tax and Customs Incentives for State-owned Enterprises which are Conducting R&D. This regulation can be used to encourage the manufactures of highly competitive domestic products, designer associations and communities.

It is true that the foundation of creative industries is individual creativity. However, the impetus of industrialization is management of the company or organization. Therefore, policies to promote creative activity, which acts as the input for creative industries, and industrialization, which represents the output, need to be

addressed from different way of thinking. This is the key to the sustained development of creative industries which is building a good structure within the environment.

Threat

Unproven Career for Living (T1)

Many people are still considering that interactive games are less promising. 'Brain drain' has taken place (domestic developers move overseas). WTO rule which authorizes the mobilization of foreign workers (code 4) has led to competition in obtaining a job. However, there is no doubt that the industry will profit from a more diverse pool of talented workforce. It is undeniable that education has an important role in realizing the success of the creative economy. This is particularly true for developing the creative industry in Indonesia. An artist, designer or craftsman can not always market their own products they make. In the marketing system which largely product oriented like creative industries, a designer or craftsman should not directly manage the marketing and sales function. A designer, artist or craftsman should be more focus on product creation and exploration of new products.

The fact that game developer has not yet been seen as an attractive profession, difficulty in mapping the number of game developer, and inadequate certification standards are threats to the growth of interactive gaming industries. Some people still have negative perceptions about a career in art and design. In addition, tuition of design school is expensive. These cause the lack of number of designers. Furthermore, there are not many formal educational institutions that specialize in interactive games.

No Support from Training and Education Sector (T2)

Education and work skills training are needed by the creative industries to provide the companies with attracting, recruiting, and maintaining employee. At the same time, opportunity should be given for education and training providers to better understand and respond to the needs of creative industries.

On the product side, there are still many products that are vulnerable to piracy. For supporting parts, the manufacturers do not have a center for game development and associations, and this subsector is not included in Indonesia Standard Industrial Classification of All Economic Activities (ISIC/Klasifikasi Baku Lapangan Usaha

Indonesia-KBLI). Inadequate infrastructure and illegal levies also cause a high cost economy. For example, lengthy processes in licensing arrangements leads to businessmen spend more expenses. Moreover, in Indonesia the promotion of many creative industries has been left largely to the individual businesses.

No Government Support in Distribution and Finance (T3)

There are a few of financial institutions which are interested in funding this sector since the return on investment takes a long time. Also, businessmen cannot make a right decision to develop their infrastructure capacity. The rules of interactive games distribution in cyberspace through the internet is not yet stable and not conducive to this business, such as tax policy. Moreover, software and computing equipment is expensive.

Government efforts to support the creative economy can not be separated with the context of the cultural journey of Indonesia. It is undeniable that the Indonesian nation made up of ethnic groups that naturally has incredible artistic talent. However, it should not be forgotten that since the New Order Regime, art and culture sector did not receive proper attention and guidance. There is even a notion that after 1965 traditional arts are systematically slaughtered slowly. Almost all strands of arts are highly observed and regulated, so as not to become a political tool of any group except that of the government.

There is no an ideal link and match between industry and higher education, in terms of competency and applied research design. Rapid technological change (disruptive technology) can be detrimental to investment. In addition, local businessmen have limitations in terms of buying software licenses. Banks and venture capitalists see the industry as not bankable, so they do not want to finance it. This has caused many designers choose to work informally. Other inconducive conditions are the exploitation and acquisitions by companies that provide assistance for them.

There is no design center that can facilitate the designers and their work, while the cluster concept is expected to help designers. The negative bureaucratic climate also has impeded the development of innovation. Another thing is that piracy is high, which is caused by the high cost of IPR registration and regulation, public service, and ineffective law enforcement. Creating high industry standard will be a good technique

to protect sustained economic growth in the knowledge-driven economy. As the economy becomes more knowledge-intensive, infrastructure generates new opportunities for innovation.

2.1.2. Key Players

Agate

agatestudio.com

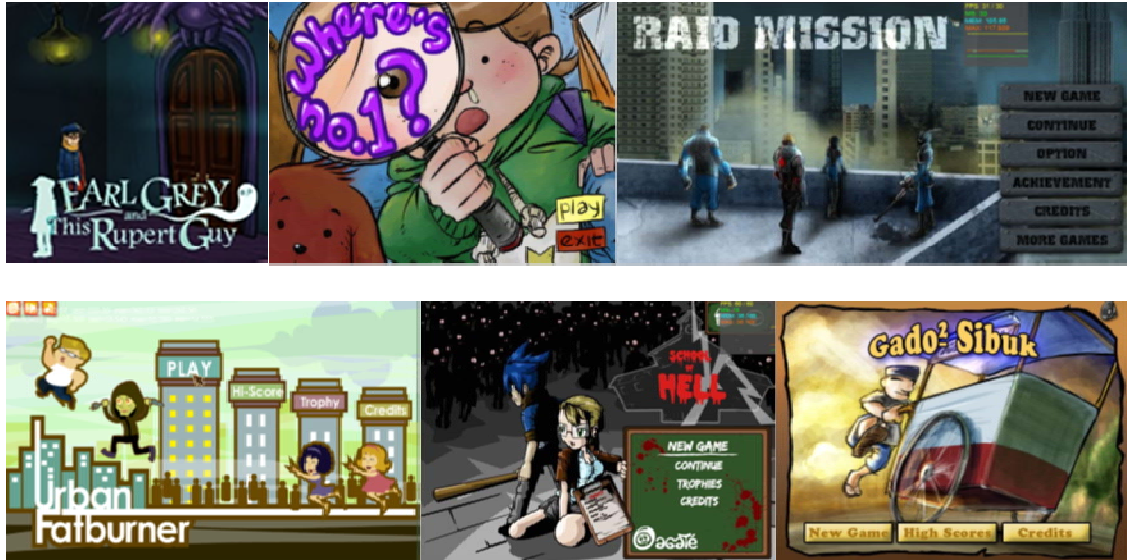


In October 2007, 20 college students with deep passion in gaming successfully created their very own game in 9 months with virtually no budget called “Twilight Altercation”. In July 2008, the same team created a multiplayer Xbox360 game called “Ponporon!” in one month which rocks Indonesian Game Show 2008. This continues to 2009 with the creation of three games “Farewell Night”, “Blank!”, and “Wish!”. One of the games won Most Favourite Product on INAICTA 2009. Finally in April 2009, the company was formally and legally established and is growing quickly to become one of the biggest game developers in Indonesia creating a wide range of games. Agate Studio has created more than 80 games, multi platforms in XNA, Flash Game, Xbox360 Game, Online Game, Silverlight Game, Social Game, Mobile Game, and this studio is even developing into Board Games. They produced some of the most successful games, not only in Indonesia but globally, such as Football Saga, Lilo City, Nyanyi Yuk!, Bola-bola Batik, Urban Fat Burner.

Agate also provides game development services as solution for advertising, campaign supporting, and digital marketing. Now there are approximately 60 crews, living with passion and skills to achieve their dreams together in Agate Studio. Making a game requires a variety of people. It can start from 2 or up to ten people. Its core is usually composed of the Game Producer (the Party Leader), Game Programmer (the one who programmes the game), and Game Artist (the one who makes the design and its assets), and usually Game Designer (the one who makes the concept of story, gameplay concepts, etc.).

Each year, the income of this company tends to rise. In 2009, for example, its total revenues reached about IDR 120 million. The amount increased to IDR 500

million the following year. In the year of 2011 the turnover was more than IDR 1 billion.



Success story:

- Earl Grey and This Rupert Guy is a point and click mystery game, great art, and music, obtained 806,628 clicks in its first 3 weeks of launching.
- Since its launch in February 2011, Agate Studio told us that the game has been downloaded more than 200,000 times and is highly popular in countries like Australia, Indonesia, Italy, Turkey, India, and South Africa.
- They successfully won the People Choice Award Flash Gaming Summit 2010 in San Fransisco, March 2010; Most Growth Company (Revenue & Profit) ~ Action Coach Business Coaching, April 2010; Indigo Fellowship Award, December 2010; Teknpreneur Award 2010 (StartUp Category), December 2010; and Top Awards in IMULAI 3.0 by Microsoft & USAID, April 2011.

Bamboomedia

bamboomedia.net



Bamboomedia is engaged in the business/creative digital industry, the unique combination of business software, education, and media (content). Bamboomedia Cipta Persada is known as a producer

of computer software applications for office, students, employees, large or small companies, and the children. The company is concerned with education and how these applications can be spread properly, well, easily, and inexpensively without limit. This company develops creative products by sourcing an idea or ideas, combined with technology and art. With a simple vision and mission, this company is able to support the empowerment of human resources and contribute to increasing national economic competitiveness of Indonesian people. The company has a simple vision, i.e. "Towards a better life through the software and creativity". Its mission is to become a partner and a provider of the best learning technology solutions, computer based training, and creative software in Indonesia.

With creative research, innovation, and marketing savvy use of CD/DVD and online application, this company provides optimal benefit to the consumer. Bamboomedia offers alternative and complementary products. It packages knowledge and skills in media of interactive CD-ROM, corporate intranet, and internet (computer based training/learning). Its products are kids interactive (kids browser), e-learning (animation/simulation), virtual IT college (programming, database, graphics, multimedia, internet, web, cad, civil, etc.), business software (SME), digital era solutions for school/teacher, online communities, and retail store (digital corner). It has a distribution of products/services by working with a network book store, computer stores, and various city resellers.

The local information and technology company owned by Putu Sudiarta is also registered as a member of the Business Software Alliance (BSA) Indonesia on July 1, 2008. In this year, Bamboomedia won ICT and E-Learning Award. The emphasis on its products and services has benefited this company (using appropriate technology, efficient, and effective), because basically the customers will only buy benefits. With loyalty and appreciation of its consumers, Bamboomedia can still maintain to provide the best work and contribution to the nation. During the five years operation, there are approximately 25,000 businesses that become consumers of Bamboomedia.

Putu Sudiarta only sells CDs of applications whose starting price is of IDR 25,000-50,000 per chip. The application may also be accessed by anyone from the CD, simply by registering or paying a sum of money according to the price of a CD without having to come to his office. Bamboomedia products, whose philosophy is based on

having products which are simple, flexible, and having high performance, are low cost local software products, but guaranteeing high performance. His collection of products also has about 108 products whose turnover could be millions of dollars, and in fact, it has been recorded to reach up to IDR 1.6 billion. Because of this, Microsoft is willing to take this company as one of its vendors to distribute its products to all corners of the country, including at least 30,000 small and medium enterprises that already use its products. Another reason why Microsoft has chosen this company to be its vendor is because Bamboomedia is against piracy.

Kinema Systrans Multimedia

kinema.frameworks-studios.com



Infinite Frameworks (IFW)

Studios is a brand name of PT Kinema Systrans Multimedia,

which was established in 1998. Located on one of the most beautiful beaches in Batam, Kinema has become one of the major players in the South East Asian's animation industry.

For the production of films consisting of city replicas that can be adjusted to the setting of the film to be made, two sound stages measuring 14,000 and 30,000 feet, workshops (art department and prosthetic workshops), animation studios, and post production. Right now, Kinema and IFW Studios have constructed a new studio in Batam and expanded their business to include live action production. Located only 45 minutes from Singapore, Kinema and IFW Studio's new facility is planned to be a media hub for Indonesia-Singapore's entertainment industries.

Island Studios, under Infinite Frameworks Group, occupies a land area of 10 hectares in Nongsa, Batam, and is projected to be the largest in South East Asia. The studio offers a comprehensive range of facilities, including visual effects.

With the capacity to ramp up resources of between 80 and 200 artists at any given time, along with corresponding data management technology and render farm capability, Kinema offers clients and partners a range of services; from animation outsource work to collaboration and co-production opportunities for animated TV Series and Feature Films.

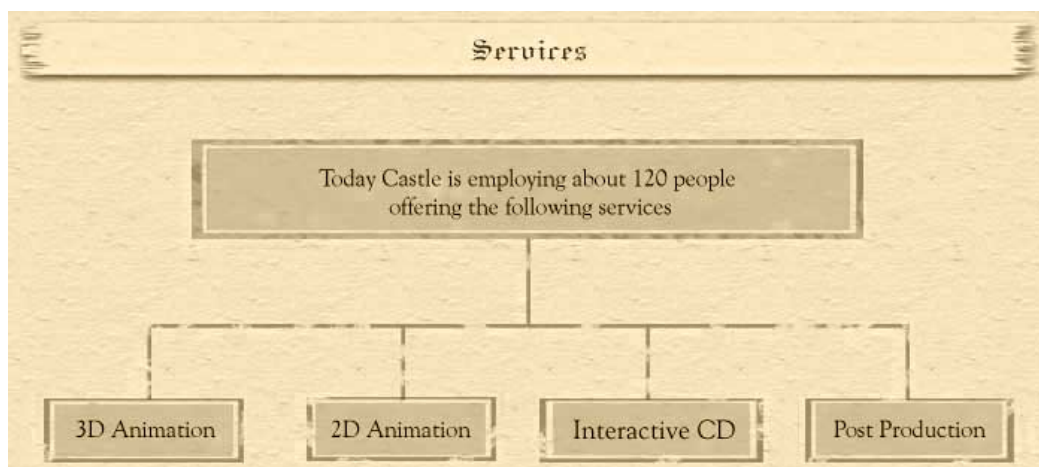
As the production house of several animated TV series such as ‘The Garfield Show’, ‘Leonard/Dr.Contraptus’, ‘Lucky Luke’, and ‘Franklin & Friends’, Kinema and IFW Studios provide a quality service to the international animation industry. “Sing to the Dawn”, the first musical full animated feature film in South East Asia, was premiered in 2008. Indonesian film “Dead Mine” is the first movie in production at Island Studios. Starring Aryo Bayu, Joe Taslim, Tigor, and Mike Lewis added with Japanese martial art star, Miki Mizuno, the film is expected to compete in the international arena.

By focusing on developing original content and IP local and international markets, Kinema aims to be a leading owner and producer of animated content in the region. With nearly a decade of experience in supervising animated feature films and TV series, the CGI team, comprising talents mainly from Indonesia and Singapore, is constantly supervised, trained, and upgraded in their skill-sets to remain up-to-date and relevant to the ever changing trends in style, technology, and applications.

Castle Animation

castle-pro.com/castle

Castle Animation was established in 2000, specializing in producing animation for the international market. Its products include TV Series, Home DVD, TV Commercial, CD-Interactive, and Children’s Book.



Hundreds of animated film series productions for kids made by a local animation company called Production Castle have been absorbed by the European and US markets,

but not a single television station has absorbed. Television series made by Castle has been exported to Switzerland, France, Spain, Germany, United Kingdom, and the US. Some movie titles such as “The Adventures of Carlos Caterpillar”, telling about the adventures of a caterpillar for Spanish television, “The Story of Jim Elliot”, about missionaries in Ecuador for British television, and children stories “Cherub Wings”, for US television. Castle worked through all the process of animation, while the story and characters were made by others.

Exports have been conducted since 2000, and from year to year the number of orders rose about 20 percent. Within a month, the average number of film productions reaches two. It has more than 170 employees; about 80 percent of them are animators.

Animated films made by Castle are still classified into a B-class, but they are parallel to the animated films made in Taiwan and Korea. Their quality is still less than 25 frames per second, but they are over Doraemon, which is only 12 frames per second. Foreign television chose Castle because of the quality was not inferior, and the price can be cheaper than other films in the same class.

2.2. Creative Service Sector: Fashion

Creative industry on fashion group are the activities associated with the creation of clothes designs, footwear designs, and fashion accessory designs, fashion production and its accessories, line consulting of fashion products, and distribution of fashion products. The business fields which are part of the fashion industry groups are, among others (Indonesia Kreatif, 2009a):

1. Industry of knitted ready made clothes that includes business on ready made clothes production, which also includes hats made by weaving or lacing
2. Knitted socks industry including socks-production business that is made by knitting or lacing
3. Other knitted goods industries that manufacture such knitted goods as light shirt, deker, and headbands
4. Manufactures of textile and its equipment which include the business of textile fabrics for ready made clothes production and their cutting and sewing equipment to make ready to wear products, such as shirts, kebaya, trousers, blouses, skirts,

- baby clothes, dance and sports wear, hats, tie, gloves, mukena, scarves, veils, belts, and handkerchiefs, from woven and sewn knit fabrics
5. The industry (convection) of ready made clothes made of either original or imitated leather and their cutting and sewing equipment to make ready to use jackets, coats, vest, pants and skirts, hats, gloves, and belts
 6. Ready made clothes industry that make goods from fur and their accessories, including garment-making business that uses leather and fur, such as fur coats
 7. Industry of footwear for everyday use, including real leather, imitated leather, rubber, and wood kanfas footwear manufacturing business,, such as daily shoes, casual shoes, shoes sandals, sandals, clogs, and slippers; besides, This business also includes the making offootwear parts, such as sole boss in, outer soles, the front lasing, middle, back, lining, and accessories
 8. Sports shoes industry includes shoes production business for sports made of leather and imitated leather, rubber, and canvas, such as shoes for soccer, athletics, gymnastics, jogging, and ballet
 9. Industry the produces field engineering shoes, including the industry that makes the parts of shoes for engineering/industry purpose. The materials used for the shoes parts are from real leather, imitated leather, rubber, and plastics which are chemical resistant, heat resistant, and safe.
 10. Other footwear industries including manufacturing business of leather, imitated leather, rubber, canvas, and plastic footwear that does not belong to any of such groups as health shoes, gedebog, and water hyacinth footwear.
 11. Big trade textiles, apparels, and leather, including a large trade of textiles and garment to other countries, such as: all kinds of textiles, made clothes, batik, ropes, carpets/rugs of textile materials, bags, all kinds of knitting, and other made goods from textiles except made clothes
 12. The big trade of goods and other household supplies includes a large variety of trade goods and other household goods related to fashion, such as: leather garment and leather footwear
 13. Textile retail business which includes a special retail trade of all kinds of batik clothes made from natural fibers, synthetic, or mixtures, such as woven cloth and batik clothes

14. Retail of ready made clothes that covers specific retail trade for all kinds of apparel made of textile, leather, or imitated leather, such as shirts, pants, jacket, coat, pajamas, kebaya, etc.
15. Retail of shoes, sandals and other footwears, including special kinds of retailing business on varieties of shoes, sandals, slippers, and other footwear made of leather, imitated leather, plastic, rubber, cloth, or wood, such as: men's shoes, children shoes, sports shoes, shoes- sandals, sandals, slippers, and medical shoes
16. Retail of textiles, apparels, footwears and other personal goods, including special retail of textile made clothes, footwear, and other personal belongings that have not been included in the groups of 52321 to the group of 52328 such as tablecloths, bed clothes, mosquito nets, mattress fabric, fabric cushions, curtains, mops, mats, and so forth
17. Export trade of textile and leather made clothing that covers the business of exporting textile and apparel production, such as: all kinds of textile made clothes, batik clothes, ropes, carpets/rugs made of textile materials, bags, all kinds of knitting, and other textile made goods, of except for apparels
18. Trade exports of goods and other household goods covering exporting business of variety of goods and other household goods related to fashion, such as: leather garment and leather footwear
19. Individual services that do not belong to any other classification, especially for services of fashion designers and fashion models.

The main activities which are covered by designer fashion are:

1. Clothing design
2. Manufacture of clothing for exhibition
3. Consultancy and diffusion line
4. Gaming for mobile phones
5. Computer manufacture, distribution, and retail
6. Games console manufacture, distribution and retail

Designer fashion industry in Indonesia satisfies the following main criteria:

1. Firms or entrepreneurs or individuals involved in clothing

2. Having a primary focus on design, as distinct from manufacture of clothing

- Established fashion labels
- Lifestyle clothing
- Niche market brand
- Emerging new designers (e.g. designers, designer makers)

Fashion is the highest contributor to Indonesia's GDP among the creative industries subsectors. Fashion is also the highest subsector in workforce absorption, exports contribution, and number of business units. Some economic figures of this subsector in Indonesia can be seen in Table 4:

Table 4: Economic Figures of Fashion Industry

Indicator	Unit	Amount
Gross value added	IDR billion	65,902
Contribution of creative industries	%	43.48
Labor absorption	Person	4,209,920
The contribution of labor to the creative industry	%	54.77
Labor productivity	IDR 000/labor/year	16,157
The number of business units	Company	1,559,993
The contribution of business units to creative industry	%	51.97
The export value	IDR billion	71,695.51
The contribution of exports to the creative industry	%	62.39

Sources: Data processing from Ministry of Trade of the Republic Indonesia (2009), and Creative Industry Research Team and Ministry of Trade of the Republic of Indonesia.

The industry associations in fashion sector in Indonesia are:

Asosiasi Pengusaha Garmen dan Aksesoris Indonesia (APGAI), Asosiasi Perancang Pengusaha Mode Indonesia (APPMI/Indonesian Fashion Designers Association), Asosiasi Pengusaha Tekstil (APT), Asosiasi Persepatuan Indonesia (ASPRINDO), Asosiasi Pertekstilan Indonesia (API), Asosiasi Produsen Garmen Indonesia (APGI), and Ikatan Perancang Mode Indonesia (IPMI).

This study used a qualitative approach. This approach uses the interviews and the secondary data which are then analysed to draw the conclusion of the study. The interviews were conducted on a conversation basis that has a purpose. The interviews were preceded with a few informal questions. The discourses of the interviews from the informants were interpreted to get an understanding of the conditions of this study. The

study also employed a descriptive approach, in which various conditions and situations that relate to this study are described and summarized. The interview lasted for 90 minutes on average. The respondents who participated in the interviews were:

1. Elitua Simarmata (Executive Director) and Yuda Kamsi (Community Relations); Indonesia Kreatif (indonesiakreatif.net)

Indonesia Kreatif is a working group for creative economy development initiated by Indonesian Trade Ministry in 2010 with the primary role as a hub agency, facilitator, and public outreach program in the development of creative economy of Indonesia. Indonesia Kreatif has 3 main programs, namely Creativepreneur (creation and capacity building program), Creative City (creation and development of creative cities program), and Creative Network. Creative Network is a program for the creation and development of networks among creative leaders, creative businessmen, communities, governments, academics, and investors. Creative Network functions as a driving force of creative economy both within and outside the country.

One important contribution by the working group is providing an online media for information, communication, and education of the creative economy in Indonesia for the creative economy stakeholders in Indonesia. The launch of this portal is a form of government intervention in providing a platform for the creative sector in Indonesia and in building creative-preneurships and creative-networks.

2. Laksono K. Adi; Fashion Designer and Owner; Oink! (oinkthepiggest.blogspot.com)

Oink! began in 1999 in Bandung, Indonesia. The name is derived from 'oink', the sounds of a little pig. That character motivated the company to create products. Oink! centred itself mainly around vintage, skateboarding, scootering, and punk-pop music culture.

3. Arifin Mas; Asosiasi Perancang Pengusaha Mode Indonesia - APPMI, Indonesian Fashion Designers Association (indonesianfashiondesigners.com)

APPMI was established on July 22, 1993. The association strives for designing, developing and fostering the fashion sector, maintaining the interest and cohesion among Indonesian fashion entrepreneurs, improving and developing the

knowledge and skills of fashion designers Indonesia, and helping to develop a business climate that allows the participation of its members.

4. Ben Wirawan; Fashion Designer, Co-founder, and CEO; Mahanagari (mahanagari.com)

Mahanagari is a company engaged in the production of merchandise whose theme is based on local cultures. The main product of Mahanagari is t-shirts with contemporary designs that are eccentric and intriguing, but having a social mission. With the tagline 'Bandung Pisan' (meaning: real Bandung), Mahanagari is successful in making T-shirts. The T-shirt designs function as a medium for a cultural campaign. Their products are not only souvenirs for tourists but also as a tool to improve knowledge, love, and awareness of Bandung's citizens to their own city. Founded by Ben S. Wirawan and Hanafi Salman in 2005, Mahanagari's other products are key rings, pins, mugs, postcards, and many others.

2.2.1. SWOT Analysis of the Sector

Strength

Uniquely Ethnic Touch and Contemporary for Patterns and Process (S1)

Indonesia has an enormous amount of cultural heritage. Indonesia has more than 700 ethnic groups, and every ethnic group has its cultural artifacts, including clothing. Batik, lurik, bagonjong, songket, and ulos are some types of clothing to show that Indonesia is rich as far as the culture is concerned. Each ethnic group has own it curves and patterns, so that those enrich Indonesian fashion. The uniqueness of ethnic is also found in the way the clothes are worn. Any ethnic traditional ceremonial event requires the people to wear appropriate clothing, for example in marriage and funeral ceremonies.

In moslem fashion, Indonesian designers have the courage to use contemporary approach, such as making a colorful kaftan—traditional clothing of the Middle East—which was previously only black. The respondents said this uniqueness is the strength of the Indonesian fashion industry. This uniqueness should be developed and promoted so that it becomes a competitive advantage for their design, as claimed by a respondent:

“Our moslem fashion is ogled by Dubai market. MiddleEast’s kaftanthat was previouslyonly black has becomecolorful in Indonesia. It becomesmore beautiful, and many peoplecan wear it.” (Arifin Mas, APPMI).

The people in fashion industry are independent, and they are autodidactic learners. They have a good expertise in designing, production techniques, and software knowlege. These advantages encourage them to always do innovation in their design. They are also the people who do not give in to circumstances, so that they manage to create appropriate production processes and techniques in response to high prices of equipment.

Growth of Local Fashion Entrepreneurs Number (S2)

Growth and profits, as the results of creative industry development, have stimulated the people to take part in it. An increasing number of entrepreneurs in this business is in fact push the entrepreneurs to countinuously innovate their designsin order to win the competition. This is the strength of the fashion industry because the entrepreneurs will always produce good quality products.

The presence of outsourcing garments helps designers to transform their designs into products. Outsourcing garments allow the entrepreneurs to meet orders from their customers and to increase their product quantities.

Weakness

Limited Number of Textile Variation in the Design Collection (W1)

Local textile factories are major manufacturers for the availability of raw materials needed by the fashion industry. The factories are concentrated in Jakarta, Bogor, and Bandung. The location of factories is close to Jakarta. The owners of those factories only produce certain goods that provide the greatest benefit for the company. They only produce a limited variety of textiles. It creates difficulties for designers because they do not have many choices in designing. The limitations of the design will weaken their competitiveness.

Lack of Up-scaling Ability for Mass Customization (W2)

The respondents stated that their production capacities do not increase significantly. Most of the fashion entrepreneurs are at the SME level. Their small assets and revenue cause banks do not have trust to finance them. Many respondents argued that they did not receive any funding from the government or access to banks and financial institutions. One respondent who have managed to get credit from banks, claims that the interest rates of credit is high which burdens him.

Skilled workers are not available in a large number, which limits the productivity. Skilled workers have special abilities. Therefore, they can work independently. On the contrary, unskilled workers work by direction or order, and it affects the productivity. This condition, however, can be improved by providing training and education for workers, but the new problem is the new cost.

This leads the entrepreneurs to produce them in limited numbers and cannot up-scale their business into mass customization, thus hindering the development of the fashion industry.

Lack of Collaboration among Stakeholders: Designers, Association, and Government (W3)

The good collaboration among stakeholder in fashion industry has not been created yet. To some extent, the entrepreneurs and designers have not gained attention from the government and have not benefited from the association. Many entrepreneurs and the designers did not obtain enough information about events, business clusters, and the training that was held by the government or association. The association also has not received attention from the government. An association official said that the government did not give attention to the association's views in making creative industries regulations.

Lack of Branding and Understanding of Global Customers (W4)

Some entrepreneurs and designers run their business as followers. They only focus on the best-selling products both in domestic and in global market, and then imitate them. Besides, they do not have a strong motivation to develop a national brand. In addition to these issues, some of them do not have the skill to branding.

Local entrepreneurs still have a lack of understanding on global customers. Their products are tailored to the trend and they do not offer something unique and different. Some of them do not realize that global customers are aware of local content from Indonesia. One thing that should be underlined is that they have no confidence to compete in global markets.

Opportunity

Potential Domestic Market (O1)

Data released by Coordinating Ministry of Economy (2010) estimated that Indonesia would have a demographic bonus in the next 20 years. The demographic bonus would be in the more qualified workers due to their being more skilled workers. This estimation was based on the assumption that the workers would have higher level education. This estimated demographic condition is very advantageous because the new talents will probably be available to support the development of creative industries. This demographic bonus also means lower number of dependency ratio, thereby expanding the number of productive age and ultimately enhancing economy productivity.

Indonesia has experienced high economic growth in the last 10 years. In World Economic Outlook Database, IMF (2010) predicts that GDP of Indonesia will grow 6.3% in average in period of 2009-2015. This figure is the highest in the world. GDP growth is followed by a rise in income per capita, and this automatically increases the number of middle class people in Indonesia. This class in general is well-educated, aware of the lifestyle, and understands the technology. These facts indicate that they are a potential market for fashion products. This is emphasized by the respondents who claim that their products are always accepted by the domestic market that is potential to be penetrated.

Mecca of Moslem Fashion and Batik for International Markets (O2)

Indonesia is the largest moslem country in the world. This encourages entrepreneurs and designers to be involved in the moslem fashion because the domestic market gives a positive response to their products. Besides domestic market, there is also an opportunity in the international market. The data released by the Ministry of

Industry show that the value of international transactions of moslem fashion in 2010 was about USD 96 billion (Purwoko & Pristine, 2010). The opportunities from both domestic and international markets excite entrepreneurs and designers to develop their business. The association also feels the same passion. APPMI (Asosiasi Perancang Pengusaha Mode Indonesia-Indonesian Fashion Designers Association) plans to make Indonesia as the mecca of the moslem fashion. Furthermore, IIFC (Indonesia Islamic Fashion Consortium) declared that Indonesia would become a world trendsetter for moslem fashion in 2020. The largest export destinations are the moslem countries, such as Malaysia, Turkey, Brunei Darussalam, United Arab Emirates, and other Middle East countries. Thus, it can be said, that themoslemfashionhasa bright futureasit is stated in the following statement:

“Because we want to penetrate the international level, we are promoting the business and artists opimally. Alhamdulillah, we have managed to make Indonesia as a fashion city of moslemfashion (the mecca of moslem fashion) like Paris and New York, which are previously known as fashion cities.... Our moslem fashion is ogled by Dubai market...” (Arifin Mas, APPMI).

Batik is one famous example of Indonesia’s pattern of clothing, especially after batik is included in the intangible cultural heritage list by UNESCO. The uniqueness within batik and its variation—each region has a different style— can be explored and designed to create a world class fashion industry.

Threat

Bargaining Power of Raw Material (T1)

The bargaining power of the raw material suppliers is greater than the entrepreneurs. It is a problem for the entrepreneurs. They do not have the choice of raw materials because the variations of raw materials are determined by the suppliers. The other thing that threatens them is the availability of raw material. Entrepreneurs cannot run their business well when the raw material disappears from the market. In this circumstance, suppliers can raise the prices. However, entrepreneurs cannot resist it although it will increase their production costs.

Imported Products from China and South Korea (T2)

The enactment of market liberalization allows foreign products, particularly from China and South Korea to enter Indonesia rapidly. The products may weaken the competitiveness of the local products. Also, the competition will become tougher when ASEAN signs the ACFTA (ASEAN-China Free Trade Area).

Some raw materials are imported. The process of import requires a long delivery time. It will disrupt the production process, because entrepreneurs rely on the availability of raw materials. Besides that, Indonesia is a “good” market for illegally-imported consumer goods. The presence of illegal products is threatening the local products, because their price is very cheap.

Appreciation of the Fashion (T3)

The customers in Indonesia consider price and function as a primary bases in buying things. In other words, they do not want to spend more money to buy better quality Indonesian products and designs. Thus, low appreciation has become a threat to the fashion industry, because the probability of their products not being acceptable is huge. For a long time, this condition will slow or even stop the growth of this industry. In contrary, they prefer to buy foreign brand. The massive attack of global ads changes their lifestyle. They are more proud to use abroad fashion

Less Conducively Import Procedures, Labor Regulation, Support from the Regional Government, and the Advent of New Regulations Overlapping (T4)

Less conducive import procedures are complained by the respondents. Custom process, which is expensive and time-consuming, is inhibiting their production processes. In fact, sometimes they cannot take their imported products. The entrepreneurs also face unclear labor regulation. The reactive attitude of the government—issued regulation after a problem occurs—often hampers the production. Another threat comes from the regional government. They have not provided assistance to the creative industries. They also tend to reject their responsibility to manage creative industries development funding from the central government. The last threat is the conflicts among state agencies also have impact on the lack of attention to industrial development.

The advents of new overlapping regulation made by local governments make high cost economy. Since the enactment of regional autonomy, local governments have made a variety of regulations that sometimes contradict with the regulations of the central government. Entrepreneurs have to spend a greater cost to pay various fees, and this leads to high cost economy.

2.2.2. Key Players

Batik Danar Hadi

www.danarhadibatik.com



PT Batik Danar Hadi

Batik is one famous example of cultural artifacts in Indonesia, especially after batik is included in the intangible cultural heritage list by UNESCO.

The uniqueness of batik and its variation in Indonesia—each region has a different style—is a very potential opportunity to be developed to advance the creative economy. Batik can be used to create a variety of fashions.

Established in 1967, Batik Danar Hadi—a holding company which was formed by Mr. and Mrs. Santosa Doellah—has helped the development of batik art and batik business in Indonesia. The objective of this group is to popularize batik as the Javanese traditional art which has the values of Javanese culture.

In the past two decades, Danar Hadi has become an integrated batik manufacturing company and has been known as a producer of fine and high quality batiks. This progress is the result of a combination of sufficient capital, diligence, expertise, and solid management. In addition, this group is also very aware of its business responsibilities in order to preserve the art of batik itself. It has paid a great attention to the preservation of a traditional art from generation to generation since the 17th century.

Integrating tenacity, skill, experience, entrepreneurial spirit, and openness to accept the fashion and taste development, Danar Hadi evolved from a self-employed business into becoming a national asset which now serves middle-to-high customers. Since 1975, Danar Hadi has expanded its business to Jakarta and major cities in Indonesia by opening House of Batik as well as a series of other outlets.

Danar Hadi has been exporting its products since 1970s era. Besides ASEAN countries, its export destinations are Australia, Italy, Germany, France, and the United States. In Japan, we can find Danar Hadi in leading department stores in Tokyo (such as Sogo, Seiyu, Seibu, Tawaraya) and in many major cities.

Eiger Adventure Gear

www.eigeradventure.com



Eiger is identic with adventure. When we mention “Eiger”, most people in Indonesia will immediately refer to the equipment related to adventure or wildlife. Eiger is a major player in adventure equipment industry in Indonesia. Its products have also succeeded in penetrating foreign markets, such as Canada and Germany. Not only does it produce the goods, but Eiger also publishes adventure bulletins, holds and sponsors the adventurous activities, and fosters the communities of natural lovers (Basir, JBPTUNIKOMPP-Universitas Komputer Indonesia, & Handayani, 2010).

PT Eigerindo Multi Produk Industri or well known as Eiger is the most renowned company in Indonesia specialized in manufacturing and retailing of adventure equipment. The company was founded in 1993 by Mr. Ronny Lukito in Bandung. The company name, Eiger, was inspired by mount Eiger, a notable mountain in the Bernese Alps, Switzerland, rising to an elevation of 3,970 meters above sea level. Started with very limited facilities, they launched out to produce bags with only two simple machines at Jl. Cihampelas No. 22 Bandung. And in the same place they opened up a small shop to sell their bags.

It produces bags and adventure equipment. Its products come in three main brands, Eiger with the positioning of adventure lifestyle, Bodypack with the positioning of e-lifestyle, and Nordwand with the positioning of outdoor living. Its brands are widely recognized as prominent local brands in Indonesia. In 2009 it is listed as one of the Top 250 Indonesia Original Brands by a distinguished business magazine Swa. It shows hard work, determination, and day by day commitment to quality excellence and outstanding reputation.

Southeast Asia is a suitable place to develop muslim fashion. Besides having a large Muslim population, Southeast Asia also has a rich cultural heritage. Started as a small store with only two sewing machines in Jalan Cihampelas No. 22 sixteen years ago, this company has evolved into a market leader in bags and adventure industry in Indonesia. Up to now this company owns 6 Eiger Adventure stores, 18 showrooms, and 88 counters spreading around Indonesia.

Shafira

shafira.com



diversity. By combining these elements, we can say, that the muslim fashion has a bright future in this region. One of the major muslim fashions in Indonesia is Shafira, which also has successfully developed its business abroad such as the Middle East countries.

Rumah Mode Shafira began as a muslim clothing studio that was founded in Bandung on January 8, 1989 at Jl. Ir.H.Juanda No. 52 Lt. II. Shafira was pioneered by Feny Mustafa.

Shafira was inspired by the word "Shaf" (meaning "line") which is often found on the walls of mosque. In current interpretation, Shaf also means an organization. Since then, Shafira has become a large, strong, and healthy business organization by synergizing the strengths of individuals from within.

During its development, Shafira received positive support from the community, and it began to open stores outside Bandung. Now, Shafira has 22 showrooms spread in Medan, Pekanbaru, Palembang, Jakarta, Bogor, Bandung, Cirebon, Surabaya, Malang, Jember, Banjarmasin, Balikpapan, Samarinda, and Makassar.

Shafira applies four elements of philosophy in manufacturing its products:

1. Design—it should be able to create convenient products, to provide a sense of pride when worn, and to create the aesthetic appearance
2. Process—it has to serve women empowerment through breeding skills and competencies throughout its chain of manufacture

3. Material—it should be as much as possible minimize the use of materials that can harm the earth and the biological environment by selecting environmental friendly textile and raw materials.
4. Shariah—it must uphold Islamic values in its entire chain of manufacturing processes and on its products

UNKL347

www.unkl347.com



Based On A True Story

UNKL347 is one of the pioneers of clothing and distribution outlet (distro) industry in Indonesia. This industry is a manifestation of urban design that represents young people and their lifestyle. Starting from Bandung, the movement of clothing

and distro has grown throughout Indonesia. Even some companies have expanded abroad. UNKL347 is one of them. It has four selling points abroad: Singapore, Malaysia, Australia, and Germany. Currently, the turnover of UNKL347 reached IDR 700 million-1 billion/month (Hanifah & Purnadi, 2008).

After 13 years, now UNKL347 is a 7-part project that holds not only a clothing line but also skateboarding and interior household stuff. Founded by art school music junkie in 1996, this company represents the trademark of UNKL347 personal perspective, lifestyle, and attitude.

Based on their love towards skateboarding, surfing, and design, in 1996, these music junkies gathered and decided to create their own “Playground”. They started by selling stuffs through special orders and catalogues, it didn’t take long until they opened their own store in 1999. Shortly they became the pioneer of Indonesia’s own label called 347 boardrider.co with their initial designs that described about the way of life they were living. Back in the earlier days they had no one but themselves to please. They were making things that they want to wear and need to wear. Later on 347boardrider.co grew as its owners’ life continued. Music, nightlife, art, and with avant-garde nuance have made them what they are today. Then the name changed into “347”.

By the end of 2006, 347 evolved into UNKL347 and made a tagline “after ten years, friends call us uncle” which tried to explain about what happened inside the company.

Sense, Design, Memories, Create, and Play. These five elements increasingly will guide our lives and shape our world in organizing youth movements, innovating a new form of creativity, supporting any kind of subculture evolution. Good design, now more accessible and affordable than ever, also offers us a chance to bring pleasure, meaning, and beauty to our lives. But, the most important thing, cultivating a design sensibility can make our city a better place for us all.

Up until today, UNKL347 is still trying new things and smiling at the back of your head!

2.3. Creative Service Sector: Design

Design is multidimensional and complex. From the process of creating ideas, the design can be subjective and emotional and can also be objective and rational. From the output side of the design can be something that is symbolic and can also be material. Design is not craft or traditional, it is defined as a creative activity associated with the creation of graphic design, interior design, product design, industrial design, architecture, corporate identity consulting and marketing research, and production of packaging and services (Indonesia Kreatif, 2009).

Design and also almost all other subsectors of creative industries rely on creativity. Design relates to and is used by all other subsectors of creative industries, although maybe that does not originate from the activity of people with design background. Designs are also used for both aesthetic and functional elements as well as properties in other creative industries subsectors.

We include the architecture into the design subsector, because it is full of activity closely associated with the design. Architecture is defined as creative activities related to building design services as a whole, both at macro level (city planning, urban design, landscape architecture) and at micro level (construction details), for example: garden architecture; construction cost planning; conservation of heritage buildings;

supervision of construction;urban planning; and consulting engineering activities, such as buildings, civil, mechanical, and electrical engineering (Indonesia Kreatif, 2009).

Some economic figures of the subsector in Indonesia can be seen in Table 5:

Table 5: Economic Figures of Design Industry

Indicator	Unit	Amount
Gross value added	IDR billion	13,602
Contribution of creative industries	%	8.97
Labor absorption	Person	439,272
The contribution of labor to the creative industry	%	5.71
Labor productivity (design)	IDR 000/labor/year	22,203
Labor productivity (architecture)	IDR 000/labor/year	131,375
The number of business units	Company	214,143
The contribution of business units to creative industry	%	7.13
The export value	IDR billion	2,892.12
The contribution of exports to the creative industry	%	2.52

Sources: Data processing from Ministry of Trade of the Republic Indonesia (2009), and Creative Industry Research Team and Ministry of Trade of the Republic of Indonesia.

Some of the industries in Indonesia are, among others:

- LeBoYe Design, Jakarta Pusat
- magno-Piranti Works, Temanggung, Jawa Tengah
- Lunar Cipta Kreasi, Yogyakarta
- Rancang Nuansa Nirmana (RN+N Designworks), Jakarta Selatan
- IMP Design Ilustrasi Komik, Bandung, Jawa Barat
- Reka Selaras Cipta Griya, Jakarta Selatan
- Eppconindo Pilar, Bekasi, Jawa Barat
- Alabaster Lighting, Denpasar, Bali
- B21 Concepts, Badung, Bali
- Rumah Desain KUBUS, Surakarta, Jawa Tengah
- RUKOS ART & DESIGN Management, Tangerang, Banten
- Deemsidea, Jakarta Utara
- IC Design, Surabaya, Jawa Timur
- Invictus Indonesia, Bandung, Jawa Barat
- Raga Global Pariwara, Jakarta Selatan
- Evolver Industries, Jakarta Selatan
- Appalindo Pratama, Batam, Kepulauan Riau
- Media Beragam Cipta, Jakarta Selatan
- Menu Media Satu, Jakarta Selatan
- Agit4Creative/Boutique Creative, Tangerang Selatan, Banten
- Kisah Publishing, Jakarta Selatan
- Raga Global Pariwara, Jakarta Selatan
- Iris Desain, Bandung, Jawa Barat

- Alinea Cipta Grafika-FDGI, Jakarta Selatan

The industry associations in this sector in Indonesia are:

Asosiasi Desain Produk Indonesia (ADPI), Asosiasi Desainer Grafis Indonesia (ADGI/Indonesia Graphic Designers Association), Desain Grafis Indonesia (DGI/Indonesia Graphic Design), Forum Desain Grafis Indonesia (FDGI), Himpunan Desainer Interior Indonesia (HDII/Indonesian Society of Interior Designers), Ikatan Arsitek Indonesia (IAI), and Ikatan Arsitek Lansekap Indonesia (IALI).

This study used a qualitative approach that begins on the data (both interview and secondary data) whose analysis is used to draw the conclusion of this study. The interviews in this study were conducted on a conversation basis and were preceded with a few informal questions. The research also interprets or translates the discourses obtained from the informants to get an understanding on what the respondents meant. The research also used a descriptive research to describe and summarize the various conditions and situations that exist. The interview lasted for 90 minutes on average. The respondents who participated were:

1. Elitua Simarmata (Executive Director) and Yuda Kamsi (Community Relations of Indonesia Kreatif (indonesiakreatif.net))

Indonesia Kreatif is a working group for creative economy development initiated by Indonesian Trade Ministry in 2010 with the primary role as a hub agency, facilitator, and public outreach program in the development of creative economy of Indonesia. Indonesia Kreatif has 3 main programs, namely Creativepreneur (creation and capacity building program), Creative City (creation and development of creative cities program), and Creative Network. Creative Network is a program for the creation and development of networks among creative leaders, creative businesses, communities, governments, academics, and investors. This program can be used as a driving force for creative economy both within and outside the country.

One important contribution from the working group is that it provides an online media for information, communication, and education of the creative economy in Indonesia for the creative economy stakeholders in Indonesia. The launch of this portal

is a form of government intervention in providing platform for creative sector in Indonesia and building creative-preneurship and creative-network.

2. Rachmad Imron; Animation, Graphic, and Technical Designer, Co-founder, and CEO; Iris Desain (irisdesain.com)

Iris Desain is an integrated communications company. The company consists of designers, engineers, consultants, and marketing specialists that work together to translate the abstract language of communication in the form of strategic media for the company's clients in the form of digital content production applications and graphic/visual tools.

3. Yannes Martinus Pasaribu; Lecturer; Fakultas Seni Rupa dan Desain-FSRD ITB, Faculty of Arts and Design, Bandung Institute of Technology

2.3.1. SWOT Analysis of the Sector

Strength

Unique and Strong Symbolic Cultural Value (S1)

The design is need by all industries—in either a small or big portion. These needs are widely varied, ranging from just a logo or company profile design to products/services that require a very large design touches. Design is not only needed by the industrybut also by the people. Business cards, wedding invitations, furniture, and even home decor and architecture are examples of the application of design needed by humans.

Designers have ability and integrity to sharply translate the symbolic value preference of domestic market. This is exactly the reason for designers to control the domestic markets. In addition, entrepreneurs can support the designers to produce new designs in anticipation of any changes in trend and even to build a new trend in society.

Trend Makers (S2)

People in the design industry are autodidactic learner. They have a strong will to develop the design knowledge and business. This situation is in line with design entrepreneurs who often hold in-house training to address the educational system that

does not yet support the development of the design industry. As a medium of learning, in-house training is to produce designers and skilled workers who have the expertise and skills that can boost the growth of industrial design.

Designers need computer as a tool to support the working process. However, the price of these devices is still too expensive. They usually buy self-assembled computer as a response to solve that problem. This is actually strength for the designers because with limited technologies they have they are triggered to produce high quality designs.

Some Indonesia designers have been able to conduct exhibitions at the international level. The events can be used as arenas for them to market and sell their products/services besides broadening their new networking with foreign partners.

Weakness

Lack of Entrepreneurial Skills (W1)

Skilled workers are not available in large numbers. This constrains the creative industries to develop their businesses. Lack of skilled workers will also limit the space of designers to create spectacular works, because their ideas can only be translated into products/services when performed by skilled workers.

On the business and managerial side, designers still have limitations. In fact, knowledge and capacity of business and managerial are the factors at which they are weak. These two factors are important for them to promote and preserve the business. Although they have a powerful ability, they have not been able to manage their business well. For example, the reluctance of designers to take care of the contract is claimed by one respondent:

“...on contract, the artists (designers) would not want to take care of the contract...someone have to manage it... In general, I see the managerial skills are still lacking in the creative industries.” (Elitua Simarmata, Indonesia Kreatif).

Lack of Funding (W2)

No matter how good the design is generated, it will not sustain if the industry does not lead to industrial level. The basic weakness of the entrepreneurs is in both funding and financing. The limited funds hamper them to develop their businesses. One of the barriers is related to their affordability to buy legal softwares. They will have difficult to work because they are overshadowed by the discomfort of using illegal softwares because of risking legal consequences. Other barriers related to lack of funding are the ability to expand and to increase production.

Design industries have difficulty to access to bank credit. They do not get the socialization of the means and requirements to apply for loans from banks. On the other hand, industry players feel that the banks do not have trust to finance them. These conditions correspond to the words of one respondent when asked whether he ever get financing from banks:

“Do not want to and have never tried ... I want to increase trust first.”

(Rachmad Imron, Iris Desain).

Lack of Collaboration among Stakeholders: Designers, Association, and Government (W3)

The good collaboration among stakeholder in design industry has not been created yet. To some extent, the entrepreneurs and designers have not gained attention from the government and have not benefited from the association. Many entrepreneurs and the designers did not obtain enough information about events, business clusters, and the training that was held by the government or association. The association also has not received attention from the government. An association official said that the government did not give attention to the association's views in making creative industries regulations.

As the people who are considered independent in the midst of society, designers usually do not like to be bound within a rigid organization. They tend to form communities that are more open. Many things they can gain from the community, such as sharing ideas and knowledge, sharing projects, or simply discussing the trends and development of the most cutting-edge design.

Opportunity

Domestic Markets for Ethnic Designs and National Advertisement (O1)

The needs of designs have increased. Domestic industry players are more aware of a product design that will be more readily accepted by the market. This is a conducive and stimulating condition for the designers to create good designs. The more better designs are created, the more established is the design industry.

Rich of cultural assets is authentic creative resources that can be developed the industry design. The tradition of storytelling (rather than written one) that is passed from generation to generation has built the ability to think metaphorically. Those both create a generation who are very good to interpret any input and to change it into design.

Emerging International Markets (O2)

There are a lot of overseas design studios that prefer to work with Indonesia designers. This is definitely due to the result of their good designs. This cooperation needs to be upgraded to open up market opportunities for Indonesian designers at the global level owing to the fact that the performance ratio of Indonesia's exports to imports of industrial design is 10:1.

“Number of our creative industry imports is actually very small...almost one in ten with its exports. It means that the total imported component per year is not much.” (Elitua Simarmata, Indonesia Kreatif).

Threat

No Government Support for Synergy (T1)

Piracy and plagiarism are a very significant threat to the development of the design industry. Piracy and plagiarism of designs and products will damage the markets and businesses run by real design entrepreneurs. Unfortunately, many design industry players do not understand the importance of IPRs. Some of them are still in the process of learning how to make good design and how to market the design they create. In fact, others have never been explained about IPRs.

There is no terminology of creative industry in central bank policy, so that the banking cannot provide any particular funding schemes. It makes most of the creative industries cannot receive funding from bank loans, although they need the funds for their working capital. On the other hand, the government has not appointed a financial institution which has the right to fund the creative industries. This condition is very harmful to the efforts of creative industry development. The more difficult they obtain funds, the more difficult creative industry is to be developed. This is certainly dangerous, because the longer this situation lasts, the more industries will die. This will lead this industry into the more unsafe condition when the free market is fully implemented.

This should be part of the duties and responsibilities of the government as a party entitled to issue policies and regulations. However, the government has not provided assistance and has not yet ready to develop the design industry. The government has several plans, but they are not executed properly.

Limited Access to Appropriate Technology (T2)

Entrepreneurs face the limited access to effective and efficient production technology. The lack of supporting industry such as suppliers of production technology and product operation system is still serious problems they faced. One respondent stated:

“...for example: Cosmos—household producer—cannot make dize for injection molding of its houseware products with competitive price and quality domestically, so it had to make it in China with the consequences that its design would be copied and then it was marketed by competitor with different brand but has the same design characteristics... Cosmos still has to import rice cooker parts, and its various household products from China, although the design of product shapes are made in Indonesia. Because, there is no national company that is able to make electronic and mechanic parts which have competitive quality, price, and after-sales guarantee.”
(Yannes Martinus Pasaribu, FSRD ITB).

Market Liberalization and Migration (T3)

In term of liberalization, government is unprepared to build protection system and to enhance creative value added of its resources, both natural and human. Government issued policy to export raw materials that give zero value added, though national design industry is still very dependent on the natural resource.

Appreciation to the design industry is still low, because the industry is still underestimated by some people who believe that design is not a real job. Many people assume that design is an easy job to do and can be done by anyone. In fact, the design can only be done by people who are creative, willing to innovate, able to see good opportunities, and able to execute these opportunities into real businesses. This condition causes a lot of designers and skilled workers prefer to work abroad. Overseas companies have a better understanding on the difficulties and complexities in the design process and would provide a better appreciation to the designers and their work.

New Global Standardization: Material, Specification, License, and Safety (T4)

Each launched product has to meet certain criteria and standards, both in terms of design and finished products. The use of environmentally friendly materials and production processes is more prominent in line with the growing concern of global warming. Product specification has also meet internationally recognized standards, which give attention to the legality of a product, in this case the license or authenticity of legal ownership, and safety elements that must be met by such products.

Unfortunately, there are many design entrepreneurs who do not pay particular attention to the standardization. They are still in the stage of creating something according to their idealism, and not to design and certify their products. The government attempted to give attention to this problem by issuing the Standar Nasional Indonesia (SNI/Indonesian National Standard). Problems were encountered are teh development of this program is still fledgling and doesn not touched the entire design industry, in dissemination, implementation, and supervision.

2.3.1. Key Players

Accupunto

www.accupunto.com

Accupunto

The inspiration underlying the creation of a product design can come from anywhere. Essentially, an inspiration should be able to meet the human needs. Accupunto combines beautiful design and ergonomics on every product they create. After the products are made, the next step is how to market them. Accupunto is able to make the distribution system of premium-class furniture products as a solution to the furniture business slump in the United States and Europe. Therefore, Accupunto won Primaniyarta Award 2011—award given to best-performing export companies—for Global Brand Builders category. This company has been exporting its products to eight countries with an export value exceeded USD 2 million (Manopol, *et al.* 2011).

Collaboration between father and son brings together a design synergy of the past and the present. Accupunto adopts an ancient method of acupuncture and transforms it into living furniture. Its ergonomic series have received numerous international awards and publications, such as Interior Innovation Award 2004 (German Design Council for Category Best of the Best for Best Details), Good Design Award from Japan, Red Dot Design Award 2003, and Indonesia Good Design Award 2003 (Grand Award winner).

Ergonic utilizes an international patented system that forms the contour of the seat. Innovation and development have always been the core beliefs of the company and it has carried the brand through its venture in introducing new and original products from Asia.

dedato

www.dedato.co.id



Integration between architecture, interior design, and visual design is dedato's strength. This has been evident in long stretches of development since the first time the company was founded.

Dedato Indonesia is a multidiscipline design consultant founded in 1988. Established in Jakarta to do consultation design jobs, this company has specialized itself in furniture design development and design product for export.

Dedato develops strong concepts to create new solutions to designs by integrating four disciplines of design. Its other concepts deal with durability and connection with client's business plan, mission statement, and company profile are the focal points in the design process.

Integrated Design when implemented consistently can help increase the awareness of name and image of a company, and as such can yield a positive influence of company's performance. A consistent and coherent approach is necessary as a corporate identity is not just communicated through the company's products and services, but also through promotional materials, buildings, interior and exterior of buildings, stationery, and many other items.

Architecture

Building is the delicate result of an equation of political, economic, and social metaphors. And throughout the process of realizing a work, the building is constantly subjected to rules and regulations, the social and political context of decision-making, and normative and engineering constraints which lead to confusion between functional ideas aimed at the economy of space and the program itself.

interior

Design elements, such as light fixtures and art, can help give the appeal. The choice of furniture and particularly its color can also achieve the right effect.

industrial + graphiC

A good technical solution is not enough. A well-designed piece of product reduces strain, error, and is easy to maintain. In other words, understanding a working situation, improving ergonomics, and creating flexibility are the key of a well-designed product. In terms of graphic design, visual communication plays an important role in a communication both internally (between the business/services units within a company) and externally (communication with other companies).

LeBoYe

www.leboyedesign.com



Consciously or not, a graphic design is a common thing to people in their everyday lives. Brand, packaging, logos, symbols, text, the publication, and so on are those that belong to graphic design. The media used for graphic design are highly varied such as paper, metals, fabrics, and ceramics.

LeBoYe began as a graphic design firm in the late 1990s when the concept of graphic design was underrated in Indonesia, and Apples were largely thought of only as fruits. Armed only with one unit of the first-generation Apple Macintosh, a leaky little house converted into an “office”, and ageing Volkswagen, Ignatius Hermawan Tanzil established LeBoYe under very modest circumstances.

This firm grew alongside its every client. This firm has been fortunate to have customers who recognize its impassioned determination to differentiate itself from others by working hard to understand its clients’ businesses as if they were owned by this firm. This firm is aware of the fact that there is no similarity among clients. Therefore, LeBoYe has always developed fresh new approaches that defy convention and “standard” industry formats. With every new assignment, this firm endeavors to constantly develop a design that not only satisfies every client’s needs and objectives but also to create a project that can communicate a new spirit and soul beyond the colors and every drawn line.

Today, this interdisciplinary design firm is specializing in creating image and branding identities, packaging, corporate communications, corporate brochures, web design, and other marketing collaterals. From international airlines to recognized fashion designers, this firm chooses to broaden its horizons by engaging itself in a variety of projects across several business types.

As a result, this firm is fortunate to have won several national and international awards for design excellence including awards from the Communications Arts, Type Director Club of New York, and the publication of a cover design on *Novum Gerachsgraphics*, West Germany. LeBoYe was invited to participate in several exhibitions in cities such as Rio de Janeiro, Tokyo, and Toronto, including exhibitions

“The Energy of Asian Design” together with 13 other well-known designers from across Asia.

Urbane Indonesia

www.urbane.co.id

URBANE Architecture is a part of the design industry which is growing rapidly and constantly renewed. By all its ability and idealism, Urbane Indonesia has sophisticated capability speak on an international level. Projects undertaken by Urbane are not only domestically, but also have expanded into many countries.

Urbane Indonesia is a consultant firm specializing in architecture, urban design, and project visioning. This firm is based in Bandung. Urbane was founded on June 2004 in Bandung by M. Ridwan Kamil (an International Young Design Entrepreneur of the Year/IYDEY award recipients from British Council Indonesia in 2006). With his partners Achmad D. Tardiyana, Reza Nurtjahja, and Irvan P. Darwis, they have established an international reputation by doing some overseas projects such as Syria Al-Noor Ecopolis in Syria and Changchun Financial District in China.

Urbane Indonesia’s team consists of young professionals with creative and idealistic minds to look for and create solutions for environment and urban design problem. This firm has onedivision called Urban Community Project whose vision and mission is to help people in an urban community to have donation access and skills to upgrade their neighborhood. This dvision has done several community project s.

Urbane Indonesia has received awards from international media such as BCI Asia Award (3 times in a row 2008, 2009, and 2010) and BCI Green Award 2009 for Bottle House Project. Urbane Indonesia has also won many national design competitions, such as Tsunami Museum NAD Competition (1st award-built, 2007), Kampus 1-Tarumanagara University Design Competition (1st award-built, 2007), Fakultas Ilmu Budaya University of Indonesia Gedung X Competition (1st award, 2009), Sangga Nagari-Kota Baru Parahyangan Town Center (1st award, 2008), and the Magic Box-Pusat Seni dan Sekolah Seni University of Indonesia (1st award, 2009).

3. Indonesian Regulation Environment on Creative Industry

Law of the Republic of Indonesia No. 31 of 2000 regarding Industrial Designs

This law governs all matters relating to industrial design. Article 1, point 1 of this law states:

“Industrial design is a creation of shape, configuration, or composition of lines or colors, or lines and color, or a combination thereof in the form of three-dimensions or two-dimensions which gives aesthetic impression and can be manifested in the pattern of three-dimensions or two-dimensions which gives aesthetic impression and able to produce a product, goods, industrial commodity, or handicraft.”

The explanation of this law states that as a developing country, Indonesia needs to promote the industrial sector by increasing competitiveness, such as in utilizing the role of industrial design that is a part of the IPRs. Cultural diversity combined with the efforts to participate in the globalization of trade and by giving legal protection to industrial design will accelerate national industrial development. Furthermore, industrial design regulation intended to provide a foundation for effective protection against various forms of plagiarism, piracy, or imitation of industrial design that has been widely known. The principle of the regulation is to recognize the ownership of one's intellectual work which gives aesthetic impression, can be produced repeatedly, and can be produced in the form of two or three dimensions. Legal protection afforded to industrial designs rights is intended to stimulate creative activities and to create a climate that encourages designers to continually create new designs (komisiinformasi.go.id, 2000).

Law of the Republic of Indonesia No. 15 of 2001 regarding Brands

This law governs all matters relating to the brand. Article 1 of this law states (portal.apkomindo.or.id, 2001):

“(1) Brand is a mark in the form of images, names, words, letters, numbers, color composition, or a combination of these elements, which has distinguishing features and is used in the trading of goods or services. (2) Trademark is a trademark used on goods traded by a person or persons jointly or a legal entity to distinguish it from other similar items. (3) Services brand is a brand that is used for services traded by a person or persons jointly or a legal entity to distinguish it from other similar services.”

The explanation of this law stated that one of the actual developments that needs to be considered for the last ten years, and the trend is still to take place in the future, is the ever-expanding globalization in the social, economic, cultural, and other areas of life. Other developments that need to be considered are the development of information technology and transportation. These two developments have made the activity in the trade sector increased rapidly and has even put the world together as a single market.

The era of global trade can only be sustained if there is a climate of healthy competition. In this era, brand plays a very important role. Therefore, to protect it, a more adequate system of regulation is required. In addition to the protection of trademarks and services brands, this law also should govern the protection of geographical indication and the sign which indicates the origin of goods (komisiinformasi.go.id, 2001).

Law of the Republic of Indonesia No. 19 of 2002 regarding Copyrights

This law governs all matters relating to the copyright. Article 2 of this law stated (budpar.go.id, 2002):

(1) Copyright is the exclusive right for the creator or copyright holder to publish or to reproduce their creation, which is arising out automatically after a creature born without reducing regulatory restrictions under applicable legislation. (2) Creator and/or copyrights holder of a work of cinematography and computer program has the right to give permission or

prohibit any other person without the approval rents for commercial purposes.

The scope of creation is stated in article 12 (budpar.go.id, 2002):

“In this law, the creation which is protected is the creation in the fields of science, art, and literature, which includes: a) books, computer programs, pamphlets, typographical arrangement (layout) of a published work, and all other written works; b) speeches, lectures, oration, and other similar creations; c) the props which are made for the benefit of education and science; d) songs or music with or without text; e) dramas or musical dramas, dance, choreography, puppetry, and pantomime; f) fine art in all forms such as painting, drawing, sculpture (carving), calligraphy, sculpture (engraving), sculpture, collage, and applied arts; g) architecture; h) map; i) art of batik; j) photography; k) cinematography; l) translations, interpretations, adaptations, anthologies, databases, and other pieces of the adaptations.”

The explanation of this law stated that Indonesia as an archipelagic country is very rich in the diversity of its art, culture, ethnicity, and religion, which as a whole is the national potential that needs to be protected. The wealth of arts and cultures is one source of intellectual work that should be protected by law. The wealth is not merely for art and culture itself, but it can be utilized to enhance the capabilities in the field of trade and industry involving its creators. Thus, the protected wealth of art and culture can improve the welfare not only for its creators but also for the nation (setneg.go.id, 2002).

Regulation of President of the Republic of Indonesia No. 28 of 2008 regarding Policy of National Industry

This regulation contains six groups of industries: manufacturing, agro industries, transportation equipment, electronics, creative industries, and specific small and medium industries (kemenperin.go.id, 2008) which are the priorities to be developed in the period 2010-2014 (indonesiakreatif.net, 2010). Issuance of this regulation is a

positive step taken by the government to develop creative industries. Creative industries subsectors which are prioritized are software and multimedia content, fashion, and crafts and art.

This regulation also requires preparation of a road map of creative industries development. Road map is a guide to develop three main points: design, technology, and quality; access to financial resources and management; and special market of export.

As a strategic move, based on Instruction of President No. 6 of 2009 and Regulation of President No. 28 of 2008, the Ministry of Industry determined the medium and long term objectives, followed by programs and action plans (indonesiakreatif.net, 2010).

a. Software and Multimedia Content Industry

Medium Term

- Completing law of the information and electronic transactions
- Developing strategic alliances in order to develop software and multimedia industry
- Revitalizing and enhancing the ability of the software industry
- Encouraging the growth of software industry that is capable to support the acceleration of animation, games, and content industry
- Developing new businesses by incubation program

Long Term

Building software and multimedia industry which are are highly competitive.

Program	Action Plan
1. Technology and standardization	1. Increasing telematics technology innovation 2. Developing and implementing company standard (KIPI), SNI, and SKKNI 3. Developing professional certification agency (LSP)
2. Human resources	1. Implementing human resources competency certification 2. Training and apprenticeship
3. Strengthening of business structure	1. Empowering Regional Information Technology Center of Excellence (RICE) dan Incubator Business Center (IBC) 2. Building and developing telematics techno park
4. Development of	Facilitating center for multimedia content design and center for

Program	Action Plan
infrastructure	software development
5.Creating of a conducive business climate	1.Preparing government regulation/policy in enhancing of using of domestic game and animation products 2. Implementing IPR on creative work of game and content 3. Conducting business meetings, forums, and socializations
6.Promotion and marketing	1.Conducting exhibitions of software and multimedia contents in Indonesia and abroad 2. Conducting competitions of software and multimedia contents

b. Fashion Industry

Medium Term

- Developing strategic alliances in order to develop the fashion industry
- Revitalizing and enhancing the ability of the fashion industry
- Encouraging the growth of fashion industry that is capable to support the acceleration of textile and textile products
- Increasing implementation of IPRs
- Enhancing HR competency
- Growing new entrepreneurs

Long Term

- Establishing the fashion product market information network
- Creating a conducive business climate
- Creating fashion products that match consumer demands simultaneously competitive
- Conducting exhibitions and dissemination of fashion products Asia, Europe, and America market
- Realizing fashion industry which is tough, independent, becoming a force of development, highly competitive, and able to make a major contribution to national economy
- Expanding sales distribution networks to commercial business centers (department stores)

Program	Action Plan
1.Preparing a manual which contains trend information	1.Collecting information of international fashion trends and local phenomenon trends 2. Integrating international trends with local ethnic inspiration into

Program	Action Plan
	the guideline books
2. Increasing awareness of brand-based fashion products	1. Increasing fashion products that implement logos and brands (branding) 2. Opening the fashion market information network
3. Improving quality of human resources in developing a creative fashion	1. Training/developing of SMEs' human resources, training/coaching of production technical skills, training/development of business management and production 2. Enhancing the role of fashion designers in developing a product that has strength from local inspiration, based on international trends
4. Developing production process technology, raw material, and marketing	1. Developing basic raw materials/local resource-based materials 2. Improving production technology and marketing
5. Creating a conducive business climate	Consulting assistance and facilitating the process for handling/obtaining IPRs

c. Crafts and Arts Goods Industry

Medium Term

- Developing crafts and art products based on cultural heritage, such as batik, traditional weaving, and embroidery
- Securing raw material supply of wood, rattan, metal, pandanus, mendong, and thread
- Increasing the use of raw materials and auxiliary materials that are environmentally friendly/ecolabeling
- Improving product quality, design, and diversification by strengthening and utilizing of SMEs direct assistance unit

Long Term

- Developing the ready-made packaging for craft products
- Modernizing machinery, equipment, and production processes

Program	Action Plan
1. Development of technology, standard, product quality	1. Design training, equipment modernization, and improvement of product quality 2. Facilitation and implementation of standard (ISO 9000, CE Mark, etc.)
2. Development of access of raw material	Facilitating partnerships with relevant agencies in order to guarantee the availability of raw materials
3. Increasing competence of human resources	Training on production, management, marketing, etc.

Program	Action Plan
4. Development of institutional and business climate	1. Developing OVOP and cluster 2. Facilitating of implementation of IPRs 3. Development of technology, design, and cooperation with universities 4. Facilitating of access to financing
5. Development of promotion and marketing	1. Facilitating exhibitions in Indonesia and abroad 2. Facilitating the positioning and branding for creative industries' products

Instruction of President of the Republic of Indonesia No. 6 of 2009 regarding Development of Creative Economy

This instructions is the basis for the development of creative economy, which regulates action plans to be implemented by 27 ministries and local governments. Some important things contained in this instruction (depkeu.go.id, 2009) are as follows:

- The president declared 2009 as the Year of Creative Indonesia (Tahun Indonesia Kreatif) characterized by organizing Exhibition of Creative Virus (involving 14 subsectors of creative industries) and Nusa Food Exhibition 2009, which includes SMEs' creativity in the food industry
- Development of Indonesia Creative Economy Portal; development of data of exporter, importer, companies, associations, and the creative industries players; and development of formal/informal educational institutions
- Blueprint of "National Creative Industry Development Plan 2025", which contains a development plan of 14 creative industry subsectors from 2009 to 2015
- Priorities set in 7 areas during the period of 2009-2014: architecture, fashion, crafts, computer services and software, advertising, interactive games, and research and development
- Encouraging creative ideas and activities such as displaying creative figures (i.e. fashion designers), developing blog # indonesiaunite, and releasing 100% Love Indonesia song to promote love and pride of Indonesia products.

4. Discussion

4.1. Games and Animation

An analysis was conducted based on SWOT of data gained from interviews and secondary data collection. The analysis produces the things that have to be developed:

a. Providing Education and Training

Today more and more young people jump into the business of digital content. One possible reason that attracts them to the digital content is the cutting-edge technology. In addition, starting cooperation with parties from abroad could be the reason that stimulates their interest to seriously pursue this business. In fact, this industry is the fastest developing industry although it still has a weakness, such as in the availability of skilled laborers that have good innovation capabilities. People who move towards the digital content industry should therefore always up-date the technology they have, and this definitely requires the expertise of innovation and creativity.

The potential of domestic market, which is very large and still growing, internet penetration, and outsourcing are stirring up excitement of small developers. The large potential market and its growth match with customer's unique character. Talent transfer has been taking place between foreign and domestic developers. The success of one product is able to cover losses on other failed investment products (one hit out many). Adequate and cheap telecommunication, electricity, energy, and the existence of community associations will help the small developers to be leaders of the industry.

The choice of the level of technology is directly related to labor. In this context if there is a lot of energy and the explosion of the number of labor force, labor-intensive policy developments are considered. Creative industries is an industry that actually reduces the application of technology—in this sense big industrial machineries—and jobs that can not be replaced by machines. The development of various skills competencies is important in order to develop the business capabilities to compete in an open environment. In general there are two groups of competencies that are important. First is managerial competence, such as skills and ability to manage finances, marketing and production of goods and services. Second, entrepreneurial attitudes are necessary for an entrepreneur.

This problem could be addressed by providing education and training. A system of low-cost education and training should be provided by the government in response to the shortage of skilled workers. In addition to increasing the capacity of human resources, graduates of educational institutions and training is expected to be new designer and entrepreneurs. As such, we recommend building an infrastructure for creative activity and related incubators for creative industries that have a profit circulating structure. At the stage in which the company works or starts to generate a profit, they are sent out into the market, and the profit generated is reinvested in other creative activities.

b. Government Support

Creative businesses can be started with little capital as a home industry. The role of entrepreneurs in this start-up is crucial to nurture the business to even higher scale. One of the key successes is of marketing. Marketing in many cases is a big problem for start-ups and small scale buysinesses because many creative workers are very much able to make products but has big difficulties to market the product. Moreover, sluggish national economy condition caused declining domestic purchasing power. At this time, overseas marketing opportunities have to be catered more seriously. When many local businesses have not been able to perform to its capabailities, the government should be able to assist with trainings such as the use of internet media.

The discourse of policies development to ensure sustained economic growth has various result including national systems of innovation and learning regions. Investments shoud be constructed as a function of a national economic development plan, where some industries may have been prioritized in the purpose to build foundation for macro oriented support programs. Two approaches are especially crucial to be enacted for the industry which is development of the distribution infrastructure and promotion of competition environment. The first set of policies includes the development of a system necessary to expand distribution, the establishment of copy protection technology, and the eradication of piracy to enable expansion to overseas markets, grant incentives for startup, tax holiday, and academic Support to create talent. The second set of policies entails safeguarding fair competition by amending anti-monopoly law and instituting contracts law, building an atmosphere that simplifies

financing, and developing good human resources. We would also like to recommend efforts for joint marketing and nurturing the market together among ASEAN nations for mutual benefits.

c. Encouraging the Relationship between Departments to Enhance Responsibility for the Digital Content Industry Development

Technology is an important factor in the development of the industry. The selection of technologies for the industry requires precision, because mistakes in choosing the type and level of sophistication can complicate the management of industry and requirement for labor. In developing countries with high population, industrial development is expected to absorb the labor force, thereby reducing the problem of unemployment. Contradictory situation in applying technology-intensive as well as labor-intensive industry complicate the strategy development.

In addition, there is no an ideal link and match the between industry and higher education, in terms of competency and applied research design. Rapid technological change (disruptive technology) can be detrimental to investment.

Being a mix of a product and a service, the products are subject for service oriented operations in the element of the business that involves the services and product oriented operations in the element that involves the product. This means that companies must have experts in the requirements for both services and product operations. In service operations companies have to address external efficiency and quality perception. However, when it comes to the product operations, the companies have to address economies of scale, internal efficiency and cost focus issues. Firms require ability to deliver services, linkages and relationships, knowledge transfer and general enterprise management to be able to operate. Furthermore, the issue of international market in a volatile market is quite a challenge.

The cost of development and marketing campaigns for the products are expensive. Besides, the distribution and commercialization channels are still limited. These cause the local players difficult to reach economies of scale. Access to utilize the cross-cutting relationship between agencies and users is still limited. In addition, rules of distribution in cyberspace through the internet have not yet been stable. Also softwares and computing equipment are expensive. On the product side, there are still many

products which are vulnerable to piracy. In the supporting parts, the manufacturers do not have a center for developments and associations, and not to mention that this subsector is not contained in national development plan.

Another obstacle is the inadequate infrastructure and illegal levies that cause high cost economy. For example, lengthy processes in licensing arrangements have led entrepreneurs to spend more expenses. Questions on ownership have surfaced in many occasions. As consequence it nurtures new sectors in relation to the industry which is legal services, both for companies and for customers.

Without a formal industry standard, change and differences are the rules; even as the market continues to develop grow at dramatic rates. This will add to the volatility of the industry. The industry has begun to enter into the mainstream. As such, researches into all aspects of the industry are important. Academics have a part to understand the industry, assisting in policy making, and providing intermediaries between the government, the public, and the industry. Sound policy should be cautiously developed to build the infrastructure, develop creative professional workforce and new technology, enhanced the distribution environment, systemize new policies for convergent environment, schemes for government support, develop investment funds for the industry, for industry, and hopefully expand to global market share

d. Liasion or Hub (Networking)

Innovation serves to help the creative industry to identify and utilize innovative processes and technologies for creative industries. Accordingly connection should be made between universities and creative industries to create networks and cooperation to nurture discovery, development, and distribution of innovative products. To develop the local economic drivers of the creative industries it is necessary to drive the local economy to grow so that the macro economic climate will be conducive for its own development. The cluster approach is needed to focus the creative industry development strategy. Economic infrastructure cluster can only grow in an area where they can ensure the economic advantages of the inputs required in the competition. Strategic focus of the cluster is the creation and improvement of the economic advantages of the inputs required in the competition such as innovation, skills, finance, physical infrastructure, as well as the business climate and marketing. The performance

of economic collaboration is demonstrated by the great competitive ability, nationally and globally.

e. Establishing Technopark and Special Incubator

Some product, especially part of the digital content, have short life cycle. However, this is actually a strength because every new products released will open up opportunities for a new business as well. In order to compete in a highly competitive climate, digital content industry actors must have the quality technology and equipment. The problem is entrepreneurs have limitations in terms of capital to buy the software licenses. Banks and venture capitalists consider the entrepreneurs not bankable, so they do not want to finance it. Limited funds will complicate the development of digital content players.

Technopark and incubators should have economy value. More often than not, the economic value seems not easy to be understood. However, it indirectly contributes to economic growth in the region by generating and supporting new companies. There are several goals of technopark and incubators:

- Improve the business competitiveness. Local companies can use facilities to conduct R&D activities. Many local companies are not capable or have the necessary assets to do its own R&D because of limited of funds, human resources, and equipment.
- Venue to develop and commercialize creative ideas or findings from the researches. Indstitutions are interested in obtaining financial benefit from research that has been developed.
- Means to develop technology intensive companies. The theory of entrepreneurship or business has no laboratory. Technopark and incubator can be used as a laboratory not only to breed companies but also to learn from the experience.

f. Shaping Professional Careers

It all starts from the hobby. Digital content industry actors usually come from people who like computers and games. Because the essence of the hobby, the actors of this industry has a very strong understanding of the products or services that they develop. Because they are completely aware of the advantages and drawbacks of their products, they always try to improve their knowledge and abilities.

They also usually gather in communities. Some of the projects they are doing are obtained from events-together, including also information on technological developments. They do not want to succumb to their limitations in the technology. They always look for creative ways to develop their technology, including conducting R&D alone. This indicates that the perpetrators of the digital content industry work based on passion. Many people usually begin to finance their work as soon as their work is starting to bring results.

Companies must employ high-skilled, but also creative employees. The product development process includes work from designers, programmers, artists, quality assurance personnel and managers. Employees with many experiences are important as the process is complex. Technological difficulties, financial constraint, capabilities of worker and other factors add to challenges on what is possible to be created.

Creative economic value chain development requires a set of policies, not only be tailor to its specific character and condition but also recognition for the artistic skills professions. Creative industries should be able to manage the worker as an artist and an artist as a profession. Governments need to distinguish this profession in the structure order of employment and educate the customer. Public should not be carried away by creative heritage of the past, but also to preserve and make new creative products as a source of inspiration to be able to create economic value.

The government should facilitate the excitement of this positive trend. One of the ways is by standardizing and certifying the work of the digital content industries actors. This will likely increase their productivity. Another way is by establishing a techno park and a special incubator to further strengthen their business resources.

g. Provide Special Incentives: Special Financing Scheme

Concrete steps are needed. The steps should not only be limited to the issuance of regulations and policies. Special incentives should also be given to the actors of digital content industries, such as special financing scheme different to the system running currently. The same thing needs to be done in the relationship among departments that are responsible for the development of the digital content industry. The last concrete step concerns the strategies since there has been no strategic move shared among stakeholders.

One more thing that needs to be taken seriously is the rules and policies that are vague and not well targeted. National and regional governments should have the same vision and mission towards the development of the fashion industry. In addition, there are some rules and policies that must be addressed, such as the revision of labor legislation, cutting red tape of business administration, capital, and law enforcement on the implementation of legislation and policy in the field.

The absence of legal institutional framework is one of the main challenges in developing the local creative industry. For example, fashion design industry in this country is not regulated by any institution trigger the absence of careful development planning. While the issue of enforcement, monitoring and coordination between agencies is also one issue that keeps coming up. Among other issues that are often dealt with by the creative industry players is the lack of coordination of the government departments and other stakeholders such as financial institutions.

The products of the industry are expensive to create and development costs rise as the hardware development and product complexity becomes more and more expensive. As such financial industry needs to be linked to the industry and make acces to fund across the industry. Financial institutions have to understand the business model, where development, distribution, marketing and service skills are all important. And that it is also important for companies to develop the specific expertise needed in these fields. The interrelation of product and service require a clear strategy and expertise in the area of product development and customer services in order to develop, launch and operate a successful business.

The financing support for creative business can be delivered through governmental budgetary program (national and regional branch), local and foreign donors, corporate social responsibility programs, R&D fund from established businesses, or the allocation of research funds. There are other nonfinancial supports such as quick, efficient and cheap public bureaucracy, good education system to prepare creative workers, or mentoring program for startups businesses.

h. Regular Festival and Awards

Festival is expected to spur the creativity of artists, establish a knowledge space for the creative industries. It creates a medium of exchange of information, knowledge,

skill, technology, experience, preferences and location of the market, as well as other information. What important about festivals is the intersection of institutions and individuals and of economic, social and symbolic activities. It offers venues for participants to go in into business negotiations, to expand knowledge through market information exchanges, and to initiate and sustain social relations.

4.2. Fashion

An analysis was conducted based on SWOT of data gained from interviews and secondary data collection. The analysis produces the things that have to be developed:

a. Exploration of Local Content

Indonesia has very rich cultural treasures, one of which is batik. Consumers abroad prefer unique motives found on the Indonesian fashion. Another advantage of Indonesia in the field of fashion is its moslem fashion. Indonesian moslem fashion has gained high appreciation at the international level. This is the direct impact of increased demand for Indonesian products. Domestic and international markets are excellent opportunities to be targeted by the Indonesian fashion industry. The international transactions of moslem fashion in 2010 amounted to USD 96 billion (Purwoko & Pristine, 2010). This shows that, the Indonesian moslem fashion has a promising prospect.

Innovation of design and the types of products and exploration of local content will further strengthen the position of Indonesia in the eyes of the fashion world.

b. Directory of Ethnic Design and Patterns: Ethnic and Cultural Properties

Ethnic design and patterns in Indonesia is very varied. Each design or pattern has a design and its inherent meaning. These variations should be optimized to enrich the cultural heritage in Indonesia.

Abundant of design and pattern are sometimes makes us forget that we have resources. It is necessary to make a special directory that contains the design and pattern in Indonesia, including derivative that can be created from those. The directory can be used as a source of data and information for designers to work. In addition, the

directory can be used as a valid reference when there are foreign parties who claim ownership of a specific design or pattern.

c. Industrialization (Institutional Development)

Exhibition—such as Indonesia Fashion Weeks, Jakarta Fashion Weeks, and Indonesia Islamic Fashion Fair—is an inappropriate way to develop fashion industry. It is not just to show new designs, but to internationalize Indonesian fashion and to facilitate a networking for various parties such as suppliers, retailers, designers, media, and models to deal with future demand. The problem is that exhibition in Indonesia has not yet been able to make fashion an industry. No matter how good the design is generated, it will not sustain if fashion does not lead to industrial level.

Institutional development should be done to lift fashion into an industry, including policy making and infrastructure development. Designers are provided by academic institution, which provides skills and knowledge of design and business. Financial incentives and procurement of raw materials are provided to the designers. The fashion sector should open to information in responding to market signals so that the designers can penetrate domestic market should be sufficient and then gradually enter international markets. Other incentive is to support on-main stream fashion such as private labels and designer makers.

d. Incentives for Collaboration: Government Has to Combine the Efforts of Stakeholders

The government has a vital role to develop the fashion industry. It should be able to facilitate all the potential strengths from stakeholders, so that the fashion industry can grow and on global level. The role of government is making policies and providing special incentives to empower association as a place to socialize and to work for the fashion industry actors. Establishment of the association is expected to facilitate the ideas and suggestions from industry players, so the policies issued by the government are not only a top-down, but also bottom-up one. It is necessary, because the industry players are the parties who have understanding and experiencing the real conditions of real fashion industry.

e. Promotion of Made-in-Indonesia (100% Indonesia)

The government should ensure that robust domestic market to be known to international markets, e.g. batik furniture, batik shoes, etc. If the domestic market appreciates “made-in-Indonesia” then the successful stories will be known by the world. A system needs to be created to enable the world recognize the sign of creative identity. So, the government needs to interfere in terms of policies, subsidies, co-production, and investment in technological frontiers (e.g. French movie industry, Japanese animation industry).

f. Bilateral and Multilateral Cooperation (Liaison)

Indonesia should conduct fashion shows overseas to get a good appreciation. The addition of frequency of exhibitions abroad will increase the awareness of people in foreign countries towards Indonesian fashion products. The opening store abroad is a step that must be taken seriously, as this will facilitate foreign consumers obtaining the fashion products they want. In bilateral and multilateral cooperations with other countries, providing of ease and special rates of export and import for the foreign partners will help Indonesia’ fashion industry to expand overseas.

g. Easy Doing for Fashion Business: Government Permission and Market Development

Foreign products, particularly from China and South Korea, are increasingly flooding Indonesia. Since China liberalized its economies, its industries and trade has increased rapidly. This condition can be a serious threat to the economy of another country. Therefore, the government should take serious measures on this, for example the government issues the policies that regulate the quantity of imported goods. Otherwise, this will upset the local products.

The problem is that the local entrepreneurs have difficulty to increase their production capacity due to the declining productive capacity of the machines used by the industry that supports the fashion industry. Productivity can be restored or enhanced by replacing parts of the machinery or buying new machinery. However, the machines and its spare parts are imported goods, which of course require substantial funds to procure. On the other hand, the local entrepreneurs do not have adequate knowledge and ability to innovate the production technology.

This could be addressed by the government by providing special incentives to industries that want to develop their own technology and other technologies that can support the development of the fashion industry. Another thing that can be done is developing appropriate technologies. There is no need of too sophisticated technology, but the one that suits the needs of the fashion industry.

Although, the government has established rules and policies regarding the development of creative industries such as those contained in the Regulation of President of the Republic of Indonesia No. 28 of 2008 regarding the National Policy of Industry and Instruction of President of the Republic of Indonesia No. 6 of 2009 regarding Development of Creative Economy, the following regulation and policies under it, until recently the fashion industry is still very difficult to access credit from banks. This situation not only becomes the weakness of the fashion industry, but also a threat to it.

Without sufficient capital funds, it will be difficult for them to expand their business. When they get higher orders in quantity and quality, they will have difficulty fulfilling the order, because their technology is low and their production capacity is small. This leads to opportunity loss, and worse the buyer could no longer wants to buy from them.

A concrete steps are needed, not only to the issuance of regulations and policies. Special incentives should be given to the actors of the fashion industry, such as special financing scheme different to the current system. The same thing needs to be done in the relationship between departments that are responsible for the development of the fashion industry. There has been no strategic move shared among stakeholders. For example, the banks have not been able to provide funding for creative industries. They argue that the Central Bank of Indonesia has not included creative industry in its list to receive financial assistance. Based on this policy, they cannot provide special financing scheme for the creative industries even though the government has issued regulations and policies as well as their action plans to provide financing schemes for any government agency.

This is of course harmful to efforts of developing the fashion industry. If this situation lasts for a long time, it can definitely paralyze the fashion industry, especially when the free market is implemented.

Another thing that needs to be taken seriously is the rules and policies that are vague and not well targeted. National and regional governments should have the same vision and mission towards the development of the fashion industry. In addition, there are some rules and policies that must be addressed, such as the revision of labor regulation and cutting red tape of business administration, capital, and law enforcement on the implementation of regulations and policies in these fields.

h. Development of Local Content-based Fashion Schools

Most of the lecturers in fashion school are graduated from developed countries. They provide teaching materials based on what they had learned, which tends to not be adapted to the real situation in Indonesia. Appropriate knowledge has to be developed based on the needs and prediction of the future.

The strength of Indonesia basic potential of cultural property will be a tremendous asset of idea. The world design trend is shifting toward uniqueness and exclusivity of design. Development of local content-based fashion schools are expected to build awareness of young men toward the basic competitive advantages they have, so they do not repeat the western design flaws that became so cold, functional, and less emotional touch.

i. Mass Customization: Provide Special Incentives in Terms of Procurement of Raw Materials

The raw materials for fashion industry are available in the market. This condition benefits the actors of the fashion industry to produce because of the availability of raw materials will ensure the continuity of their production. Furthermore, there are many intermediaries who dare to invest and to import the raw materials to meet the demands of fashion entrepreneurs.

Unfortunately, the manufacturers of raw materials have some bargaining positions. They will only produce the raw materials that provide the greatest benefits. This will complicate the entrepreneurs and designers because they will have difficulty to innovate due to the limited choice of raw materials. Another bargaining position the manufacturers have is that they can adjust the price of products on the market. When

demand is high, the raw materials will shrink in the market. Therefore, they could raise the prices of their products, and yet the fashion industry actors will still buy them, although this would incriminate their finances.

The government should play a major role in providing special incentives in terms of procurement of raw materials for the fashion industry. Another measure that the government should take is facilitating the innovation and development of alternative raw materials by utilizing the abundantly available local raw materials.

Fashion industry can evolve, as we see today, because it has gained the support from the supporting industries, for example they can outsource garments. This happens because if the designers transform their good designs into product designs, this will not be economically feasible. Consequently, they outsource garments which have better technology and are available in a larger quantity. In other words, having supporting industries and maintaining a good cooperation with them will certainly foster the fashion industry.

j. Providing a System of Low-cost Education and Training

The number of skilled workers is limited, but they are the backbone of the fashion industry sustainability. Since they have special skills and are independent in their work, the designers and entrepreneurs can entrust the production processes to them. Actually, this obstacle can be resolved by providing education and training to the unskilled labors. However, because of the financial difficulty the the fashion industry has, this training program cannot be implemented.

Fortunately, Indonesia will enjoy a demographic bonus in 20 years' time. Demographic bonus can be used as collateral for the availability of skilled workers, because the demographic bonus also means that workforce is available with a better education. Another thing that can be gained from the demographic bonus is the reduction of dependency ratio, which means that the productive age population will increase, thus allowing Indonesian fashion industry to employ these productive age people in their business.

A system of low-cost education and training should be provided by the government in response to the shortage of skilled workers. In addition to increasing the capacity of

human resources, graduates of educational institutions and training is expected to be able to produce new designers and entrepreneurs.

k. Collaboration with other ASEAN Countries

Thailand has a specialized agency to manage creative industries, Thailand Creative and Design Center (TCDC), which was established in 2003 (tcdc.or.th). Through innovative services, TCDC does (Pasong, 2008 in Ministry of Trade of the Republic of Indonesia, 2008):

- Establish creative and design infrastructure and human development
- Link with world centers and trends in creative and design industry
- Connect creativity and design with Thai uniqueness, local knowledge, SMEs, and the markets

TCDC plays a role to develop Thailand creative industries, including marketing the products and services. Within the ASEAN framework, TCDC experience can be used by other ASEAN countries. They can collaborate with TCDC to use its export destinations—especially the European market—as entry points for fashion products.

On the production side, Indonesia can cooperate with Malaysia and Vietnam. Indonesia and Malaysia have a long tradition relationship. Many Malaysia citizens came from Java—as the rightful owner of batik. Meanwhile, Vietnam experienced tremendous growth in textile production. Those great potentials should be used to develop ASEAN batik.

4.3. Design

An analysis was conducted based on SWOT of data gained from interviews and secondary data collection. The analysis produces the things that have to be developed:

a. National Design Policy

Policy is the most important thing to develop national design industry. Therefore, a policy should be created as an umbrella for the development of design that apply nationally. Recent condition is there are many programs and policies that are partial and do not able to facilitate the excitement in design industry. Sometimes, the policies

even become counter-productive to the development. For example, the Department of Commerce issued “wrong policy” that allowed exporting rattan raw materials to China. It stultified furniture industry in Cirebon and Majalengka.

Actually, the government tried to play an active role to develop the design industry, which is currently based on the Instruction of President of the Republic of Indonesia No. 6 of 2009 regarding Development of Creative Economy. Its derivatives can be seen in the declaration of 2009 as the Year of Creative Indonesia and issuance of a blueprint of “National Creative Industry Development Plan 2025”, which contains a development plan of 14 creative industry subsectors from 2009 to 2015.

Indonesia government also has issued Law of the Republic of Indonesia No. 31 of 2000 regarding Industrial Designs, Law of the Republic of Indonesia No. 15 of 2001 regarding Brands, Law of the Republic of Indonesia No. 19 of 2002 regarding Copyrights, Regulation of President of the Republic of Indonesia No. 28 of 2008 regarding Policy of National Industry, and the other policies to accelerate national industrial development and to provide a foundation for effective protection against various forms of plagiarism, piracy, or imitation of industrial design that has been widely known. Legal protection afforded to industrial designs rights is intended to stimulate creative activities and to create a climate that encourages designers to continually create new.

However, the issuance of the policies has not been able to provide significant support to the design industry development, because those policies have not been revealed to be specific action plans. Law enforcement should be formulated and implemented prior to Indonesia and the ASEAN market is completely open to the global market.

The government has to rearrange the bureaucratic system, so that its human resources are the people who truly have the competence and passion to develop design industry. National design industry needs strong figures who capable in nurturing, supporting, maintaining, and promoting the design industry as one of the national asset. The government should have the human resources who coming from successful entrepreneurs in creative industries, who enabled to perform a variety of training related to the increasing of design industry’s added value from upstream to downstream, including management of copyright and coaching to seek and to expand the production market. Furthermore, the government should have integrated and measurable cross-

linked program among departments in managing the design industry as part of a national creative industries.

b. National Standardization (SNI): Implement Standardization and Certification

Recent weakness of government to anticipate ACFTA is in integrating coordination. The government should establish a creative forum which is able to proactively bridge the interests of the government (policymakers), academics (producing HR), and industry (business people). Thus, it can build a synergy that can spur development of design industry, for example, by arranging the pro-local design SNI. This action can fortify domestic industry from the rush of cheap China product in local market. Of course, it has to fix entire system of quality from the beginning in order to deliver the final product output which is appropriate to SNI criteria. It is directly related to the improvement of national design industries competitiveness in the future.

For the designers, the basic standard is technical certificate or education. What we need in the design industry is the integrator such as a trading cooperative that determine quality control and the association to lobby and contribute to improve productivity and market access.

c. Provincial and National Design Awards

From within the country itself, there are still a very small number of people who can appreciate local designers' creations. These people regard their job and work merely as a hobby. They have not been able to properly appreciate the creative process. This could be because they have not got enough understanding about the creative process behind each design. They also may not know that there are only certain people who have the ability to transform a design into a product or services that has a selling value. This lack of appreciation caused some designers choose to work abroad the developed countries provide a better appreciation to the designers and designs.

This condition should get serious attention from all parties. There are several steps that can be implemented as a solution, such as giving awards for high-quality design and good designers; giving appropriate assessment for the products that are created by local designers; and facilitating the exhibitions and festivals where designers show their creations.

d. Collaboration among ASEAN Countries for Creating ASEAN Hub

Each of ASEAN country must have economic development plan—including the creative industries), both in its capacity as a nation, as well as member of ASEAN, especially in facing the AEC by 2015. They have tradition and culture, as a potential source for developing creative industries respectively.

Tradition and culture, coupled with the creativity of the designers will produce high quality designs and products. However, the development of design industry cannot stop on production. At a later stage, marketing should be the main focus, so the design as the industry can give value added to the designer and the customer.

AEC Blueprint can be used to form collaboration among ASEAN countries for creating the ASEAN hub. Blueprint should be ratified by each country and translated into policies that can support the creation of the hub.

e. Directory of Indonesian Design (Artifact of Cultural Design)

Artifact of cultural design is very varied. Each design has inherent meaning. These variations should be optimized to enrich the cultural heritage in Indonesia.

It is necessary to make a special directory that contains artifact of cultural design, including derivative that can be created from those. The directory can be used as a source of data and information for designers to work. In addition, the directory can be used as a valid reference when there are foreign parties who claim ownership of a specific design.

f. International Exhibition

Indonesia should conduct fashion shows overseas to get a good appreciation. The addition of frequency of exhibitions abroad will increase the awareness of people in foreign countries towards Indonesian design products. The opening store abroad is a step that must be taken seriously, as this will facilitate foreign consumers obtaining the fashion products they want. The government should use its networking that established in foreign countries to introduce and to market the potential of design industry. In bilateral and multilateral cooperations with other countries, providing of ease and

special rates of export and import for the foreign partners will help Indonesia's design industry to expand overseas.

g. Formal Education for Design and Entrepreneurial Skills

Managing and doing business in design industry are still largely limited to applying basic management knowledge. Many actors in design industry are may not even be able to implement management principles in running their business. Although they have exceptional design skills, they have not yet or even have never gained knowledge about how to run the business well and correctly.

Overall, the problems associated with human resources can be overcome through education and training. The curriculum that includes a combination of design and business aspects are expected to increase the number of entrepreneurs in the design industry. Schools or educational institutions that run the education on design industry must be tightly supervised. Here, we give an emphasis on mentoring because a good and right mentoring will be able to enhance the ability of the graduates in creative industries.

Certifying the designers will provide a positive impact to the design industry. This will likely make the actors in this industry to feel equal with those from the other mainstream industries. In short, certification will demonstrate the competence and capability of a designer.

h. The Role of Design Association

The people who are engaged in the design industry are the ones who do not like restriction in doing their job. They tend to dislike the too rigid organization as it will restrict their movements. Most of them come from communities that are fluid and open. In their communities, they share ideas, knowledge, experience, and projects. From the conversations with the members of these communities, brilliant ideas or even international caliber designs are often generated. They also tend to see government as the party who gain political advantages of the explosion of creative industries phenomenon in Indonesia.

This condition can be corrected through the association which acts as a bridge between designers, government, and other stakeholders. The existence of the association is expected to contribute thoughts and actions towards the design industry

development. Up to now, there are many designer associations, but they have not been able to contribute significantly, because they do not have strong legitimacy. The government should recognize the associations, by involving them in any decision-making that aims to advance the national design industry.

j. Implementation of Law Enforcement

Piracy and plagiarism are a very significant threat to the development of the design industry. Piracy and plagiarism of designs and products will damage the markets and businesses run by real design entrepreneurs. Unfortunately, many design industry players do not understand the importance of IPRs. Some of them are still in the process of learning how to make good design and how to market the design they create. In fact, others have never been explained about IPRs.

Design industry is still very difficult to access credit from banks. Without sufficient capital funds, it will be difficult for them to expand their business. This leads to opportunity loss, and worse the buyer could no longer wants to buy from them.

A concrete steps are needed, not only to the issuance of regulations and policies. Special incentives should be given to the actors of the design industry, such as special financing scheme different to the current system. The same thing needs to be done in the relationship between departments that are responsible for the development of the design industry. There has been no strategic move shared among stakeholders. For example, the banks have not been able to provide funding for creative industries. They argue that the Central Bank of Indonesia has not included creative industry in its list to receive financial assistance. Based on this policy, they cannot provide special financing scheme for the creative industries even though the government has issued regulations and policies as well as their action plans to provide financing schemes for any government agency.

Another thing that needs to be taken seriously is the rules and policies that are vague and not well targeted. National and regional governments should have the same vision and mission towards the development of the design industry. In addition, there are some rules and policies that must be addressed cutting red tape of business administration, capital, and piracy and plagiarism; as well as law enforcement on the implementation of regulations and policies in these fields.

k. Implementation of Technology Transfer Policy and Creating the Supporting Industries to Guarantee Availability of Raw Materials and Production Tools

As it grows, the design industry faces problems in the availability of skilled workers. In the medium and long term, this could lead to the stagnance of industrial growth or even could lead to the decline of the the industrial growth. If this happens entrepreneurs will have difficulty to expand their business, and their business may even be taken over by companies coming from overseas.

One solution to the above-mentioned problems is by technology transfer. Implementing policy in which it requires any foreign company operating inIndonesia to transfer technology to their Indonesian partners is what the design industry would like the government does.

The government is aware of the potentials contained in the design industry. Because of its awareness and obligations and responsibilities, the government has issued regulations and policies to support the development of industrial design. Among them are the Law of the Republic of Indonesia No. 31 of 2000 regarding Industrial Designs, Law of the Republic of Indonesia No. 15 of 2001 regarding Brands, and Law of the Republic of Indonesia No. 19 of 2002 regarding Copyrights.

These strengths and opportunities can be further developed if the supporting industries for the industrial design are established. With the establishment of the supporting industries, the availability of raw materials and production tools for the design industry will likely be guaranteed. Also, the implementation of law enforcement will ensure the survival of industrial design and will provide legal certainty for the design perpetrators to continue working. Furthermore, opening the tap of export will facilitate the overseas expansion of the actors of creative industries.

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Appendix Interviewee-based SWOT

Fashion

Interviewee	Strength	Weakness	Opportunity	Threat
Laksono K. Adi (Oink!)	<ul style="list-style-type: none"> - Entrepreneurs guarantee their continuity of production. - Supporting industries (outsourcing garments) are able to increase the production capacity. - Selling point is not only in one place, but it is spread across Java, Bali, and Medan. - Tecnology of production technology does not affect the growth of business. - Entrepreneurs use credit from banks to finance their business. - Entrepreneurs form informal community to support their business. - Entrepreneurs collaborate with other industries, such as music and sports. - The business has loyal customers. - Low-end market always absorbs the new designs. - Raw materials are easily obtained because there are a big number of suppliers. - Adequate telecommunication, electricity, and energy are available and their prices are low. 	<ul style="list-style-type: none"> - The fashion sector is facing the problem in the availability of skilled workers - Managerial and business ability of entrepreneurs are low - Turnover of laborers and sales forces is relatively high - Interest rate of credit is high - Association has not provided significant action for business development - Many entrepreneurs are followers and they do not have a clear business concept - The market has been saturated because it has received “massive attack” in last 5 years 	<ul style="list-style-type: none"> - Sales trend has been shifted to smaller cities and other areas outside the two major cities of clothing: Bandung and Jakarta. - Direct competition with foreign products increases the product price and profits. - Events give positive impact to increase sales. - Online marketing provides a significant increase of sales. - Imports of goods from China help the production process. - Some players have franchised their product to Malaysia and have opened selling point in Singapore and Australia. 	<ul style="list-style-type: none"> - Entrepreneurs face difficulty in import custom - The government has not provided capital access for entrepreneurs.
Ben Wirawan (Mahanagari)	<ul style="list-style-type: none"> - Entrepreneurs have a strong desire to give added value and brand to their products. - Creative designers always give birth to ideas, concepts, products, and prototypes of new designs continuously. - The designs are easily obtained from freelance contributors and students. - Entrepreneurs use royalties system to pay the designs. - Industry players are independent and autodidactic learner. - Some industry players have had a good network and have been running the B2B. - Entrepreneurs form informal community to support their business. - Industry players have great skills in design, production techniques and software mastering for designing. - Adequate telecommunication, electricity, energy are available and their prices are low. - The cities that have developed the industry have a strong culture and good atmosphere to protect the industries. - Indonesia has a great number of culture “fuels” to compete overseas, such as the curved shape. 	<ul style="list-style-type: none"> - It is difficult to access credit from banks. - Many entrepreneurs are followers and do not have a clear business concept. - Many entrepreneurs do not have the capital, ability, and motivation to run their businesses. - Many entrepreneurs oversimplify the designs by directly imitating them from the internet. - Many entrepreneurs give big discounts to pursue a sale, but at the end it paralyzes its own products. - Managerial and business ability of entrepreneurs are low. - The government provides inappropriate training - Entrepreneurs have not been confident to reach high-end market and to compete in global markets. - Entrepreneurs have not explored the local content as a source of inspiration to improve their competitive advantage. - Raw material has not been evenly distributed, only in Java. 	<ul style="list-style-type: none"> - Trends are always changing - Good infrastructure will be a place for a fair competition and good learning process, and it will bring investment - Foreign investors are looking at creative industry actors, since the development of creative industries will provide economy and social impact - Global trend (and free trade) makes industry players to market its products - The local market is very large - ICT, networking, and connectivity are getting better. - There is a different tax rate between the local and foreign products. 	<ul style="list-style-type: none"> - Direct competition with big companies and multinational companies lead to differences in the remuneration. - Some equipment and raw materials are imported. - Dishonest bureaucrats are hampering development of creative industry. - Conflicts among state agencies have impact on the lack of attention to industry development. - The city government has not provided assistance to the creative industries. - Tax holiday is only for big industries, though most of creative industries are SMEs. - Piracy and plagiarism have occurred, since industry players did not have quite understanding of IPR. - Raw material suppliers’ bargaining power is great.

Interviewee	Strength	Weakness	Opportunity	Threat
	<ul style="list-style-type: none"> - Mixing innovation has already started to enrich the design and technological innovation to develop raw materials. - The non-mass production industry does not require major funding. - The need for IPR is not too important, so piracy is not regarded as a threat. 			
Arifin Mas (Asosiasi Perancang Pengusaha Mode Indonesia-Indonesia Fashion Designers Association)	<ul style="list-style-type: none"> - The association is officially under the Chamber of Commerce. - Indonesia has the design advantages to penetrate the Middle East market. - International community has recognized Indonesian moslem fashion. - Designer creativity and originality of the work have affected the increasing demand from international market for Indonesian products. - Some designers have been expanding overseas. - The qualified designers, which are powerful icons and have a big number of production workers, would be able to increase production. - Adequate telecommunication, electricity, and energy are available, and their prices are low. - Indonesia has a diversity of cultural products, such as batik, lurik, and bagonjong. 	<ul style="list-style-type: none"> - The associations do not have any cooperation with the government. - Interest rate of credit is high. - Managerial and business ability of entrepreneurs are low. - Education to improve the ability of the designer is lacked. - Entrepreneurs need capital and human resources development. - Technology and machines are still expensive. - Designers do not have the sophisticated concept. - Production capacity of machines in mass production has been declining, innovation and technology of textile raw materials is still problematic, and technology of leather (tanning industry) has not been developed. - Relationship between businessmen, centers, and business clusters has not been going well. 	<ul style="list-style-type: none"> - Indonesian is the mecca of moslem fashion. - Indonesia has the largest moslem population in the world. - Middle East is a promising moslem fashion market. - Designers come from the young and their numbers has always been increasing in recent years. 	<ul style="list-style-type: none"> - Chinese products can threaten the survival of local entrepreneurs. - Many raw materials are imported, and the delivery time for importing the materials takes a long time. - Globalization and market liberalization weakens the competitiveness of local entrepreneurs. - Designers copy each other's work. - Appreciation to fashion is still low since customers prefer price and function as a primary consideration.
Elitua Simarmata (Indonesia Kreatif)	<ul style="list-style-type: none"> - Some designers have been expanding their business overseas. 	<ul style="list-style-type: none"> - Production is expensive, and the labors do not have good skills. - Managerial and business abilities of fashion entrepreneurs are low. - Banks do not have a trust to finance the creative industries. 		<ul style="list-style-type: none"> - Raw materials, such as fabrics and dyes, are imported.

Design

Interviewee	Strength	Weakness	Opportunity	Threat
Rachmad Imron (Iris Desain)	<ul style="list-style-type: none"> - People in design industry are autodidactic learner. - Entrepreneurs held in-house trainings. - Designers often use self-assembled computers. - Entrepreneurs form community to support their business. 	<ul style="list-style-type: none"> - Legal software is expensive. - It is difficult to access credit from banks. - The design sector is facing issues of the availability of skilled workers. - Relationship with other industry sectors has not been established. 	<ul style="list-style-type: none"> - Designers begin to realize and want to develop the IPR. - Overseas studios like to work with Indonesia designers. 	<ul style="list-style-type: none"> - Skilled workers prefer to work abroad. - The government has not provided assistance and has not yet ready to develop the design industry. - Appreciation to the design industry is still low.
Elitua Simarmata (Indonesia Kreatif)	<ul style="list-style-type: none"> - Some designers have been expanding overseas. - Software for designing is available. - The design is required by all industry sectors, then it becomes a strength to the designers to develop their businesses. 	<ul style="list-style-type: none"> - Designers have lack of knowledge and capacity in business and management as well as having low confidence. - Entrepreneurs are lack of financial resources. On the other hand, banks do not have a trust to finance the creative industries. 	<ul style="list-style-type: none"> - The needs of designs are raised to support the design process, so is the use of technology. - Technology transfer from foreign companies is an opportunity to enhance the technological 	<ul style="list-style-type: none"> - Piracy and plagiarism occurs since industry players do not have enough understanding on IPR - There is no terminology of creative industry in central bank policy so that the banking cannot provide any particular

Interviewee	Strength	Weakness	Opportunity	Threat
		<ul style="list-style-type: none"> - R&D for product design is still limited. - Entrepreneurs cannot utilize brand for their design. - Design is an internally part of big companies. 	<ul style="list-style-type: none"> capabilities of local designers. - Standardization and certification of skills for design practitioners are necessary. - Ratio of export to import is almost 10:1. - Ministry of Education starts to design the curriculum of creative (education) for basic level. 	<ul style="list-style-type: none"> funding schemes. - Oligopoly in internet tariff hampers the development of design. - Main problems that have obstructed the development of creative industry: financing, human resources, technology, IPR, and regulation.
Yannes Martinus Pasaribu (Fakultas Seni Rupa dan Desain-Faculty of Art and Design)	<ul style="list-style-type: none"> - Designers have skill and integrity in the work. - Designers have ability to translate the symbolic value preference of domestic market. - Sleek structure of SMEs make the entrepreneurs are flexible to produce new designs and even to build a new trend. 	<ul style="list-style-type: none"> - Access to financial resources is lack. - It is hard to run sustainable fashion business, if it does not lead to industrial level. - Entrepreneurs cannot utilize brand for their design. - Individual characteristic of designers is standing out. It is difficult to work together among them. - Lack of concrete support from government hampers the development of program which is able to synergize the various potential designs. 	<ul style="list-style-type: none"> - Rich of cultural assets is authentic creative resources that can be developed the industry design. - The tradition of storytelling (rather than written one) that is passed from generation to generation has built the ability to think methaphorically. 	<ul style="list-style-type: none"> - Government policies often change and there is no synergy between departments. - Entrepreneurs face the limited access to effective and efficient production technology. - Unpreparedness of the government to build protection system and to enhance value added is still serious problems. - Legal licensed software and ICT tools are still expensive for the begginers in design industry.

CHAPTER 6

Developing AEC into a Global Service Hub:

The Case of the Creative Industries in the Philippines

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1. Nature of the Industry

1.1. Service

Creative industries, in general, belong to the service sector. Business activities that normally fall in the category, according to the United Kingdom's Department for Culture, Media and Sport (DCMS), "have their origin in individual creativity, skill and talent, which have a potential for job and wealth creation through the generation and exploitation of intellectual property" (Creative Industries Mapping Document, DCMS, 2001, p.05). Consistent with the definition, the DCMS (2001) maintains that creative services include: advertising, architecture, art and antiques, computer games, crafts, design, designer fashion, film and video, music, performing arts, publishing, software, and TV and radio.

As a broad and highly diverse area of expertise, the difficulties in clearly delineating the activities of creative industries and capturing their contribution to the economy stems from three main points: 1) creative industries are closely linked with the undertakings of non-creative sectors; 2) contribution to culture are valued more relative to the contribution to ideas; Tolentino's Framework for Clustering Creative Services (Joint Foreign Chambers of the Philippines, 2010), for instance, clearly distinguishes between sectors employing creative workers and those employing knowledge workers (refer to Table 1); and 3)

creative industries are comprised mainly of micro, small- and medium-scale enterprises, whose performance may not be accurately reflected in current statistics (Local Government Development and Improvement, 2010).

Whilst clearly identifying activities that are classified as creative services and measuring their economic performance can still be improved, the Philippines has not only adopted the UK's Department of Culture, Media and Sport's characterization of creative industries but has also expanded the list of sectors to include: animation, culinary arts, cultural/heritage activities, new media, and visual arts.

Quite apparent from the preceding discussion, however, is that creative industries span a wide array of services. In the interest of: 1) providing a detailed analysis of the strengths, weaknesses, opportunities, and threats (SWOT) as well as that of the policies/regulatory/institutional initiatives that support the sector; 2) presenting meaningful and appropriate recommendations; and 3) developing a profile of firms which are considered key players of the sector, this paper will focus on two of the Philippines' creative services sector, namely, printing and publishing, with focus on electronic or digital publishing, and animation industries.

Table 1: Industries Employing Creative and Knowledge Workers

Clustered Industries Employing Creative Workers	Clustered Industries Employing Knowledge Workers
✓ Advertising	✓ Business Process Outsourcing
✓ Animation	✓ Engineering Design
✓ Architectural and Interior Design	✓ Financial Services
✓ Brand, Product and Fashion Design	✓ Hardware and Systems Design
✓ Cultural Exhibition and Performance	✓ Legal Services
✓ Digital Gaming and Entertainment	✓ Medical and Healthcare Services
✓ Industrial Craft	✓ R&D and Consulting Services
✓ Mobile Phone Applications	✓ Software Development
✓ Motion Pictures	✓ Website Development
✓ Music and Performing Arts	
✓ Radio Broadcasting and TV	
✓ Toys and Playthings	
✓ Visual Arts	

Source: Cesar Tolentino, Framework for Clustering Creative Services, 2008

Note: The table is copied from the 2010 Joint Foreign Chambers of the Philippines' Advocacy Paper.

The Philippine printing and publishing industry is an established sector comprised of more than a thousand firms located in ten out of the country's sixteen regions and employed an estimated twenty-six thousand workers in 2008. The industry has extensive forward and backward linkages and offers a wide range of products and services to both the local and global markets. The digital animation industry, on the other hand, gained prominence in the 1980s through its subcontracting services that catered mostly to the international market. Foreign ownerships and affiliations helped domestic counterparts to tap into the opportunities offered by the global animation industry. Presently, the Animation Council of the Philippines, Inc. believes that the sector is made up of about 50 to 100 establishments that are mostly located in the National Capital Region. In 2008, the Business Process Outsourcing Association of the Philippines reported that the animation sub-sector provided about 8,000 employees with a means of livelihood. Both industries are mostly comprised of small- and medium-scale enterprises.

The succeeding sections define the scope and discuss the performance and prospects of the two industries. The insights gained from the analysis of the qualitative and quantitative information will be utilized to fulfill objectives of the project that are enumerated above.

1.2.Industry Scope

Printing and Publishing

Under the Philippine Standard Industrial Classification (PSIC), the printing and publishing industry is comprised of firms engaged in the activities listed in Table 2.

Table 2: Philippines Printing and Publishing Sectors and Products

PSIC Code	Sector/Activity	Product/Service
221	Publishing	✓ Books (i.e., textbooks, atlases, professional nooks, fiction books, etc.), brochures, musical books, maps, pamphlets, and other publications (i.e., packaging materials, political campaign materials, receipts and business forms, etc.)
221	Publishing	✓ Newspapers, journals (i.e., tradejournals), periodicals, magazines, comics, etc. ✓ Photos, engravings and postcards, timetables, forms, posters, reproduction of works of art, or other printed matters, products of micropublishing
222	Printing and Services Related to Printing	✓ Reproducing published products listed above (PSIC Code 221) by means of duplicating machines, computer controlled reproduction, embossers, photocopiers or thermocopiers ✓ Production of composed type, prepared printing plates or cylinders, impressed lithographic stones or other impressed media for use in printing in other unit; includes bookbinding ✓ Electrotyping, stereotyping and photoengraving ✓ Bookbinding and related work ✓ Services related to printing
223	Publishing and Printing Activities	✓ Services of establishments involved in both printing and publishing activities

Source: Tullao & Habaradas. (2001). “An In-depth Study on the Printing and Publishing Industry in the Philippines”

The market for printing and publishing services includes a wide range of consumers starting with the household - which includes political candidates, students, medical doctors, researchers, etc. – and ending with institutional buyers such as financial institutions, private education, hotel and restaurants, etc. (Tullao & Habaradas, 2001).

Digital Animation

The PEARL2 State of the Sector Report on Philippine Digital Animation (2008) defines animation as “the process of giving the illusion of movement or life to cinematographic drawings, models or inanimate objects,” which is accomplished through a series of drawings “photographed in sequence on successive motion picture frames or images created by computer software” (PEARL2, 2008, p.11). In general, animation technology falls into two categories: 1) two-dimensional, which is traditionally hand-drawn but of late is accomplished with the aid of computers; and 2) three-dimensional, which

creates characters that have depth and 3D viewpoints through animation software programs (Tschang & Goldstein, 2004).

Production of animated works, according to Tschang & Goldstein (2004), involves four stages: 1) conceptualization – focuses on the development of ideas, creating the conceptual artwork, drafting the final script, and planning (i.e., roles, logistics, schedules, etc.); 2) pre-production – involves script revision, if necessary, details of scripts are depicted in storyboards and, ultimately story reels¹ in mostly non-computer generated art and a “prototype” of the film is assembled – the stage requires more art and, thus, the services of artists; 3) production – centers on the development of how each character and background would be shown on film such as color, texture, shading, and lighting; animation and visual effects are also incorporated in film recording; and 4) post-production – “consists of the sound effects, the final musical score, sound mixing and color correction” (Tschang & Goldstein, 2004) as well as editing of scenes and retakes, if necessary.

Outsourcing of the various tasks involved in animation production is an industry practice borne out of cost, quality and talent considerations. Subcontractors are typically employed after the conceptualization stage when the script and main models for characters (how they would look, for instance) have been developed (Tschang & Goldstein, 2004). More specifically, in the pre-production stage, subcontractors are employed to prepare, for example, storyboards, character design, background design, prop design, special effects, etc. Subcontractors, when hired to work in the production stage, are assigned to “animation, clean up, visual effects, and digital ink and paint (especially for 2D), and for 3D, rendering and compositing” (Tschang & Goldstein, 2004).

Commercial applications of animation services include advertisements – be it on the internet or television, video clips, computer games, television animation series, animated films, architectural and industrial design, medical demonstrations, and teaching aids (PEARL2, 2008 and Tschang & Goldstein, 2004).

¹Story reels “are full sequence of the art conveying the story that can be viewed largely in its entirety” (Tschang & Goldstein, 2004).

1.3. Contribution to the Philippine GDP, GNP and Manufacturing Sector

Printing and publishing services has steadily accounted for less than half a percent of the Philippines' GDP and GNP – an average of 0.34% and 0.33%, respectively from 1991 to 2005, which is higher than its average share in the more recent years of 0.24% and 0.21%, respectively in 2006 to 2009 (refer to Table 3). The industry's contribution to the Philippines' manufacturing sector, while subject to the same declining trend, is more than one percent during the same time period – an estimated 1.4% from 1991 to 2005 and 1.01% from 2006 to 2009 (refer to Table 3).

The dwindling share of the printing and publishing industry to the economy's national income is a result of the sector's lackluster performance in the past two decades. Table 3 clearly shows that while an average annual expansion of 1.05% in the sector's gross value added (GVA) was recorded in 1991-2000, except for 2001 to 2005, the industry's output has been steadily going down at an annual average rate of 0.69% in 1996 to 2000 and 2.71% in 2006 to 2009 (refer to Table 3).

Table 3: Printing and Publishing Industry Contribution to the Philippine Economy, 1991-2009

Indicator	1991-1995	1996-2000	2001-2005	2006	2007	2008	2009	2006-2009
Printing & Publishing GVA (in constant 1985 PHP billions)	2.93	3.09	3.34	3.29	3.36	3.12	3.02	3.20
Manufacturing GVA (in constant 1985 PHP billions)	187.60	224.27	266.37	305.66	315.71	329.01	314.40	316.20
GDP (in constant 1985 PHP billions)	747.64	904.28	1,094.99	1,276.87	1,368.41	1,417.09	1,432.12	1,373.68
GNP (in constant 1985 PHP billions)	762.75	951.31	1,182.15	1,392.01	1,502.81	1,591.11	1,654.94	1,535.22
Printing & Publishing GVA Growth (%)	1.05	-0.69	2.87	-2.14	2.01	-7.00	-3.27	-2.71
Manufacturing GVA Growth (%)	2.70	3.17	3.34	4.20	3.29	4.21	-4.44	1.82
GDP Growth (%)	2.88	3.96	4.49	5.40	7.19	3.54	1.06	4.30
GNP Growth (%)	3.45	4.74	4.94	5.45	7.96	5.88	4.01	5.83
Printing & Publishing Share to Manufacturing (%)	1.56	1.38	1.25	1.08	1.06	0.95	0.96	1.01

Printing & Publishing Share to GDP (%)	0.39	0.34	0.30	0.26	0.25	0.22	0.21	0.24
Printing & Publishing Share to GNP (%)	0.38	0.33	0.28	0.24	0.22	0.20	0.18	0.21

Source: 2010 Philippine Statistical Yearbook, NSCB

Note: 1991-1995, 1996-2000, 2001-2005 values are averages for the indicated years.

The improvement in the sector's performance in 2001 to 2005 - as evidenced by a 2.87% annual average rate of increase for the five-year period - was mostly accounted for by rising GVA levels in 2001 (PHP2.97 billion) to 2004 (PHP3.76 billion); thus off-setting the more than ten percent decline in gross value added in 2005 (PHP3.36 billion). The succeeding years, however, witnessed frequent contractions in the printing and publishing GVA levels recorded at 2.14% in 2006 (from 2005's PHP3.4 billion to 2006's PHP3.3 billion), 7% in 2008 (from 2007's PHP 3.4 billion to 2008's PHP3.1 billion) and 3.27% in 2009 (from PHP2008's PHP3.1 billion to 2009's PHP3 billion); thus, shrinking the industry's output by an annual average rate of 2.71% during the four-year period (refer to Table 3).

Tullao & Habaradas (2001), in their in-depth study of the Philippine printing and publishing industry, identified "the lack of formal training of managerial and technical personnel and inadequate investment in new technology" (p.14), which determines the quality of the sector's products, as among the major factors that hinder its growth. Consequently, combined with greater competition among local printers and publishers as well as foreign providers of printing and publishing products and services, the onset of and the relatively prolonged effects of the global financial crisis in 2007 to 2009, high production costs and, thus, declining marginal profits, the gross value added of the Philippine printing and publishing sector shrank in 2006, 2008 and 2009.

Table 4: Printing and Publishing Industry Trade Values (in US\$), 2009

Products	Exports	Imports	Net Exports
Printed books, brochures, leaflets and similar printed matter, whether or not in single sheets	1,841,933	52,762,065	-50,920,132
Newspapers, journals and periodicals, whether or not illustrated or containing advertising material	194,635	1,886,581	-1,691,946
Children's picture, drawing or colouring books	2,789	86,929	-84,140
Music, printed or in manuscript, whether or not bound	-	838	-838
Maps and hydrographic and similar charts of all kinds, including atlases, wall maps, topographical plans and globes, printed	-	165,309	-165,309
Plans and drawings for architectural, engineering, industrial, commercial, topographical or similar purposes, being originals drawn by hand; handwritten texts, photographic reproductions or sensitised paper and carbon copies of the foregoing	-	28,421	-28,421
Unused postage, revenue or similar stamps of current or new issue in the country in which they have, or will have, a recognized face value; stamp-impressed paper; banknotes; cheque forms; share or bond certificates	1,942,947	27,521,877	-25,578,930
Transfer (decalcomanias)		1,067,710	-1,067,710
Printed or illustrated postcards; printed cards bearing personal greetings, messages or announcements, whether or not illustrated, with or without envelopes or trimmings	836,118	177,966	658,152
Calendars of any kind, printed, including calendar blocks	67,243	303,107	-235,864
Other printed matter, including printed pictures and photographs	5,327,521	10,496,093	-5,168,572
Total	10,213,186	94,496,896	-84,283,710

Source: 2009 Foreign Trade Statistics Imports, Volume I, NSO

Trade in printing and publishing products and services reinforce the conclusion of Tullao & Habaradas (2001) that the local industry predominantly serves the domestic market. In 2009, for instance, the industry posted a trade deficit of US\$84,283,710 (refer to Table 4). Imports were more than nine times that of exports – US\$94.5 billion versus US\$10.2 billion; thereby posing strong competition, specifically for local producers of printed books, brochures, leaflets and similar printed matter, whether or not in single sheets, unused postage and other printed matter, including printed pictures and photographs - which accounted for more than 55.83% of Philippine printing and publishing imports during the year, unused postage (29.12% share) and other printed matter (11.11% share). Majority of these printed products was sourced from the United States, Singapore, France, Hong Kong and China. Note that the industry consistently suffered a trade deficit for all product items (refer to Table 4); thus, implying very strong competition in the local and global markets.

In terms of exports, more than half of the sector's foreign sales (52.16% of US\$10.2 million) stemmed from the other printed matter including printed pictures and photographs sub-sector. Tullao & Habaradas (2001) claim that the relatively large Filipino communities abroad accounted for the considerable demand for these printed materials in major foreign-markets in 2009, which included Saudi Arabia (US\$3 million), China (US\$0.30 million), and the United States (US\$0.23 million).

1.4.Sector Profile

1.4.1. Regional Distribution/Concentration of Enterprises

Printing and Publishing

According to the results of the National Statistics Office's (NSO) 2003 and 2005 Annual Survey of Philippine Business and Industry (ASPBI), the number of printing and publishing producers with twenty or more average total employees rose from 329 to 392 or a rate of increase of 19.15% (refer to Table5). Employment, however, went up at a slower rate of 2.17% during the same time period from 2003's 20,053 to 2005's 20,489 (refer to Table5).

Table 5: Establishments with Twenty or More Average Total Employees in the Printing and Publishing Industry Number of Establishments and Employment Level by Region, 2003 and 2005

REGION	No. of Establishments		Employment	
	2003	2005	2003	2005
PHILIPPINES	329*	392*	20,053*	20,489*
NATIONAL CAPITAL REGION (NCR)	250	299	15,709	16,306
CORDILLERA ADMINISTRATIVE REGION (CAR)	4	3	117	77
REGION III - CENTRAL LUZON	5	10	135	205
REGION IVA - CALABARZON	17	15	1,776	927
REGION V - BICOL	-	3	-	129
REGION VI - WESTERN VISAYAS	8	9	242	249
REGION VII - CENTRAL VISAYAS	18	20	772	946
REGION X - NORTHERN MINDANAO	3	4	78	119
REGION XI - DAVAO	12	14	765	962
REGION XII - SOCCSKARGEN	3	4	198	213

Source: 2003 and 2005 Annual Survey of Philippine Business and Industry, NSO

*Sum of the regional statistics may differ from the overall statistics reported owing to suppressed data.

In addition, the data gathering efforts of the NSO also revealed that - in 2005, with the addition of three printing and publishing establishments in Bicol, businesses belonging to the sector were located in ten out of the Philippines' sixteen regions. Majority of them, however, were concentrated in the National Capital Region (76%), Central Visayas (5%) and CALABARZON (average of about 4% for the two years). Correspondingly, about 79% of the total number of laborers who worked in printing and publishing firms with twenty or more average total employees was employed by firms located in the National Capital Region in 2003 and 2005 (refer to Table 5).

Digital Animation

Interviews conducted revealed that the industry is comprised of mostly small- and medium-scale enterprises. Firms engaged in animation services are located in the three major regions of the Philippines: Luzon, Visayas and Mindanao. Majority, however, particularly large players, are mostly based in the National Capital Region. The Animation Council of the Philippines, Inc. puts the number of establishments that comprise the industry about fifty to one hundred studios and companies.

Notable in the regional distribution of firms belonging to the printing and publishing and digital animation industries is that a significant number of them are located in the National Capital Region (NCR). Theories and empirical studies explain the behavior in terms of market and cost realities in urban areas. In 2007 to 2009, for instance, NCR accounted for significant shares of the Philippines' gross domestic product - an average of 32.7% per year; personal consumption expenditure - an average 28.6% per year; government expenditure - an average of 41.7% per year; and gross capital formation - an average of 55.1% per year. It was also the home of an estimated 13% of the Philippines' 89 million population in 2007; growing at a faster rate of 2.11% annually relative to the Philippines 2.04% population rate of increase. Accordingly, NCR offers a larger market, a higher quality and more extensive network of functional infrastructure (i.e., roads, ports,

public transportation, utilities, communication facilities, educational institutions, etc.), and complementary good and services industries relative to the other regions of the country.

In addition to the benefits clearly offered by NCR's considerable household, firm and government expenditures, Ebert & McMillen (1999) also claim that the availability of supporting and complementary industries can reduce the cost of operation (Ebert & McMillen, 1999) of firms and are, therefore, critical to their success.

1.4.2. Industry Structure and Performance

Printing and Publishing

The printing and publishing industry of the Philippines is comprised of primarily small-scale enterprises that employed less than 20 workers – 78% in 2006 and 74% in 2008.

In 2008, the National Statistics Office reported a 15.1% drop - from 1,344 enterprises in 2006 to 1,141 in 2008 - in the total number of establishments that made up the Philippine printing and publishing industry. Table 6 clearly illustrates that although both the number of small (less than 20 employees) and large (more than 20 employees) printing and publishing firms fell during the period, the former's drop was steeper at 23.93% - from 1,046 in 2006 to 844 in 2008 – relative to the latter's 0.67% reduction – from 298 in 2006 to 296 in 2008.

Consequently, overall employment in the sector suffered a similar decrease - 4.1%, from 27,599 in 2006 to 26,382 in 2008. Similar to the case of the number of establishments, the reduction in total employment was monopolized by establishments with less than 20 employees at 31.31%, from 2006's 9,507 to 2008's 6,625. Firms in the printing and publishing sector employing more than 20 workers reported higher employment levels at 19,864 in 2008 relative to 2006's 18,092 – or a growth rate of 9.79% (refer to Table 6).

Table6: Printing and Publishing Industry Number of Establishments and Employment Level by Type of Establishment, 2006 and 2008

Type of Establishment	No. of Establishments		Employment Level	
	2006	2008	2006	2008
Employing Less than 20	1,046	844	9,507	6,625
Employing 20 and over	298	296	18,092	19,864
Philippines	1,344	1,141	27,599	26,382

Source: 2006 and 2008 Annual Survey of Philippine Business and Industry, NSO

*Sum of the regional statistics may differ from the overall statistics reported owing to suppressed data.

Despite the reduction in the overall total number of establishments and total employment, variables pertaining to output, revenue, investment and cost - except for capital expenditure of firms with less than 20 employees - registered an upward trend in 2008 for printing and publishing establishments regardless of size (refer to Table7). In addition, rates of increases indicate that relative to small (less than 20 employees) printing and publishing enterprises, larger service providers (more than 20 employees) benefited the most from the more lucrative business transactions in 2008.

Table7: Printing and Publishing Industry Statistics by Type of Establishment (in current PHP million), 2006 and 2008

Region	Value of Output		Total Revenue		Total Cost		Capital Expenditures	
	2006	2008	2006	2008	2006	2008	2006	2008
Employing Less than 20	4,016	4,347	3,957	4,252	3,440	4,098	105	91
Employing 20 and over	22,824	26,865	23,148	26,695	19,981	23,358	362	586
Philippines	26,840	31,308	27,104	31,046	23,421	27,553	467	680

Source: 2006 and 2008 Annual Survey of Philippine Business and Industry, NSO

*Sum of the regional statistics may differ from the overall statistics reported owing to suppressed data.

In terms of value of output, for example, small printing and publishing enterprises achieved an 8.24% boost from PHP4 billion in 2006 to PHP4.4 billion. Their larger counterparts, on the other hand, generally enjoyed a 17.71% growth in the value of output – from 2006’s PHP22.8 billion to 2008’s PHP26.9 billion (refer to Table7). The same pattern can be observed in the values reported for total revenue – 7.46% increase for small firms versus 15.32% for larger enterprises and cost - 19.13% rise in small enterprises as compared to 16.91% in larger service providers. It is, thus, not surprising that larger establishments posted a faster growth in profit 5.33% relative to a decline of 70.21% in

small enterprises. Accordingly, larger firms had a greater incentive to invest in capital – up by 61.88% from PHP362 million in 2006 to PHP586 million. Establishments with less than 20 employees reduced their capital expenditures to PHP91 million in 2008 from 2006's PHP105 million or -13.33% drop (refer to Table7).

Table8: Printing and Publishing Industry Return on Investment (in current PHP) by Type of Establishment, 2006 and 2008

Type of Establishment	Return on Investment Based on Total Revenue		Return on Investment Based on Profit	
	2006	2008	2006	2008
Employing Less than 20	37.69	46.72	4.92	1.67
Employing More than 20	63.89	45.52	8.74	5.67
Philippines	58.00	45.66	7.88	5.14

Values are generated from the statistics published in the NSO's 2006 and 2008 Annual Survey of Philippine Business and Industry.

Deriving the overall returns on investment (ROIs) based on total revenue and profit for both types of establishments in the printing and publishing industry in 2006 and 2008 revealed that overall ROIs suffered a decline of 27.28% and 34.78%, respectively – from PHP58 for every PHP1 investment in capital in 2006 to PHP45.66 in 2008 for ROI based on income and from PHP7.88 for every PHP1 investment in capital in 2006 to PHP5.14 in 2008 (refer to Table8).

Small firms, however registered a positive rate of change in the ROI based on total revenue of 23.96% - from PHP37.69 in 2006 to PHP46.92 but a drop of 66.06% in the ROI based on profit - from PHP4.92 in 2006 to PHP1.67 in 2008 for every PHP1 investment in capital; implying that for printing and publishing enterprises employing less than 20 workers, higher revenues earned in 2006 to 2008 required incurring additional costs that were significantly greater. Labor costs, in particular, would rise considerably especially if workers were required to work longer hours (i.e., overtime) in order to cope with the higher demand for printing and publishing services. More paper and paper products and power would also be required as output level increased. For establishments employing less than

20 workers in the printing and publishing industry, therefore, the gap in ROI values in 2003 and 2005 is explained by a higher marginal cost relative to marginal revenue.

Both of the larger service providers' ROIs, on the other hand, posted negative rates of change of 28.75% (based on total revenue) and 35.13% (based on profit) during the same period. Apparent in the data is that the larger investments made in 2005 did not generate at least equal amounts of corresponding revenues during the same year. Expansions, particularly in the form of additional physical capital, may not immediately bring in added revenues and profits. Lag times are commonplace owing to delays encountered in integrating the new equipment in the production process, hiring more workers – if necessary, seeking out new customers, etc. In the case of the publishing and printing industry, particularly the key players, investments in new capital also go into launching new products and services, which also require time before revenues and profits are earned. The most likely explanation for the difference in ROI values in 2003 and 2005, however, is the slowdown in the market itself. The year 2004 was an election year, which explains the greater demand for printed materials in 2003 and the relatively lower one in 2005.

Table9: Printing and Publishing Import Levels and Sub-sector Shares to Total Printing and Publishing Import Level, 2007

Commodity	Value of Imports (inUS\$)	Share to Total Printing and Publishing Imports
Printed books, brochures, leaflets and similar printed matter, whether or not in single sheets	52,762,065	55.8347
Newspapers, journals and periodicals, whether or not illustrated or containing advertising material	1,886,581	1.9964
Children's picture, drawing or colouring books	86,929	0.0920
Music, printed or in manuscript, whether or not bound	838	0.0009
Maps and hydrographic and similar charts of all kinds, including atlases, wall maps, topographical plans and globes, printed	165,309	0.1749
Plans and drawings for architectural, engineering, industrial, commercial, topographical or similar purposes, being originals drawn by hand; handwritten texts, photographic reproductions or sensitised paper and carbon copies of the foregoing	28,421	0.0301
Unused postage, revenue or similar stamps of current or new issue in the country in which they have, or will have, a recognized face value; stamp-impressed paper; banknotes; cheque forms; share or bond certificates	27,521,877	29.1246
Transfer (decalcomanias)	1,067,710	1.1299
Printed or illustrated postcards; printed cards bearing personal greetings, messages or announcements, whether or not illustrated, with or without envelopes or trimmings	177,966	0.1883
Calendars of any kind, printed, including calendar blocks	303,107	0.3208
Other printed matter, including printed pictures and photographs	10,496,093	11.1073
Total Printing and Publishing Import Level	94,496,896	100.0

Source: 2009 Foreign Trade Statistics Imports, Volume I, NSO

Moreover, revenue and profit generation within the printing and publishing industry are significantly affected by competition among local and foreign publishers, particularly in the book publishing sub-sector. Foreign book publishers, according to Tullao & Habaradas (2001), enter the Philippine market by directly selling to major bookstores, using an agent to introduce their books to local retailers, forming partnerships with booksellers who can import foreign books upon the request of clients, and granting reprint rights to local booksellers.

Indeed, printed books, brochures, leaflets and similar printed matter whether or not in single sheet accounted for more than half, 55.83% or US\$52.8 million, of the industry's 2009 US\$94.5 million total imports (refer to Table 9). As mentioned in the discussion in the section on Contribution to the Economy, the top three countries from which these materials originated were the United States (US\$23.1 million), Singapore (US\$10.8 million) and Hong Kong (US\$5.5 million).

Similarly, the unused postage (29.12% of total imports, US\$27.5 million) and other printed matter including printed pictures and photographs (11.11% of total imports, US\$10.5 million) sub-sectors face strong rivalry not only from local but also foreign printers, specifically from France (US\$9.81 million) and the United Kingdom (US\$9.3 million) and China (US\$0.88 million) and Hong Kong (US\$0.25 million), respectively. Competition in the printing and publishing industry, similar to other sectors, are based on price and quality. While a highly trained workforce, investment in technology and product and service diversity, particularly in large-scale enterprises, strengthen the ability of local players to compete; higher production costs in the Philippines - owing to more expensive paper and paper products, power and transportation - puts local providers at a disadvantage.

Digital Animation

The Philippine animation sector is considered to be part of a larger industry called Business Process Outsourcing (BPO), which is divided into: contact/call centers, back office services, data transcription, animation, software development, engineering

development and game development (Senate Economic Planning Office, 2010). In 2008, BPO companies numbered 618 with the largest percentage shares reported for contact centers at 31% or 191 companies, data transcription at 22% or 135 companies, and information technology and software development at 19% or 119 companies. Animation accounted for 8% (49 companies) of the total number of BPO establishments in 2008. It was the second smallest sector in the industry –engineering services firms was the smallest at 7% (43) of the total number of BPO establishments, reported during the same year (Senate Economic Planning Office, 2010).

In the Philippines, according to PEARL2 (2008), enterprises involved in animation work fall into two general categories: 1) service providers – mostly local firms with foreign affiliations that are engaged in animation services for use in entertainment, business, and education; and 2) local subcontractors – commissioned to work on segments of an animation series; freelancers dominate in this type of animation service. Local animation industry participants offer a wide range of services beginning with storyboarding in the pre-production stage to dubbing in post-production. Unlike in China, India, South Korea, and Malaysia, however, there are “virtually no commercial animator producer” (PEARL2, 2008) in the country. Interviews with industry stakeholders confirm that one of these few companies that work on original content is Top Peg Animation and Creative Studio, Inc.

Table 10 presents data on the BPO’s and animation industry’s revenues from 2004 to 2008. The animation sector’s income initially accounted for 3.53% of the Business Process Outsourcing’s US\$1.48 billion earnings in 2004. The former’s share slowly tapered off to 1.98% of the BPO’s US\$6.1 billion proceeds in 2008. Although both sectors’ revenues went up significantly, particularly in 2005, during the five-year period, the animation industry’s growth rates remained below the BPO’s annual rate of increase – average of 23.98% per year from 2004 to 2008 for animation versus 43.32% per year from 2004 to 2008 for BPO (refer to Table 10). The gap between the two widened from 2007 to 2008; hence the smaller share of animation to BPO revenues in 2008.

Table 10: Animation Industry Revenues, 2004-2008

Description	2004	2005	2006	2007	2008	Average
Animation Industry						
Level (in current US\$ millions)	52	74	97	105	120	89.6
Growth Rate (%)	-	42.31	31.08	8.25	14.29	23.98
Share to BPO Total Revenue (%)	3.53	3.06	2.98	2.15	1.98	2.74
Business Process Outsourcing						
Level (in current US\$ millions)	1,475	2,420	3,257	4,875	6,061	3,617.6
Growth Rate (%)	-	64.68	34.59	49.68	24.33	43.32

Source: Business Process Outsourcing Association of the Philippines (BPAP) as cited by the Senate Economic Planning Office (2010)

Share to BPO and growth rates were derived from the BPAP figures.

World demand for animation output, particularly for entertainment purposes (films, commercials, etc.), was placed at US\$80 billion in 2010 (WTC, 2008); thus creating a lucrative market for animation services, and, in turn, service providers (i.e., artists). Competition for subcontracted animation services, however, is fierce among the major players in the region, namely: Singapore, South Korea, Philippines, India, and China.

Studies and interviews argue that rivals in Singapore, South Korea and China, specifically, are strongly backed by their respective governments through co-production programs, tax incentives and domestic market penetration policies (Fei, 2008; Young, 2008 and Seah, 2008), which gives them an edge in securing projects in the domestic and international markets. Since the industry's products and services, particularly for subcontracted work, are relatively homogenous, Philippine animation firms lose out to rivals in countries like India and China that perform the same tasks, for less pay (Tschang & Goldstein, 2004).

It is, therefore, critical that the local industry differentiate its products and services from its competitors in order to establish a niche and increase market share. Continuous upgrading of equipment, training of artists and technical workers, and climbing the value chain – which for the Philippines means developing original ideas for animated series and films that will cater to the tastes and preferences of the world market –as well as greater government support are avenues that can be explored to achieve these goals.

1.4.3. Employment and Wages

Printing and Publishing

Establishments with twenty or more average total workers in the printing and publishing industry employed 20,053 and 20,489 workers in 2003 and 2005 (refer to Table 11), respectively, posting a rate of increase of 2.17% during the period. Printing and publishing industry laborers, similar to the number of establishments in the sector, were concentrated in the National Capital Region - accounting for 78.34% and 79.58% of total industry employment in 2003 and 2005, respectively.

Table 11: Establishments with Twenty or More Average Total Employees in the Printing and Publishing Labor Statistics by Region, 2003 and 2005

Region	Total Employment		Paid Employees		Unpaid Employees		Total Compensation (in million current PHP)	
	2003	2005	2003	2005	2003	2005	2003	2005
NCR	15,709	16,306	15,696	16,172	13	135	2,561	2,714
CAR	117	77	112	77	5	0	14	10
REGION III	135	205	120	183	15	23	8	10
REGION IVA	1,776	927	1,776	918	0	9	102	102
REGION V	-	129	-	129	-	0	-	8
REGION VI	242	249	240	241	2	8	18	18
REGION VII	772	946	772	932	0	14	78	105
REGION X	78	119	78	119	0	0	5	8
REGION XI	765	762	765	756	0	5	53	68
REGION XII	198	213	198	210	0	3	13	15
Philippines	20,053*	20,489*	20,015*	20,283*	38*	207*	2,878*	3,147*

Source: 2003 and 2005 Annual Survey of Philippine Business and Industry, NSO

*Sum of the regional statistics may differ from the overall statistics reported owing to suppressed data.

Regions where the growth of employment in printing and publishing firms were the fastest in 2003 and 2005 included Region X (52.56%), Region III (51.85%), Region XI (25.75%), and Region VII (22.54%), which can be explained by expansions in the number of establishments (refer to Table5). The total number of laborers working in the industry, on the other hand, shrank in Region IVA (47.80%) and CAR (34.19%) (refer to Table5). Correspondingly, the more than one-third reduction in the Cordillera Administrative

Region's printing and publishing establishments' level of employment can be accounted for by firms leaving the industry in 2005 (refer to Table5).

Unpaid workers in the industry accounted for 0.19% and 1.01% of total printing and publishing sector employment in 2003 and 2005, respectively. Regions with the highest share of unpaid laborers in 2003 were: Region III (11.11%), CAR (4.27%), Region VI (0.83%), and NCR (0.08%). In 2005, except for the Cordillera Administrative Region, all the previously reported shares of unpaid workers to total printing and publishing industry employment rose considerably - 11.22% in Region III, 3.21% in Region VI, and 0.83% in NCR. Additional regions that also reported climbing shares of unpaid workers to total employment were Region VII (1.48%), Region XII (1.41%), Region IVA (0.97%), and Region XI (0.52%).

In the Philippines, unpaid workers are normally members of the family (spouses and children) who are called upon to perform a variety of business-related tasks (i.e., attend to customer queries, orders and concerns) for which remuneration may be in kind – for example, food and shelter.

Lastly, on the national level, total compensation in the industry swelled by 9.35% from 2003's PHP2.9 billion to PHP3.2 billion in 2005 (refer to Table 11). Printing and publishing laborers in Region X enjoyed the largest upswing in total compensation at 60%; Region VII and Region XI were distant second and third from the top at a 34.62% at 28.3%, respectively.

Table 12: Selected Printing and Publishing Industry Personnel Average Monthly Wage Rates (in current PHP), 2004, 2006 and 2008

Occupation	2004	2006	2008	Average Growth (%)
Production Supervisors & General Foremen	14,566	13,387	17,403	11.00
Mechanical Engineers	14,175	19,753	17,004	12.72
Journalists & Other Writers	n.d.	n.d.	17,629	-
Accounting & Bookkeeping Clerks	10,355	10,700	12,277	5.71
Proofreaders and Copymakers	n.d.	n.d.	14,228	-
Compositors, Typesetters & Related Workers	11,486	11,128	10,525	-4.27
Stereotypers & Electrotypers	12,167	9,959	11,065	-3.52
Printing Engravers & Etchers	10,819	12,569	12,312	7.07
Bookbinders & Related Workers	7,834	9,787	10,649	16.87
Pressman Letterpress and Related Workers	9,622	9,747	8,943	-3.48
Unskilled Workers, except Janitors, Messengers & Freight Handlers	7,515	8,919	10,389	17.60

Source: 2010 Philippine Statistical Yearbook, NSO
 2008 Philippine Statistical Yearbook, NSO
 2006 Philippine Statistical Yearbook, NSO

Based on Table 12, majority of the average monthly wage rates of selected occupations in the printing and publishing industry consistently grew in 2004, 2006, and 2008 - accounting and bookkeeping clerks with an average rate of increase of 5.71%, bookbinders and related workers, 16.87%, and unskilled workers, except janitors, messengers and freight handlers, 17.6%. Except for compositors, typesetters and related workers, which steadily declined at an average rate of 4.27%, the rest exhibited a volatility that did not necessarily result in levels of average monthly wage rates that were lower in 2008 relative to 2004. In 2004 production supervisors and general foremen, for instance, reported an average monthly wage of PHP14,566. It fell to an average monthly wage of PHP13,387 in 2006 and climbed to an average monthly wage of PHP17,403 - thus, posting an 11% growth rate. The variations in wages across occupations were determined by the demand for the industry's products and services as well as the availability of required skills, which in the Philippines may be hampered by the "lack of formal education and training on the managerial and technical aspects of printing and publishing" (Tullao & Habaradas, 2001, p.15).

Digital Animation

Employment in the Philippine animation sector accounted for an average of 2.6% per year of the BPO workforce from 2004 to 2008 (refer to Table 13). Similar to the BPO employment levels, the animation sector workforce posted positive rates of change during the 5-year period - an annual average rate of increase of 29.10% per year from 2004's 3,000 workers to 2008's 8,000 workers. Employment level peaked in 2005 with a 50% jump – from 3,000 workers in 2004 to 4,500 workers in 2005, which was unmatched by succeeding years' employment level rates of change (refer to Table 13).

Table 13: Animation Industry Employment Level, 2004-2008

Description	2004	2005	2006	2007	2008	Average
Animation Industry						
Level	3,000	4,500	6,500	7,000	8,000	5,800
Growth Rate (%)	-	50.00	44.44	7.69	14.27	29.10
Share to BPO Employment (%)	2.99	2.77	2.76	2.34	2.15	2.60
Business Process Outsourcing						
Level	100,500	163,250	235,575	298,953	371,965	234,049
Growth Rate (%)	-	62.44	44.30	83.13	24.42	53.57

Source: Business Process Outsourcing Association of the Philippines (BPAP) as cited by the Senate Economic Planning Office (2010)

Share to BPO and growth rates were derived from the BPAP figures.

The animation sector's employment level growth rates, however, pale in comparison with the swell in the BPO sector's labor force – an average of 62.44% increase per year from 2005's 100,500 to 2006's 371,965 workers (refer to Table 13). Consequently, the share of animation employment to BPO workforce has been steadily declining – from 2.99% in 2004 to 2.15% in 2008 - during the five-year period.

Competition for animation artists is fierce not only in the domestic but, especially, in the international market. Whereas local firms in the 1980s conducted intensive in-house training, Tschang & Goldstein (2004) claim that hiring away animators who have already been trained and are ready to work is the more recent strategy employed by local and

international industry players. Consequently, some “[firms have] stop[ed] training animators” (Tschang & Goldstein, 2004, p.18).

Skilled and experienced personnel certainly have every incentive to look for greener pastures outside the domestic economy. In 2011, the reported median salary for a cartoonist/ animator in the United States is US\$46,775 per year or PHP2,011,325². For the same year, senior 2D artists in the Philippines received salaries that ranged from PHP25,000 to PHP40,000 (<http://job-search.jobstreet.com.ph/philippines/animator-jobs/>) per month or PHP300,000 to PHP480,000 a year. The average wages of selected animation and animation-related personnel in 2008 are listed in Table 14. Art directors were the highest paid personnel in the industry per NSO’s database. They nonetheless still received only 20% of what animators in the US earned in 2011.

Table 14: Selected Animated Films and Cartoons Production Industry Personnel Average Monthly Wage Rates (in current PHP), 2008

Occupation	2008
Multi-Media Artists & Animators	15,420
Art Directors	34,211
Film & Video Editors	13,946
Graphic Designers	12,830
Accounting & Bookkeeping Clerks	13,308
Unskilled Workers, except Janitors, Messengers & Freight Handlers	9,720

Source: 2010 Philippine Statistical Yearbook, NSO

In addition to the difficulty of keeping skilled and experienced personnel, the industry is also hard pressed in finding workers who acquired training in the use of new and emerging animation technology. In particular, the high-end 3D animation is an important technology/skill for local animators to master and extensively utilize if the Philippines is going to be successful in attracting a larger share of the world animation market.

²Computed at PHP43 for every US\$1.

2. Reinventing the Printing and Publishing Industry: Digital Publication

One of the most important technological developments of the 20th century is the introduction and the evolution of the internet as a tool for communication and dissemination of information. Presently, a person spends on average of 11 hours and 24 minutes online per month. The internet is mainly used to send e-mails, news and weather, information search, surfing, research, or instant messaging (Pew Internet and American Life Project as cited in Sharma, n.d.).

Accordingly, there has been a dramatic increase in the demand for digital content and, thus, electronic publishing, which, for the most part, is provided free of charge. A closer look into the preferred sites and information accessed in the internet revealed that the five most popular electronic publishing content types included: 1) scientific, technical and medical (STM), which was identified as the fastest growing media sectors; 2) legal tax and regulatory (LTR); 3) education and training, wherein the internet serves as a source of materials used to facilitate class room teaching from kindergarten to college; 4) travel, the internet provides a convenient source of travel information as well as eases bookings through its online options; and 5) finance and market, the internet provides quick and easy access to databases, academic researches and local and global news, which are indispensable to decision-makers (Sharma, n.d.).

In the United States, free on-line content has resulted in falling newspaper circulation – recorded at 5% from April to May 2010 (Zacks Investments, 2011) – and, thus, aggravating the concern over tumbling advertising revenues – estimated at 5.4% from July to September of 2010. On-line advertising revenues, on the other hand, steadily increased from 13.9% during the second quarter of 2010 to 10.7% in the third-quarter of 2010. Zacks Investments (2011) claim that “advertisers are migrating to the Internet driven by increasing online readership and lower advertising prices online than print”.

US key players are striving to cope with the present-day realities by downsizing and, therefore, cutting costs (i.e., reducing the workforce and closing printing facilities), exploring new markets (i.e., younger demographics and higher-income households who

require varied web and print services requirements), and contemplating the possibility of “charging readers for online content” (Zacks Investment, 2011). The pay and read model pioneered by leading business newspapers like The Financial Times and The Wall Street Journal, which employs a metered system “where readers after browsing a certain number of free articles, are being asked to subscribe” (Zacks Investment, 2011), has inspired various newspapers like The New York Times to do the same.

The Philippine printing and publishing industry is no stranger to offering digital services. In the newspapers and magazines sub-sector, for example, The Philippine Daily Inquirer and Summit Publishing Company, Inc., provide customers on-line access to their printed materials. Similarly, Vibal Publishing, a key player in the publishing and printing sub-sector, complements the textbook publication and on-line publishing product line services with a website for parents to promote e-learning.

In fact, given the high printing and publishing costs in the country (i.e., paper and paper products, chemical and chemical products, and power), digital publishing/e-publishing holds a more promising future for local industry participants. The demand for digital materials (i.e., books) is fueled by the accessibility and widespread use of the internet and the availability of gadgets that facilitate their use (i.e., computers, mobile phones, and e-book readers).

In this regard, the future of publishing, particularly in terms of building an AEC Global Service Hub, lies in digital publication. Accordingly, the succeeding sections for the printing and publishing sector analysis focus on digital publishing, also known as electronic publication.

2.1. Industry Definition

According to Grolier Electronic Publishing (1995), electronic publishing - also known as e-publishing and digital publishing – “refers more precisely to the storage retrieval of information through electronic communications media” (Grolier Electronic Publishing as cited in Mishra & Saxena, 2008, p.190). The process has been equated to the sum of electronic technology, computer technology, communication technology and publishing

(Saxena, 2009). Thus, fueled by the growing demand for fast and easy to access information and rapidly improving technology, particularly in the area of information and communication, e-publishing is currently utilized by all sectors of the world economy – firms, households and governments.

The literature identifies a number of different types of electronic publishing models: 1) electronic books, which is primarily conceived to meet the needs of the academic community, allows for “quick publishing and dissemination of information” (Saxena, 2009, p. 671). E-books, today, however, are no longer limited to encyclopedias, journals and textbooks. Virtually any traditionally printed book can have an electronic version; 2) electronic periodicals provide access to online reading materials (i.e., journals, magazines, newsletters, etc.) to all users anytime and anywhere; 3) electronic database refers to books, periodicals and reports, which are “converted to electronic form that allows access for public use through digital networks. The online electronic library card catalog (OPAC) shows how information could be published and that enables the user to search the document with various access points like author, title, subjects” (Saxena, 2009, p. 671); 4) electronic publishing on CD-ROM allows for more materials to be included, “both in terms of quantity and type” (Saxena, 2009, p.671); 5) print-on-demand (POD) is a hybrid of traditional and electronic publishing. Books are retained by publishers. Hard copies are made only when orders are received, which reduces the publishers’ costs (Saxena, 2009); 6) digital content publishers “deliver shorter sized works to the consumer via download to handheld and other wireless devices” (Saxena, 2009, p. 672); 7) electronic ink uses technology that allows materials (i.e., ads and newspapers) to self-update; 8) email publishing “is designed specifically for delivering regular content-based email messages. Email publishing, or newsletter publishing, is a popular choice among readers who enjoy the ease of receiving news items, articles and short newsletters in their email box” (Saxena, 2009, p. 672); and 9) web publishing is a widely used model today by many companies (through their websites) “to create content and data that is portable to other devices” (Saxena, 2009, p. 672).

2.2. On-line Publishing Value Chain

Traditional and on-line publishing share similar value chains; both aim “to generate, add value and deliver information or content to the final consumer or end-user of that content” (The Cultural Industries Growth Strategy, 1998). On-line publishing has three main revenue streams: 1) delivery infrastructure; 2) content; and 3) supporting products. The difference between traditional and on-line publishing is in the proximity between the service provider and the reader. On-line service providers, owing to the internet, have immediate access to a global customer base. Accordingly, Internet Service Providers who provide access to the network and charge subscription fees comprise the first stream of revenues in the value chain. Similar to traditional publishing, the second revenue stream focuses on individuals responsible for content such as writers, illustrators, designers and editors. On-line publishing, on the other hand, also requires professionals who can capture the content in digital form and publish the materials on websites for consumers to access through web-pages or through the intermediation of search engines or hypertext links (The Cultural Industries Growth Strategy, 1998). Revenues are then generated through subscription fees, as in the case of academic publications, and advertising. The providers of supporting products and services make up the final revenue stream. Access to the internet and, thus, on-line materials, necessitates the purchase of software (i.e., web browsers), hardware (i.e., e-readers, personal computers, mobile phones, etc.) and other products and services (i.e., network installation)

2.3. Industry Structure and Performance

The latest available data on book sales indicate that the revenues from electronic books were a small but a rapidly growing segment of the global publishing industry. According to the Association of American Publishers (AAP), e-book sales accounted for 3.64% of total US book sales in 2010, US\$441.3 million digital book sales versus US\$12.11 billion total US book sales (printed and e-books). Whereas US printed book sales went up by 3.6% in 2010 – from US\$11.25 billion in 2009 to US\$11.67 billion in 2010, e-book sales

more than doubled from US\$18.7 million in 2009 to US\$49.5 million in 2010 (Soares, 2011).

In particular, Reynolds & Ioffe (2010) determined that about 1% of US textbook sales were accounted for by digital books in 2010. While relatively low at present, their five-year projection show that the share of digital textbook sales can go up to 18.8% in 2014 owing to: 1) competitive pricing; 2) availability; 3) advances in technology; 4) integration of textbook/instruction with student outcomes; 5) viability and popularity of online learning; and 6) expansion in scope and use of open educational resources. Moreover, technological developments, especially in the field of consumer electronics, which are also gaining ground in terms of use in the educational institutions, enhance the opportunities in digital publishing.

There are, therefore, indications that support the claim that the growth of digital publishing and internet companies are achieved at the expense of traditional bookstores, especially in the US textbook sub-sector. Overall, however, it could also be argued that online bookstores serve as a marketing tool, which boosts the sale of published materials, particularly new authors and back list books. In fact, some e-book sales are prompted by customers owning the traditional published versions or owning the electronically published version encourages the user to buy the traditionally published counterpart. The above data, in fact, can be interpreted that despite the rapid increase in electronic books sales, there was little change in the total printed books – 2010's US\$11.67 billion relative to 2009's US\$11.25 billion (Soares, 2010). Undoubtedly, the signs are pointing to significant changes in global publishing industry in the near future. For now, however, the demand for traditional books – based on US data - remains strong.

2.4. Can the AEC be a Global Service Hub in Digital Publishing?

Although electronic publishing is but an emerging industry in the Philippines, within the ASEAN region, Singapore has a well-developed, competitive and steadily growing interactive digital media (IDM), for which digital publishing is a sub-sector. In general, Singapore's IDM sector posted double-digit compounded annual average growth rates in

the number of establishments (14%), employment (22%), value added (26%) and revenue (22%) for 2007 to 2010 (Deloitte, 2012). The Singapore IDM sector is composed of three sub-sectors: 1) firms involved in “creating, publishing, production, display, and distribution of IDM-related content” (Deloitte, 2012); 2) related industries engaged in production, manufacture, and sale of devices and equipment that enable consumers to access to IDM products and services; and 3) enterprises “that are involved in the development and purchase of IDM-related services” (Deloitte, 2012).

In particular, the rich media and publishing sub-sector is engaged in the following services: interactive television and film, interactive publishing services, interactive online media, web 2.0 services and interactive learning media. In 2010, the sub-sector contributed reported a \$463 million value added, an employment level of 4,080, and the participation of 280 enterprises (Deloitte, 2012). Moreover, according to Deloitte (2012), an estimated 66% of the firms that make-up Singapore’s IDM industry is of local origin.

According to the Deloitte (2012) study, the critical success factors of the enterprises comprising Singapore’s IDM sector are: 1) “increasing adoption of applications that are provided by Singaporean IDM companies to key players, such as Singtel, StarHub, Maxis, and TelkomSel”; 2) the attractiveness of the industry to foreign investors owing to the soundness, dynamism and future profitability of Singapore’s IDM industry; 3) the availability of talent and expertise, both local and foreign, in Singapore, which are essential inputs to all aspects of the IDM industry; and 4) increasing global reach, which is manifested through the “expanding []international presence” (Deloitte, 2012) of Singapore-based companies.

Finally, global players are recognizing Singapore’s potential as a means to reach the vast market in the Asia-Pacific region. Amazon, for example, is now hosting services in a data center in Singapore – formerly, Amazon Web Services were only available from data centers in the US and Europe. Amazon’s decision opens new possibilities for sub-sectors in the interactive digital media to expand their respective customer bases and innovate. Indigames, in fact, has already signified their intent “to launch a Facebook game based on

the Indian Premier League (IPL), an extremely popular cricket league in India and around the world” (www.datacenterknowledge.com/).

3. Key Players

Printing and Publishing

Seventy-three companies that belong to eight sub-sectors of the Philippine printing and publishing industry were ranked as among the Philippines’ Top 8000 Corporations in 2009. The Philippine Profiles and Perspectives, Inc. used gross revenue as a criterion in choosing the aforementioned establishments. Selected financial data are presented below for each sub-sector with key players that are involved digital publishing.

The five key enterprises in the publishing of newspapers, journals and periodicals sub-sector, which accounted for 17.81% - 13 out of 73 printing and publishing establishments - of all firms in the printing and publishing industry that were included in the 2009 top 8000 corporations are listed in Table 15. The sub-sector has the one of the highest return to equity among all the printing and publishing companies included in the Philippines’ top performing corporations; ranging from PHP0.15 net income for every PHP1 equity to PHP0.92 net income for every PHP1 equity in 2008 and 2009 (refer to Table 15).

Key players like The Philippine Daily Inquirer offer on-line access to newspapers and magazines (including archives) in addition to the sale of printed newspapers. Summit Publishing Company, Inc. – ranked number 2 in the sub-sector - is one of the leading magazine publishers in the country with more than twenty titles that caters to the different segments of Philippine society. In addition, Summit Publishing Company, Inc. offers digital media, outside-of-the-home media and consumer events services.

Table 15: Key Players in the Publishing of Newspapers, Journals and Periodicals Sub-sector, 2008-2009

Company Name	Rank		Gross Revenues (in current PHP million)		Net Income (in current PHP million)		Return on Equity	
	2008	2009	2008	2009	2008	2009	2008	2009
The Phil. Daily Inquirer, Inc.	-	574	2,386	2,209	125	122	0.23	0.23
Summit Publishing Company, Inc.	1046	1223	975	931	42	44	0.85	0.92
Pilipino Star Printing Company, Inc.	1807	2004	520	513	56	72	0.15	0.17
Pilipino Star Ngayon, Inc.	-	3083	-	297	-	28	-	0.15
SH Publications	2824	3401	288	256	41	42	0.86	0.92
Total for the Top Five Firms			4,169	4,207	263	309	0.26	0.25
Total for the Sub-sector (13 companies)			5,204	5,456	297	290	0.19	0.17

Source: Top 15000 Corporations Business Profiles 2010-2011 Edition, Volume 1, Philippine Profiles and Perspectives, Inc.

Note: Sums may not be consistent with the total of the columns owing to rounding off.

Majority of the top firms – four out of five - in the publishing and printing sub-sector realized significant increases in their respective returns to equity, ranging from PHP0.04 to PHP0.17 for every PHP1 equity in 2008 to PHP0.01 to PHP0.45 for every PHP1 equity in 2009 (refer to Table 16). Some of the key players in this sub-sector have branched out into digital publishing. Vibal Publishing, for example, does not only offer printing jobs but audio-video production (i.e., CD-ROMs to complement textbook series) projects as well. The company centers on education and education-related resources (i.e., production of textbooks and complementary learning materials). In support of its on-line publishing product line, particularly for educational materials, the company has established a hub for parents to promote e-learning. C&E Publishing, on the other hand, primarily serves the medical and science books markets through its re-printing and distribution services.

Table 16: Key Players in the Publishing and Printing Activities Sub-sector, 2008-2009

Company Name	Rank		Gross Revenues (in current PHP million)		Net Income (in current PHP million)		Return on Equity	
	2008	2009	2008	2009	2008	2009	2008	2009
Vibal Publishing House, Inc.	1177	1324	855	847	22	5	0.04	0.01
C&E Publishing, Inc.	1444	1781	684	601	6	13	0.08	0.14
Fortune Packaging Corp.	1660	2168	580	471	5	12	0.06	0.12
Rex Printing Co., Inc.	3091	2877	255	326	7	19	0.11	0.22
Book Media Press, Inc.	6163	3402	97	256	1	7	0.17	0.45
Total for the Top Five Firms			2,470	2,501	42	55	0.05	0.06
Total for the Sub-sector (8 companies)			2,939	2,973	52	67	0.06	0.07

Source: Top 15000 Corporations Business Profiles 2010-2011 Edition, Volume 1, Philippine Profiles and Perspectives, Inc.

Note: Sums may not be consistent with the total of the columns owing to rounding off.

Digital Animation

The major studios in the Philippines, according to Goldstein and Tschang (2004), include:

- ✓ Toei Animation - a Japanese company with a Philippine subsidiary that has worked on GI Joe, Transformers, Dragonball, Sailor Moon and Nadja
- ✓ Top Peg Animation and Creative Studio, Inc. – Philippine-owned company that has worked on Disney TV series like 101 Dalmations, Tarzan, Kim Possible and Hercules
- ✓ Top Draw – a new entrant in 2004 with a track record in the global market
- ✓ Philippines Animation Studios (PASI) – funded by a listed Malaysian company
- ✓ Holy Cow! Animation – specializes in 3D digital animation

In 2009 two of the five firms listed above – Toei Animation and Top Draw - as well as four members of the Association Council of the Philippines were included in the 2010-11 Philippines Top 15000 Corporations.

Data shows that Top Draw recovered considerably in 2008 from a net loss of PHP3 million to PHP12 million in 2009 or 300% revenue increase in one year (refer to Table 17). While Top Draw earned a net income which is significantly lower than the industry leader, Creative Programs, Inc. in 2009 – PHP12 million for Top Draw relative to Creative Programs, Inc.’s PHP101 million, it outperformed all top five companies with a return to equity of PHP1.38 per PHP1 equity (refer to Table 17).

Table 17: Key Players in the Animation and Animation Related Sector, 2008-2009

Company Name	Rank		Gross Revenues (in current PHP million)		Net Income (in current PHP million)		Return on Equity	
	2008	2009	2008	2009	2008	2009	2008	2009
Creative Programs, Inc.	1284	1384	776	801	-144	101	-0.14	0.09
Toon City Animation, Inc.	3872	3717	187	226	-16	6	0.70	-0.40
Top Draw Animation, Inc.	-	5352	83	134	-3	12	-0.15	1.38
Toei Animation Phils, Inc.	5268	6039	121	112	-26	8	-0.27	0.08
Challenge Systems, Inc.	7947	8706	66	66	1	1	0.13	0.20
Phoenix One Knowledge Solutions, Inc.	-	13577	32	31	0	2	0.02	0.50

Source: Top 15000 Corporations Business Profiles 2010-2011 Edition, Volume I, Philippine Profiles and Perspectives, Inc.

In 2009, half of the key players listed in Table 17 enjoyed higher levels of gross revenues – between 3.2% to 61.4% increase, which led to better ROIs (except for Toon City Animation, Inc.). According to interviews, key players offer animation and contracting services from pre-production to post-production activities.

4. Strengths, Weakness, Opportunities and Threats (SWOT) Analysis

The careful analysis of the printing and publishing, with focus on digital publishing, and the digital animation industries revealed internal factors that contribute to the sectors' ability to successfully compete (strengths) or undermine their ability to maintain their viability (weakness) in world market. Opportunities and threats, on the other hand, are elements external to the industry that affect their future growth and development. The succeeding section offers a discussion of these factors for each of the industry included in this study.

4.1. Printing and Publishing with focus on Digital Publishing

Table 18: Digital Publishing SWOT Analysis

Sector	Strengths	Weaknesses	Opportunities	Threats
Digital Publishing	<ul style="list-style-type: none"> ✓ availability to wide range of consumers/readers ✓ ease in accessing, purchasing and updating materials ✓ lower publication costs ✓ relatively more environmentally friendly ✓ higher value added ✓ prestigious literary awards that recognize literary talent and creativity in the Philippines 	<ul style="list-style-type: none"> ✓ electronic readers are expensive ✓ preference for traditionally printed books ✓ limited titles 	<ul style="list-style-type: none"> ✓ greater chance of being published ✓ higher royalties ✓ applicability to a wider range of media activity 	<ul style="list-style-type: none"> ✓ piracy ✓ copyright infringement ✓ rapid rate hardware and software obsolescence ✓ greater competition

4.1.1. Strengths

With the internet, electronic materials are available to anyone worldwide. More than 2.2 billion people used the internet in December 2011. According to Internet World Stats

(2011), majority of them resided in Asia (44.8%), Europe (22.1%) and North America (12%) (<http://www.internetworldstats.com/stats.htm>). North America, however, has the highest penetration rate at 78.6%, followed by Oceania/Australia at 67.5% and Europe at 61.3% (refer to Table 19). Worldwide, an estimated 32.7% of the 6.93 billion population has access to the internet (<http://www.internetworldstats.com/stats.htm>).

In addition, a typical person is online an average of more than 11 hours per month (Sharma, n.d.). Combining the time spent at home and at work, an average American's monthly internet usage is ten times more than the world norm, 25 hours and 25 minutes at home and 74 hours and 26 minutes at work (Sharma, n.d.). Accordingly, electronically published material (i.e., journals, magazines, books, etc.) has a global audience that spending a significant proportion of their time reviewing digitally available materials.

Table 19: Internet Usage Statistics

World Regions	Population (2011 Estimate)	Internet Users Dec. 2000	Internet Users Latest Data	Penetration (% Population)	Growth (in %) 2000-2011
Africa	1,307,524,058	4,514,400	139,875,242	13.5	2,998.4
Asia	3,879,740,877	114,304,000	1,016,799,076	26.2	789.6
Europe	816,426,346	105,096,093	500,723,686	61.3	376.4
Middle East	216,258,843	3,284,800	77,020,995	35.6	2,244.8
North America	347,394,870	108,096,800	273,067,546	78.6	152.6
Latin America	597,283,165	18,068,919	235,819,740	39.5	1,205.1
Oceania/Australia	35,426,995	7,620,480	23,927,457	67.5	214.0
World Total	6,930,055,154	360,985,492	2,267,233,742	32.7	528.1

Source: Internet World Stats (2011), <http://www.internetworldstats.com/stats.htm>

Second, the internet allows consumers immediate, convenient and easy access to electronically published materials (i.e., fiction and non-fiction books, journals, magazines, newsletters, etc.). Buying digital books, for instance, can be done anywhere – at home, at work, while traveling, etc – with a click of the mouse. In addition, digital publishing is also an ideal storage and retrieval mechanism for information that requires frequent updating such as the news. Not only is it less costly but data also reach its audience in a timely manner and provides an easy means for revising and correcting.

Third, publishers and readers/users of information also benefit from the cost reductions realized by eliminating the need for paper and ink in electronic publishing (Saxena, 2009). Certainly, less paper and chemicals demand mean less trees would be cut and, likely, less harmful wastes would be generated; thus, the environment benefits.

Fourth, in terms of content, digital publishing offers a broad spectrum of possibilities – colors, textures, animation, interactive, etc. – that not only enhances its entertainment value but also offers a new and an effective means of teaching and learning. By all indications, therefore, electronic publishing is posed to revolutionize data storage and retrieval, entertainment habits and broaden educational opportunities.

Lastly, a number of prestigious national and local awards recognize the creativity of Filipino writers. Among them are, but not limited to: 1) The Ramon Magsaysay Award, established in 1958, “is given to persons regardless of race, nationality, creed or gender – who address issues of human development in Asia with courage and creativity, and in doing so, have made contributions which have transformed their societies for the better. The award is given in six categories: government service; public service; community leadership; journalism, literature and creative communication arts; peace and international understanding; and emergent leadership” (<http://www.rmaf.org.ph/?id=2&page=history>); 2) National Artist Award (Gawad Pambansang Alagadng Sining) “was established under Proclamation No. 1001 dated April 27, 1972 to give appropriate recognition and prestige to Filipinos who have distinguished themselves and made outstanding contributions to Philippine arts and letters” (<http://www.ncca.gov.ph/about-ncca/org-awards/org-awards-national-artist-guidelines.php>). The National Artist Award was raised to the level of the Order of National Scientists and the Gawad sa Manlilikhang Bayan and, thus renamed to the Order of National Artists (Orden ng mga Pambansang Alagad ng Sining) by Executive Order No. 236 dated September 19, 2003; 3) National Awards, sponsored by the National Book Development Board and the Manila Critics Circle, are given every year to “the best books written, designed and published in the country” (http://nbdb.gov.ph/index.php?option=com_content&task=view&id=65&Itemid=97); 4) Gintong Aklat (Golden Book) Awards are given every year by the Book Development

Association of the Philippines “to the best books judged for all-around excellence” based on the quality of design, printing, and binding, and the significance of content and quality of writing (http://nbdb.gov.ph/index.php?option=com_content&task=view&id=65&Itemid=97); and 5) The Carlos Palanca Memorial Awards for Literature aims to “help develop Philippine literature by providing incentives for writers to craft their most outstanding literary works” (<http://www.palancaawards.com.ph/history.php>).

The various awards listed in the preceding paragraph goes beyond recognizing literary talent. They also confer upon the recipients material benefits. In the case of the National Artists Award, for example, prizes include cash, monthly pensions, medical and hospitalization benefits and life insurance (<http://www.ncca.gov.ph/about-ncca/org-awards/org-awards-national-artist-guidelines.php>). Cash prizes, certificates and medallions are also given to recipients of the Ramon Magsaysay Award (<http://www.rmaf.org.ph/?id=1&page=readMore>).

4.1.2. *Weaknesses*

Despite the seemingly lucrative future of the digital publishing industry, a few key concerns require attention for it to maximize its potentials. First, electronic materials require electronic readers, if not, computers. Currently, these gadgets are still priced above what typical consumers may be willing and/or able to spend (<http://www.ecommerce-digest.com/ebooks-survey.html>).

Second, not all printed books/materials have electronic counterparts. While the list of titles available in digital format is growing, electronic book titles are still but a small portion of the printed book titles (<http://www.ecommerce-digest.com/ebooks-survey.html>).

Lastly, the preference for printed books outweighs any and all advantages offered by electronic materials (i.e., graphics) for most consumers, which explains the strong demand for traditionally printed materials, especially in the US (<http://www.ecommerce-digest.com/ebooks-survey.html>).

4.1.3. Opportunities

Publishing is made easier with the use of the internet. An author now has a choice of publishing his work with or without the aid of a publishing company. Free softwares (i.e., Calibre and Mobipocket E-book Creator) allow one to convert a Microsoft Word file into an e-book format (i.e., AZW and MOBI). Once converted into an acceptable e-book format, an author can sell the work through an aggregator like Smashwords or have the aggregator sell the digital book to major e-book sellers such as Barnes and Noble eBookstore and Apple's iBooks (<http://reviews.cnet.com/how-to-self-publish-an-e-book>). Accordingly, added to the vast materials provided by established and traditionally-published authors whose works can also be made available in digital form, an untapped source of new and potentially prolific writers is made possible by the relative ease of self-publishing electronically. Lower costs – owing to the elimination of printing, transportation and warehouse costs - may also mean higher royalties in the near future.

Finally, digital publishing has potential for application to a wide range of markets, including advertising and digital animation. New products can be created by applying animation techniques to electronic materials, which can, in turn, be used for advertising or digitally animated children's books or interactive educational materials.

4.1.4. Threats

According to Castro, Bennett and Andes (2009), “piracy is the reproduction and distribution of material protected by copyright without the permission, including on P2P networks”. Book piracy, particularly, in developing countries, is a serious concern among traditional publishers. Textbook buyers, specifically among tertiary level clients, can acquire cheaper copies of the books they need from establishments that photocopy, bind and sell them. An interview with a key player in the Philippines attributes the problem to the lack of “resources and manpower to strictly implement” laws on Intellectual Property.

Electronic materials like e-books are even easier to copy and share/sell (Jungla, 2010). They can be quickly downloaded, stored indefinitely in flash and hard drives, and shared

with relative ease via e-mail, instant message, posted on websites, or copied to another flash/hard drive.

Data on digital piracy is mostly on incidents involving the US motion picture, sound recording, business software, and entertainment software/video game industries. Castro, Bennett & Andes (2009) maintained that about US\$22 billion were lost due to digital piracy (US\$20 billion) and retail opportunities (US\$2 billion). If these figures are any indication of the magnitude applicable to the digital publishing sector, then piracy, if unabated, is a serious threat to the electronic publishing industry.

Copyright infringement goes hand-in-hand with digital piracy. Since creative works, for instance published books, are protected by laws on Intellectual Property, the unauthorized reproduction and distribution of these materials – piracy - constitute copyright infringement.

Third, the choice of formats or platforms is critical for authors and digital publishers for it determines the hardware and software components the electronic material would need for consumers to access it. The rapidly changing technology, particularly in the area of consumer electronics, renders certain formats/platforms obsolete and, thus, the electronic materials that depend on them.

Lastly, in 2008, traditionally published books accounted for about 98% of global book sales, the balance, 2%, was attributed to electronic book sales (<http://publishingtrends.posterous.com/stats-global-book-publishers-ibisworld-0>). While digital book sales are growing at relatively rapid rates, 39% compounded from 2004 to 2008 for the US (<http://publishingtrends.posterous.com/stats-global-book-publishers-ibisworld-0>), numerous competitors - which include publishing industry rivals include online bookstores/aggregators/internet companies, self-publishers, traditional and established book publishers and traditional bookstores, make it a very competitive sector.

4.2. Analysis

The internet has literally opened a world of possibilities for the publishing industry by making it easy to retrieve and publish information. The stakeholders in the digital

publishing industry – including authors/writers, publishers, aggregators and online and traditional publishers that offer digital publishing services – are uniquely poised to make the most of the opportunities it offers, namely, a greater chance of being published and the applicability to of electronic materials to a wider range of activities.

A global audience and the ease of accessing timely information are strengths that the digital publishing can capitalize on to encourage new authors to submit their work for publication or to publish their output themselves. Royalties may also be higher in digital publishing as compared to traditionally-published works. Authors for the latter medium accept an average of 10-15% royalty given that the process entail considerable costs (i.e., editing, printing preparations such as artwork design and layout, printing thousands of copies, transportation and warehouse, overhead, etc.). The stakeholders in digital publication, especially the authors and book agents, believe that royalties should be more than the current 25% for e-books because some of the costs associated with traditionally published works will no longer apply, for instance printing, transportation and warehouse costs (Soares, 2011)). In other words, electronic publication could be a more lucrative endeavor for content creators. Moreover, as digital publication requires neither paper nor chemicals, electronic publications may be more appealing to a growing number of environmentally-conscious clientele. Furthermore, as new and established authors take advantage of the opportunities for digital publication, one of the current weaknesses of the sector, which is the limitation on the number of available titles in digital form, can be minimized, if not completely eliminated. Lastly, these endeavors will create new jobs for authors, editors, illustrators, animation artists, web designers and, in the case foreign manuscripts, translators. Filipinos can significantly contribute their talents in the accomplishment of these tasks – regardless of their place of residence for these tasks can be accomplished and submitted through the internet - and, thus, help build an AEC Global Service Hub.

Digitally published materials offer more than just the printed word. They also make possible the integration of animation and interactive activities that add to the potential of an author's/writer's work. Electronic materials, for example, can revolutionize the processes

of teaching and learning. Animated and interactive materials allow users to use more of their senses (i.e., sight and sound), which not only makes learning enjoyable, but also, according to experts, increases retention and facilitates the recall of information. Similarly, the application of animation to children's books can create new products, for instance an electronic book where the reader can choose how a story would progress – given the basic premise - and, thus, end. Every new selection would then create a new story and not only teach a child to read but can also serve as a stepping stone to teaching logic, critical thinking and the consequences of choices. Marketing and advertising, interactive/digital games, business and research can also benefit from the versatility and creativity of electronic materials.

Rapidly changing technology is both a boon and bane for the digital publishing industry. For one, it has made possible the existence and growth of digital publication through the internet and the introduction of electronic readers. Presently, electronic readers are still relatively expensive, which limits the market for electronic materials to those who can buy an iPad, Kindle, etc. In time, as these companies strive to improve on their products (i.e., lightweight and flexible screens, wireless downloads, bigger capacity, etc.) and given a larger customer base, e-readers should become more affordable. In addition, improvements in technology are also overcoming the problems concerning interoperability across consumer technologies – making it easier for gadgets to adapt to new trends. Critical to maximizing the gains from convergence, which is seen as the next big wave within the IDM sector, is knowledge transfer from global experts – sharing of ideas by industry leaders (Deloitte, 2012). Technology - in the form of software, networks and data bases - is also aiding stakeholders to filter and customize information according to the needs of the consumers. Hence, specialization and narrowcasting, for instance in the field of current affairs, commerce, education or fiction, is also an emerging trend (The Cultural Industries Growth Strategy, 1998). Improvements in technology and the development of new ones, however, can aggravate the concern of publishers on the choice of format or platform. There is a real danger of obsolescence if a platform is eliminated owing to the introduction of new and better models of e-readers.

Finally, the problem of piracy and copyright infringement can be addressed by technology. Presently, in the movie, music and software industries, file sharing is mitigated by industry stakeholders through digital rights management (DRM), which are “technical controls embedded within the content to prevent unauthorized use” (Castro, Bennett and Andes, 2009, p. 7). The content scramble system scheme, for instance, encrypts video on DVDs while software usually requires “a unique license key to activate the product” (Castro, Bennett and Andes, 2009, p. 7). Castro, Bennett and Andes (2009) assert that DRM curbs digital piracy but piracy is still a concern for the industry owing to the development and use of illegal methods to continue the unauthorized use electronic materials despite DRM.

In the digital publishing industry, the use of DRM creates unavoidable consequences such as “interoperability challenges especially for proprietary technology” (Castro,*et al.*, 2009, p. 8). On account of DRM, e-books purchased from a particular online source, for example iTunes for iPad, may not be read by Kindle or Galaxy. Despite the drawback, however, online digital book retailers protect their products against piracy through DRM.

4.3.Solutions to the Piracy Problem and Technology

Other than DRM, Castro, *et al.* (2009) elaborated on several technology-aided solutions that hinder digital. Among them are: 1) network management; 2) P2P network pollution; 3) content identification; and 4) blocking internet users from website feature pirated content.

First, uploading and downloading digital publishing content require high bandwidth, including P2P applications. “Pirates,” according to Castro, *et al.* (2009), “constitute the largest group of Internet users engaged in uploading and downloading the largest amounts of content.” Thus, revising service plans from the popular “unlimited use” to volume-bounded service or usage-sensitive pricing plans, with the cooperation of internet service providers (ISPs), can deter the acquisition and distribution of illegally obtained digital materials. Network management has been employed in OECD countries more as a means of managing internet traffic rather than to reduce the incidence of piracy and, therefore, “has been criticized by proponents of open access to copyrighted materials on grounds that

they limit free expression” (Castro, *et al.* 2009). Similarly, network management is an obstacle not only to the “illegal exchange of copyrighted content” (Castro, *et al.*, 2009) but also to the use of electronically published for legitimate means such as research and other academic purposes.

Second, P2P network pollution refers to providing sites that feature pirated content with file copies that are of inferior quality or those with content that are different from the genuine article, music, or video. P2P network pollution can, thus, slowdown the circulation of illegally-obtained digital materials (Castro, *et al.* 2009).

Third, content identification systems, which “can be detected by automated means if others try to share it on file sharing networks or websites,” (Castro, *et al.*, 2009) allow content owners to: 1) identify the source of the recording through watermarking; 2) determine if their work has been uploaded to a website through fingerprinting; and 3) require websites that distribute pirated materials to constantly update the means of uploading and downloading files, called hash tags, - through metadata systems - and, thus hinder access to digital materials (Castro, *et al.* 2009).

Lastly, blocking or denying internet users ISP connection to websites hosting pirated content requires: 1) federal government mandate to block websites that facilitate the exchange of illegal content; 2) private or public institution that would keep an updated list of websites (domain names or IP addresses) to block (Castro, *et al.*, 2009).

Clearly, technology-aided measures can deter or reduce the incidence but not completely prevent or eliminate digital piracy. Castro, *et al.* (2009), therefore, concluded that “government has an important role to play in protecting the intellectual property of copyright holders.” According to dialogues with Philippine industry stakeholders, the law on Intellectual Property is sufficient. Enforcement, however, requires resources that are acutely limited. In the case of digital publishing, monitoring and implementation costs would indeed prove to be prohibitive for if technology can be used to impede the progress of digital pirates then technology can also be employed by violators to circumvent the measures discussed above; for example, changing domains when websites are blocked or

shut down or replace inferior quality digital materials with the better ones when they are uploaded in official sites.

A more lasting solution to the problem of digital piracy, therefore, is changing social behavior - for “digital piracy exists, in large part, because individuals choose to engage in it” (Castro, *et al.* 2009). To this end, Castro, *et al.*, (2009) recommend education and the increased legal access to digital content. Education usually takes the form of campaigns against piracy, the first of which date back to 1992 when the Software Publishers Association attempted to inform the public of the impact of piracy on the industry and convince consumers to respect intellectual property. Similar campaigns, since then, have been launched by various sub-sectors of the industry (i.e., anti-piracy clips in theaters and DVDs) in the hopes that social norms will, in time, favor the rights of copyright owners (Castro, *et al.*, 2009). Lastly, the limited release of certain digital content can create a market for illegal copies (i.e., movies screened only in selected localities and countries, television series that can be viewed only in their countries of origin, etc.). Emerging consumer demand for entertainment, for instance the desire to watch television series continuously instead of on a weekly installment basis, are satisfied by digital pirates. Copyright owners and producers can do the same by making digital materials – electronic books, movies and music – available to the global market through legal means (Castro, *et al.*, 2009). Clearly identifying them as authorized or legal copies can also help ensure that consumers can distinguish and choose them over their pirated counterparts.

4.4. Digital Animation

Table 20: Digital Animation Industry SWOT

Sector	Strengths	Weaknesses	Opportunities	Threats
Animation	<ul style="list-style-type: none"> ✓ continuous training on traditional methods ✓ in-house training in local animation firm ✓ foreign-ownership and/or foreign affiliations ✓ familiarity with US language, culture, humor and history ✓ expertise in 2D ✓ Filipinos easily adjusts to industry changes ✓ strong industry association 	<ul style="list-style-type: none"> ✓ lack of data on the industry ✓ dominance of SMEs ✓ shortage of creative talent ✓ high investment required for new technologies ✓ difficulty in retaining skilled and experienced animation artists ✓ high cost of talent ✓ inadequate marketing and distribution network 	<ul style="list-style-type: none"> ✓ declining cost of critical inputs, particularly local broadband internet services ✓ new gadgets that expand market for animation ✓ untapped domestic market 	<ul style="list-style-type: none"> ✓ preference for foreign animation output ✓ inadequate facilities in training institutes ✓ weak academe-industry linkage high-cost of software licenses ✓ inadequate institutional support ✓ migration of animation artists ✓ low cost of foreign rivals

4.4.1. Strengths

The existing literature and interviews with industry stakeholders revealed a number of the sector's strengths starting with the claim of the Animation Council of the Philippines, Inc. (ACPI) that the continued training and emphasis on traditional methods (i.e., hand-drawings) gives the Philippine digital animation firms an edge over their foreign competitors. ACPI maintains that the processes involved in hand-drawings stimulate creativity and, thus, a factor that strengthens the competitive advantage of the local industry.

Second, the availability of in-house training in local animation firms, which enhances the education received from formal training institutions and raises the technical proficiency of workers through experience, also benefits the sector.

Third, foreign-ownership and/or foreign affiliations of large-scale animation firms is an major advantage in building credibility in the global market, acquiring finance and creative expertise, and securing contracts from foreign clients. In fact, with the growing opportunities abroad, strong linkages with foreign key players raise the potential for

success of business and industry strategies anchored on the co-production model and local content development (WTC, 2008).

Interviews with industry participants also bare out that the shared history, language and traditions between the Philippines and the United States give local animation participants an advantage over the country's closest rivals. Local animation artists are able to effectively convey humor, in particular, owing to their familiarity with idiomatic expressions, for instance, and other cultural nuances.

In addition, despite the emergence of tough competitors, dialogues with industry stakeholders claim that the Philippines' expertise in 2D animation remains unmatched. The application of software and hardware tools has enhanced the utilization of the technique and expanded its market. Moreover, Filipino animation artists adjust easily and quickly to changes in techniques and their applications to the industry.

Lastly, the Animation Council of Philippines, Inc. (ACPI) – one of the animation industry's professional associations – helps industry members establish well-functioning infrastructure needed by the local animation sector like marketing and distribution networks, offers venues for showcasing various animation output (i.e., annual competition like the Animahenasyon) and training and the spread of new technology (i.e., many of ACPI's members are schools that offer animation degree courses), and serves as a springboard for advocacy campaigns (i.e., lobby for government policies and will benefit all industry stakeholders).

Among the programs that ACPI conducts for the benefit of the sector include: 1) support for association members when participating in trade fairs and business missions; 2) training of animation artists through its collaboration with TESDA and the development of curricula and courses to ensure that graduates of animation programs are job ready; and 3) conduct of various content creation workshops to encourage and promote the development of locally-produced original content (ACPI, 2011).

4.4.2. *Weaknesses*

First, critical to the promotion of the animation industry is data. Accurate estimates of the number of establishments in the sector, the size of the enterprises, the number of workers it employs as well as the sector's value added, revenue and cost are essential in tracking the industry's performance, harnessing its potentials, determining the sector's needs and the assistance its participants requires, and lobbying for policies (i.e., incentives, training, etc.) that will directly benefit all industry players. Currently, there are scarce accurate private and/or public databases on the sector to help serve these purposes.

Second, the dominance of small- and medium-scale limits the capacity of firms and results in some animation firms having to turn down big projects. It also constrains the marketing capability of local animation enterprises for the task primarily falls on the shoulders of one person and limits the scope and reach of the campaign (PEARL2, 2008). On an industry level, the situation is exacerbated owing to the lack of a unified marketing program resulting in the inability of the local industry to maintain market presence.

Third, both the literature and interviews assert that the industry is unable to draw creative talents who can develop original-content animation work. In the stages of production of animated work, going up the value the chain requires that animators be capable of conceptualization work (Tschang & Goldstein, 2004); thus allowing them to keep up with the market's tastes and preferences. Conceptualization employs story-telling abilities and creativity that Filipino artists possess but require high investments and virtually no financial returns for five to seven years for full-fledged animation films. Accordingly, majority of the projects that use original Filipino content are short clips – three to five minute films – that are prepared for independent festivals. The exception to this is *RPG Metanoia*, the first Philippine full length CG animated feature film in 3D, which was released in 2010.

Fourth, local animation artists are experts in 2D animation but few can work on projects that utilize other animation technologies - for example 3D, because of the prohibitive investment in equipment that the technology requires; thus, limiting the types of projects that domestic animation service providers can accept. Monitoring and adapting

new technologies in animation production are critical elements for the continued viability and profitability of firms in the industry.

Fifth, the local animation industry has difficulty in retaining skilled and experienced animators, supervisors, and technical personnel owing to the draw of higher compensations and benefits offered by foreign animation outfits (ACPI, 2011).

Lastly, local animation service providers prefer to focus on tasks associated with completing animated projects (i.e., creating storyboards and story reels, applying color, textures, shading, and lighting, incorporating visual effects and integrating the musical score) as oppose to the business processes necessary in securing, marketing and distributing projects.

4.4.3. Opportunities

One of the potential sources of Philippine animation industry growth and profitability is the steady decline in the cost of local broadband internet services as well as faster internet connections resulting in greater efficiency (i.e., shorter turnaround times and transmissions to clients and lower production costs).

Second, beyond the expected growth in the traditional markets for animation output (i.e., featured film, advertising, gaming, military and medical simulations, etc.), demand for animation services is expected to grow considerably in the short- to medium-term owing to the introduction of gadgets (i.e., tablets, hand-held devices for e-learning, etc.), which creates new markets/applications for animation output.

Finally, interviews with industry stakeholders believe that there is a large untapped domestic market from which future demand for the industry's services and output would originate. An example is the application of animation to education. Developed countries are now using e-learning with digitized content and, thus, incorporate animation aspects. The digitization and possible production of animation series based on children's books, according to ACPI, could be other sources of growth in the domestic market for the industry.

4.4.4. Threats

ACPI considers the Filipinos preference for foreign goods and services, including animation series and films, as an obstacle to the promotion of animation works with original, homegrown content. Certainly a following for native Filipino animation series, films and other products would encourage artists to develop original ideas and help increase the number of Filipino animation works that the domestic and international markets can enjoy.

Similarly, the PEARL2 (2008) study on the digital animation sector maintain that – except for the very few large educational institutions - training institutes for animation often lack needed facilities to equip graduates with the knowledge and skills to use the latest animation technology. Animation schools require the latest software and hardware to guarantee that graduates are industry ready. High costs of equipment and the rapid rate of obsolescence, however, result in a gap between the skills acquired in training institutes and those that are needed by the industry.

The PEARL2 (2008) study also asserts that the academe-industry linkage can be strengthened, which, among other things, can result in a curricula for animation degree/training courses that fully address the needs of the animation industry.

The high cost of software licenses for digital animation that limits the budgets of animation enterprises on the rest of the inputs necessary for animation production is also identified as a potential obstacle to the local sector's viability and profitability.

Lastly, inadequate institutional support, particularly from complementary industries and government, limit market access and push up the cost of production (Tschang & Goldstein, 2004). Local TV stations, for instance, can champion locally-conceptualized and produced animated cartoons by regularly airing them. Not only will the strategy boost the local demand for the industry's output but it would also pave the way for encouraging and developing local talent. The government can also create a business environment that would enhance the sector's competitiveness by, for instance, removing the taxes on software and

hardware and expediting the release of imported animation equipment especially for the small-scale industry players that dominate the sector.

ACPI confirmed that foreign rivals enjoy significantly lower costs because of government support (i.e., co-production and development programs, fiscal incentives, etc.). China and India's costs, for instance, are about 50% less than that of Filipino animation firms, which gives firms originating from these countries an advantage when competing for subcontracted projects.

Consequently, strong institutional support and higher pay in neighboring countries attract experienced and well-trained animation artists to rival countries like Singapore and India. The local industry is compelled to continually shoulder the cost of training and adjust to the introduction of new artists into the work process throughout the completion of various projects.

4.5. Analysis

An opportunity for improving the price competitiveness of Philippine digital animation firms stem from the expansion of local broadband internet services, especially with the construction of the planned cyberspace corridor in the super regions, which, in turn, can further reduce the cost of one of the most important inputs to the digital animation sector services and result in greater efficiency through faster internet connections (i.e., shorter turnaround times and transmissions to clients). If this can materialize together with a concrete means of reducing software licenses costs (i.e., removing the taxes on software and hardware and expediting the release of imported animation equipment) and improvements in training received from educational institutions (i.e., improvement in facilities, especially in the equipment used for animation) – which can expand local expertise beyond the Philippine industry's niche in the 2D market segment - then Filipino digital animation enterprises can deepen and expand their hold on the outsourcing/subcontracting segment of the market.

Moreover, growth in the market for digital animation in the near future is expected to originate from several sources, namely: 1) traditional markets such as featured films,

advertising, and gaming; 2) new markets that are expected to open with new applications of modern gadgets and other technological innovations; and 3) large untapped domestic market including the application of digital animation to education and the digitization and possible production of animation series based on children's books.

In fact, the World Trade Centre (WTC) (2008) placed the global market for content and animation-related services at US \$34 billion and US\$80 billion for finished products by 2010. According to the WTC (2008), the animation sector's major markets include: 1) the United States; 2) Europe; 3) Asia; and 4) the Middle East and Africa.

The US and Europe remain to be the largest markets for animation services. Contributing to the United States' dominance of the industry are its sizeable population and "free" market for creative production. The WTC (2008) maintain that "US broadcasters are often able to wholly commission programming and when their license fees fall short, producers are often able to secure private sources of revenues or distribution to round out their budget." Whereas, the United Kingdom is the principal European producer of animation and many of its animation companies have established international reputation.

Asia is predicted to have the biggest potential for industry growth and development – both as a source of services and well as demand for finished products. The WTC (2008) identified Singapore, Hong Kong, Korea and Thailand as "relatively good sources of sales revenues for children's and factual programming." In addition, the Middle East and Africa, according to the WTC (2008) "have recently become good sources of sales for children's and family programming although the revenues are modest".

Filipino digital animation firms are poised to take advantage of these new markets through their strong linkages in the international market through affiliations with global players and familiarity with US language, culture, humor and history. Moreover, Filipino workers are highly trainable, animation artists, in particular, adjust easily to industry changes. Success in tapping into the local and global opportunities could transform SMEs into large-scale enterprises that have the capacity to take on greater work from the global market as well as resources to invest in original content development. Similarly, the mixture of foreign outsourced animated services and the creation of series with local

content can stem the tide of animation artists who leave the Philippines for foreign companies that offer considerable financial and professional gains.

The extent to which Filipino digital animation firms can increase their share of the growing global animation market, however, depends on how well the industry's weaknesses and threats are addressed. Raising the share of local digital animation materials aired in the domestic market, for instance, depends on the Filipinos' tastes and preferences, which, according to ACPI, favor foreign animation series and films. Support of the government and private sector, which can take the form of airing more locally-produced animated works, especially those that contain original content, will not only increase market access for domestic firms but also develop local talent and original content.

5. Regulatory Environment

5.1.Existing Regulations

Printing and Publishing

The Philippine government has passed laws, issued executive orders, and enforced policies that are intended to protect all the stakeholders of the printing and publishing industry - traditional and, by extension, electronic - as well as to promote the growth and development of firms that belong to the sector. They include, but are not limited to: 1) Republic Act 8293, The Intellectual Property Code of the Philippines; 2) Republic Act 8047, The Book Publishing Industry Development Act; 3) Executive Order No. 226, Omnibus Investment Code; 4) 2011 Investment Priorities Plan; and 5) Republic Act 8424, The Tax Reform Act of 1997.

While the Intellectual Property Code of the Philippines (RA 8293) focus on “the development of domestic and creative activity, [facilitation of] technology transfer, [attraction] of foreign investments, and [ensuring] market access for [Philippine] products” by guaranteeing intellectual and industrial property, the law affects the printing and publishing sector for it specifically requires the consent of authors before “published

works” are made public (via, for instance, books, pamphlets, and other writings, and periodicals and newspapers). Original works, including literary and artistic works, are likewise afforded copyright protection by virtue of the Code. Accordingly, as creativity flourishes owing to the protection the writers’ output, more opportunities for the printing and publishing sector will emerge (Tullao, Jr. and Habaradas, 2001).

The main goal of The Book Publishing Industry Development Act (RA 8047) is to develop and implement a National Book Policy that will promote the growth of the Philippine book industry. National Book Development Board, established by RA 8047, works to address the issues faced by the book publishing sector, specifically “authorship and creative activity, marketing and distribution, printing, readership, and the library system” (Tullao & Habaradas, 2004) through, for example, a network of fiscal and non-fiscal incentives (supported by Executive Order 226).

Among the fiscal incentives offered by RA 8047 are: 1) tax and duty-free importation of books, specifically children’s books; children’s educational comics; bookmics – blend of books and comics; scientific, cultural, medical, architectural and professional magazines; and book catalogs; 2) tax and duty-free importation of raw materials used in book publishing; 3) exemption from the value-added tax applied to the sale, importation, printing, publication or distribution of books; 4) tax and duty-exempt importation of spare parts and supplies, particularly for consigned equipment or those imported tax and duty-free by registered enterprises; and 5) tax holidays (RA 8047, 1994).

The Omnibus Investment Code - a.k.a., Executive Order 226– assures the inclusion of book development activities in the Philippines’ Investment Priorities Plan, which, in turn, grants fiscal and non-fiscal incentives for persons and enterprises engaged in book publishing and book publishing-related activities (EO 226, 1987).

The sector, as guaranteed by Executive Order 226, is included in the Board of Investments’ 2011 Investment Priorities Plan. The 2011 IPP offers: 1) fiscal incentives such as income tax holidays, tax and/or duty exemption on imported capital equipment, exemption from 12% input value added tax on allowable purchase of goods and services (i.e., communication charges) and/or additional deduction for labor expense; and 2) non-

fiscal incentives like unrestricted use of consigned equipment, exemption from wharfage dues and export tax, duty, and fees, employment of foreign nationals, and special investors resident visa (Triple i Consulting, 2005-2011).

Lastly, the Tax Reform Act of 1997 or RA 8424 reduced the tax imposed on the royalties of book authors from 20% to 10%, which may serve as an incentive to authors and, thus, promote productivity.

Digital Animation

Enabling laws and policies that affect the animation industry include: 1) Executive Order 561 - Formation of the Super Regions and the Mandate of the Superregional Development Champions; and 2) 2011 Investment Priorities Plan.

Executive Order 561, issued in 2006, among other things, provides for the establishment of “super” regions and a cyber corridor that “traverses [] ‘super’ regions from Baguio to Cebu to Davao” (<http://www.visitmyphilippines.com/index.php?title=ExecutiveOrder561-FORMATIONOFTHESUPERREGIONSANDMANDATEOFTHESUPERREGIONALDEVELOPMENTCHAMPIONS&func=all&pid=309&tbl=1>) that will serve as “catalyst[s] development” and, thus, “create opportunity across the country” (<http://www.visitmyphilippines.com/index.php?title=ExecutiveOrder561-FORMATIONOFTHESUPERREGIONSANDMANDATEOFTHESUPERREGIONALDEVELOPMENTCHAMPIONS&func=all&pid=309&tbl=1>). The cyber corridor is envisioned to and, thus, support for the information, communication and knowledge economy through a wide range of cyberservices that adhere to global standards, including a US\$10 billion high bandwidth fiber backbone digital network (Executive Order 561).

The animation sector – classified as under creative industries - is included in the “export industries” list of the Board of Investments’ 2011 Investment Priorities Plan (IPP) along with information technology and IT-enabled services. Similar to the printing and publishing industry, therefore, industry participants qualify for: 1) fiscal incentives such as income tax holidays, tax and/or duty exemption on imported capital equipment, exemption

from 12% input value added tax on allowable purchase of goods and services (i.e., communication charges) and/or additional deduction for labor expense; and 2) non-fiscal incentives like unrestricted use of consigned equipment, exemption from wharfage dues and export tax, duty, and fees, employment of foreign nationals, and special investors resident visa (Triple i Consulting, 2005-2011).

According to ACPI, the animation industry – under IT and IT-enabled services - was also one of the five sectors President Gloria Macapagal Arroyo identified for promotion during her administration, which granted privileges to industry participants such as invitations to and support for participation in international conferences, exhibits and fairs.

Lastly, Technical Education and Skills Development Authority (TESDA) supports the industry by sponsoring nationwide industry entry-level training, which helps the sector develop and recruit talent nationwide. Presently, they include short courses on: 1) animation (NC2); 2) digital animation (NC3); and 3) 3D animation (NC3). The Department of Education is also working with ACPI in developing a curriculum to train students in visual graphics design and basic animation, which would be offered to technology-vocational high school.

5.2. Modeling Success: Lessons from Our Neighbors

There is little doubt that several neighboring ASEAN countries' governments have done well in creating enabling environments in which their respective animation industries have bloomed and grown. Valuable lessons can, therefore, be learned from these countries on how best the Philippines can support creative industries and promote the region as a services hub.

Development funding, co-production/investment programs, and participation in trade fairs, according to interviews with Philippine local animation stakeholders are among the most effective means of assisting the industry nurture animation artists and small- and medium-scale enterprises who/that can produce original ideas and concepts (content), secure investments and subcontracted projects from the global market as well as exhibit their portfolio, and catch the attention of possible partners and be acquainted with new

technology. The Media Development Authority Singapore employs all three strategies to support “the growth of innovative ideas and concepts into commercial animation productions”, which has resulted in the creation of more “original made-by-Singapore content that are targeted at the international market” (Seah, 2008). Thailand’s Software Industry Promotion Agency (SIPA) has a similar policy on co-production. SIPA provides “30% funding for a digital content entrepreneur as a co-production partner” (Wiwatsinudom, 2008).

Small- and medium-scale players, in particular, do not find it easy to shoulder the cost of participating in trade fairs (i.e., air fare, hotel accommodations, booth fees, etc.) and few, if any, are able to take advantage of the opportunities offered by these events. SIPA “funds the participation of animation and game production enterprises with original content in world exhibits, matches major investors with producers of animation and game as well as facilitates trade negotiation and collaboration” (Wiwatsinudom, 2008).

Lastly, cultivating domestic market opportunities are just as important as penetrating the global market. Among the most effective means of increasing opportunities within the country for animation companies is encouraging local networks to air animation series/films with original, indigenous content. China, through the State Administration of Radio, Film and Television (SARFT), increase the number of channels and programmes on animation by mandating that “at least 70% of total animation broadcast must be domestic animation and foreign animation cannot be broadcasted during prime time, 17:00 to 21:00” (Fei, 2008). South Korea has a “quota for domestic animation and for newly produced domestic animation for the purpose of providing opportunities to promote newly produced domestic animations through television networks in Korea and thus increase the number of newly produced creative domestic animations and facilitate investment in the animation industry by broadcasting companies among others” (Young, 2008).

5.3. The Philippines and the ASEAN Economic Community as a Global Services Hub

The strategies discussed above can be complemented by policies that grow SMEs and creative individuals and utilize the AFAS and trade in services to promote local industry and build the ASEAN Economic Community as a Global Services Hub.

Growing SMEs in Creative Industries

A critical first step in promoting the growth and development of the local and regional services sector is nurturing small- and medium-scale enterprises until they reach maturity/large-scale operations. *Ceteris paribus*, big businesses can take advantage of the benefits offered by economies of scale (i.e., discounts on bulk purchases, allocation of fixed costs, etc.); have a higher likelihood of securing credit for expansion and technology upgrade; and the flexibility to offer diverse product lines.

Among the strategies that individual ASEAN countries and the region can adopt to achieve this goal fall into four main categories, namely: “1) building productive capacities; 2) regulations protecting intellectual property rights; 3) data collection; and 4) establishment of a source of international market information” (UN, 2004).

In the printing and publishing, including electronic publishing, and digital animation sectors, for example, capacity building can take the form of human resource development. The cost of training for firms can be reduced by graduating workers who are job-ready. Presently, the Philippine government is trying to address this by requiring students to complete two additional years of schooling before going to the university (also known as the K+12 Policy). K+12 graduates are expected to have improved communication and analytical skills and be better prepared either to work right after high school or take advantage of the opportunities offered in college. Another strategy is to encourage in-house training for workers through tax incentives for firms that invest in their workforce’s skills development (i.e., attendance in seminars and conferences both in-house and offered by a third party). The fiscal incentive is critical particularly to digital animation firms for most have to continuously train new workers and animation artists to replace employees

who leave local firms in favor of more lucrative opportunities offered by foreign-owned firms or the global market.

An equally important policy for the two industries is that which provides digital publishing and digital animation companies access to credit such as facilitating grants and credit schemes, particularly for small- and medium-scale publishers and digital animation firms. Upgrading of equipment and securing new software and hardware are expensive but necessary investments that allow small- and medium-scale firms to expand their scale and scope of operations. Reasonable sources of funding for these expenses could, thus, go a long way in ensuring the competitiveness of SMEs in the sectors.

In addition, similar to other digital animation firms in its neighboring ASEAN countries, the Philippines' local industry relies on the opportunities offered by the international market for animation services demand. Expanding their share in the global animation services market as well as establishing a market niche, according to UNCTAD, would be facilitated by policies that increase the local industry's value added. The "provision of market supported programmes specifically designed to increase the level of technological collaboration, innovation and support for cultural entrepreneurship" (UNCTAD, 2004, p. 9) – which in developed countries take the form of "specialized education and training, including support for artistic development both in its own right and with an added business dimension" (UNCTAD, 2004, p. 9), access to financial assistance and targeting SMEs in strengthening technological infrastructure and modernization – would build the required productive capacities to promote the industry's growth and development.

Interviews with Philippine industry stakeholders assert that incubation and technology centers – equipped with the latest software and hardware for animation production - for artists with original ideas for animation output would certainly serve the best interest of the industry. As mentioned previously, the conceptualization and production of an animation feature film, for example, takes anywhere from five to seven years. Local private entrepreneurs are, thus, hesitant to invest in a project that not only will have no returns for five to seven years and but also have uncertain outcomes after release. Industry

participants are, thus, recommending that government help shoulder the cost of developing these ideas and see them to fruition. Private and public sector partnership in producing animation films and series is a strategy that has been successfully employed by countries like Thailand and Singapore in not only securing foreign investments or forming joint-ventures with global players but, more importantly, in developing local content.

ACPI also recommends access to technology centers for industry participants, which would help reduce cost and allow smaller enterprises to use the latest animation technology without having to bear the investment cost. The incubation and technology centers can also house a showcase room and, thus, assist in marketing the output of animation enterprises to potential domestic and foreign clients. These technology centers do not necessarily have to be government-owned and operated. Small- and medium-scale enterprises or industry associations can pitch in and share the cost of maintaining the centers to enjoy the benefits of economies of scale despite the size of individual firms and/or the size of the members of the associations.

Moreover, like China, the Philippines and the ASEAN region can implement policies that will encourage local television and cable networks and movie production outfits to air animation series and films with local content. Promoting digital animation services in the regional and Philippine markets can lead to the development of original ideas and support efforts to climb the value chain and, thus, open the doors to higher value added products and processes. Marketing indigenous ideas and upholding local and regional talent can also stem the egress of animation artists.

Creative industries in the ASEAN region, which include the animation and publishing – traditional and electronic - sectors, would benefit from modernizing and enforcing Intellectual Property regimes. UNCTAD (2004) affirms that not only will respecting and enforcing IPRs attract foreign direct investment but the simplification of processes for local and regional firms to access new patents, new knowledge and the like can increase productivity and facilitate market creation. Book piracy in the Philippines, for example, is a serious concern among Philippine publishers. Textbook buyers, specifically among tertiary level clients, can acquire cheaper copies of the books they need from establishments that

photocopy, bind and sell them. An interview with a key player attributes the problem to the lack of “resources and manpower to strictly implement” the Philippine Intellectual Property Law. Digital piracy is also global concern, which would have to successfully addressed by the ASEAN region if it is to build a global services hub (refer to the section on *Solutions to the Piracy Problem and Technology* for the discussion on technology-aided measures and the role of government).

Interviews with industry stakeholders also verify that data collection and monitoring, specifically on the digital animation industry of the Philippines, is hindered by the inability to accurately define the sector. The sector has two major components, namely: the outsourcing and creative components. Initially, the local animation industry was classified under petroleum and petroleum products owing to the petroleum content in the raw materials the sector used (i.e., ink). More recently, the outsourcing component drew public sector attention so the animation sector was included in the business process outsourcing industry together with call centers and medical transcription. Finally, the animation services was recognized for its creative content and included in the creative industries category. It is, nonetheless, often treated as a sub-sector of the information and communication technologies sector (i.e., 2011 IPP) owing to the type of equipment needed by animation firms.

Difficulties in properly identifying participants in the industry and, therefore tracking their performance and contribution to the economy were also encountered in the database that attempts to track top performers (Top 15000 Corporations). Enterprises engaged in animation and animation-related services, in particular, were classified under telecommunications services not elsewhere classified – Toei Animation Philippines, Inc. – and motion picture and video production – Top Draw Animation, Inc., Creative Programs, Inc., and Toon City Animation, Inc.

The accurate definition of any industry, especially on a regional scale, is critical to its growth and development. Data resulting from industry definition, structure and performance are the basis for formulating appropriate policies that can assist in building productive capacities, intervention measures, if and when necessary, and the like.

An important source of animation-related information (i.e., technology, market needs, etc.) as well as e-publishing is the link with foreign firms. According to the UNCTAD (2004) paper, developing countries can maximize the opportunities offered by international global production networks in creative industries by employing a local and regional strategy that is “framed around invigorating local firms and putting into place a whole range of fiscal, trade, financial and competition policy designed to strengthen the dynamic interactions between the local and international producers” (UNCTAD, 2004, p. 11).

Finally, ensuring the successful implementation of the policies recommended above require two very important ingredients: 1) applying for incentives and grants must be easy and economical; and 2) incentives and grants must be time bound. Assistance extended to the firms belonging to the digital publishing and digital animation industries would be ineffective if the cost of securing the incentives and grants are too high. Lengthy and complicated processes that require reams of documents and several days to obtain approval would discourage beneficiaries from applying at all. Worse, in some cases, these processes may entail costs that are higher than the offered incentive and/or grant. Likewise, support for the digital publishing and digital animation industries must focus on ensuring that firms belonging to the two industries will, in the immediate future, be global players. This goal will not be achieved if local enterprises become dependent on government support.

Growing Creative Individuals

The interview with the National Book Development Board (NBDB) and the Animation Council of the Philippines, Inc. (ACPI) contend that developing the inherent talents of creative individuals begin with increasing access to basic education and skills training for all potential creative workers regardless of place of residence and socio-economic status. In the Philippines, for example, ACPI attests to the assistance extended by the Technical Education and Skills Development Authority (TESDA) in expanding the search for and developing the talent of potential animation artists nationwide through the conduct of industry entry-level training in animation, digital animation, and 3D animation as well as in preparing a curriculum to educate students in visual graphics design and basic animation;

thereby extending the opportunities for employment and specialized training for animation artists beyond the urban areas. NBDB also echoes the call for strengthening basic education as a means of enhancing creative talents for the publishing sector. In addition, a sound background in history and geography and an effective reading program, backed with a sense of pride and national/regional identity would contribute to content development and moving up the value chain both in printing and publishing and digital animation.

In addition, recognizing superior creative work develops competition among creative workers that normally results to increases in high quality output and attracts more participants in the sector. Local private institutions and the Philippine government honor outstanding authors and their works with prestigious awards (medals, trophies and cash awards). ACPI has also been recognizing outstanding animation artists through the Animahenasyon Philippine Animation Festival (i.e., Animahenasyon's The Outstanding Emerging Artist in Animation Award and Animahenasyon Lifetime Achievement Award). A similar system can be established in the ASEAN region that not only acknowledges outstanding creative works but also one that pays tribute to books and animated series and films that are products of collaboration between creative workers across ASEAN countries.

AFAS and Trade in Services

The Philippines' commitments under the ASEAN Framework Agreement on Services (AFAS) impose conditions on Modes 3 (commercial presence) and 4 (presence of natural persons) of services supply. In general, limits to foreign equity participation (Mode 3) and employment of foreign professionals (Mode 4) in printing and publishing and digital animation and their respective sub-sectors and related industries (i.e., computer and related services, software implementation services, etc.) are waived with sufficient paid-in capital, employment generation, technology level, and share of exports to total production (7th Package of Commitments under ASEAN Framework Agreement on Services—Philippines—Schedule of Specific Commitments)³.

³ 'The 7th Package of Commitments under ASEAN Framework Agreement on Services—Philippines—Schedule of Specific Commitments' could be download from Annex of Protocol to Implement the

Based on the AFAS commitments, nature, performance and SWOT of the Philippine printing and publishing and digital animation industries, the promising modes of supply is Mode 1 (cross-border supply), which enjoys no significant barriers on market access and national treatment. Mode 3 (commercial presence), on the other hand, offers the best solution to the problem of the egress of animation artists in the Philippine digital animation sector. Attracting sufficient large-scale foreign enterprises that will employ local creative workers in the domestic economy can curb the loss of writers, artists and other essential creative industries personnel.

Moving up the Value Chain

Key to the future viability and prosperity of creative industries the ability of participating firms to move up the value chain. Specifically for the printing and publishing and digital animation sectors, this means graduating from sub-contracted work to content development. Original ideas and themes contained in books and portrayed in animated series and films will allow local firms to grow and reduce their dependence on foreign companies for commissioned work. As a multi-cultural region, the ASEAN's history, tradition, culture, belief system, folklore, and even everyday experiences can be tapped as materials for original content for as long as the chosen ideas have universal appeal – themes that speak to global experiences. Similarly, merchandising – in the form of toys (i.e., action figures, board games and digital games), shoes, wearing apparel and school supplies - can also be one of the sources of ideas for original/local content.

Results of previous studies and interviews with industry stakeholders identifies the following as the primary ingredients to shift from contracted to original work: 1) the availability of creative talent capable of original content development; 2) the use of the latest technology; and 3) government support. Growing creative talent, as discussed in the previous sections, requires investment in education and skills training with special focus on rural areas as well as recognition for exceptional creative works. Emphasis on technology

Seventh Package of Commitments under the ASEAN Framework Agreement on Services, Cha-am, Thailand, 26 February 2009. Available at <http://www.aseansec.org/22221.htm>

upgrades particularly for small- and medium-scale enterprises through private and public initiatives. Industry associations and/or cooperation between SMEs can make possible the sharing of equipment, softwares and the like to lighten the financial burden for individual firms but still enable SMEs to reap the benefits of the utilization of the latest technology (i.e., improved work quality, lower costs, faster processing time, etc.). Lastly, government support in critical areas such as the provision of well-functioning infrastructure (i.e., roads), access to credit and industry-specific information, co-production programs and the strict implementation of the Intellectual Property Laws can creating the business environment that is conducive for the creative industries' growth and development.

In the context of building a service hub in the ASEAN Economic Community, an incentive system can be designed that favors the output digital publishing and digital animation firms (i.e., access to low-cost credit, market access, national treatment, etc.) that combines the talents, skills, and capital of nationals of the ASEAN region. These can be especially critical when digital publishing materials and digital animation are combines to create new products in the field of advertising, children's books (i.e., animated or create your new adventures type of books) and/or educational materials (interactive).

What Can the Filipinos Contribute?

ACPI and NBDB believe that Filipinos can contribute significantly in content development and fielding trainers to the goal of building an AEC Global Services Hub. The strengths of Filipino creative workers lie in their mastery of the English language, multi-cultural background, and ease in adapting to new technology. Moreover, the Philippines offers a young, dynamic and college-educated population, which can be tapped as a rich source of creative workers. Presently, Filipinos are already working as teachers and instructors in basic education and animation firms operating within the region. New applications of digitally published materials and animation services and expansions in the current markets would require the services of additional authors, editors, illustrators, animation artists, web designers and, in the case foreign manuscripts, translators. Filipinos

can also contribute significantly in the accomplishment of these tasks and, thus, help build an AEC Global Service Hub.

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Industries1.pdf+creative+industries+philippines+joint+chambers&hl=en&gl=ph&pid=bl&srcid=ADGEEsJr6ScsfldBZxP4YU5Mykw1XvObIQWH-zHfgAcZw_NuW-VtvETs_AetHu3cK48r48ovgSmNuHxk6juHk6NORc-CXNFp3BQ2DB7rm65k-WFNZduRy5fI5_SnECYUFYkW4k4Ru_VD&sig=AHIEtbQ_Jc1_Cspe4u48Coc4x5G8-flzww.

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Insights into the industries were derived from interviews conducted with the stakeholders of the Philippine printing and publishing and animation industries including industry players, industry association and government regulating institution.

CHAPTER 7

Developing AEC into a Global Services Hub The Case of Interior and Fashion Design in Vietnam¹

VO TRI THANH, *et al.*

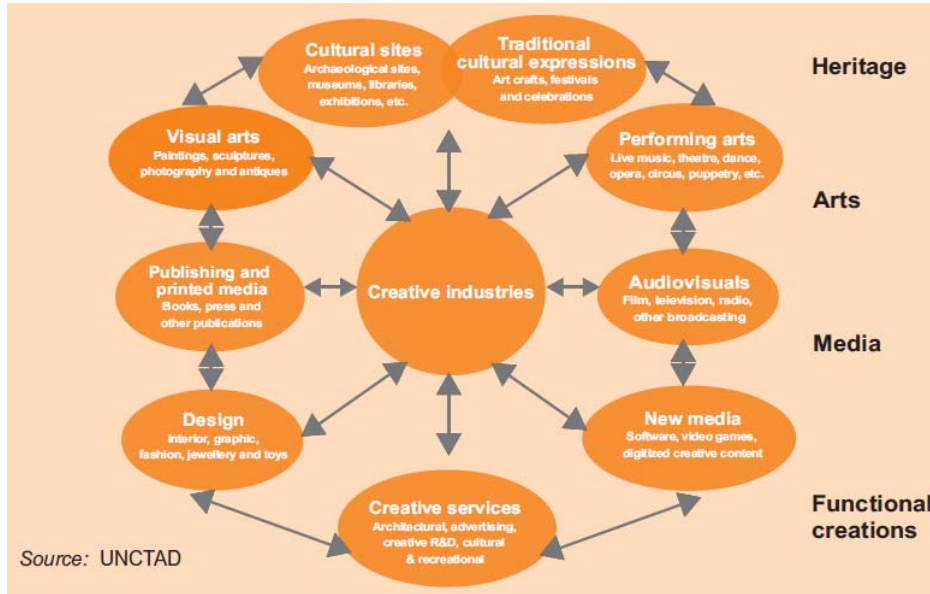
Central Institute for Economic Management (CIEM)

In the last decade, the creative economy has become a topical issue of international economics and development agenda. The knowledge-based economy is a new period of development, coming after the natural economy, agricultural economy and industrial economy. This period possesses the characteristic of relying on knowledge and information under the background of science and high techniques development. In this economy, physical resources do not only include traditional ones, which is also called visible factors (such as capital, materials and labor) but also comprise of new resources (such as knowledge, management and technology) – the human factor. Therefore, education and culture are the fundamental background for development under the knowledge-based economy.

Another reason for the development of this new knowledge-based economy is the globalization process, which create changes and linkages among countries, organizations and individuals both in terms of economics and culture. With regards to cultural aspect, the globalization process can create culture diversity for a person because he/she can contact with different cultural background. Globalization also helps people have better understanding of the world and its global challenges through the booming of information, popularization of tourism and easier access.

¹ The paper is part of a research series on “Developing the ASEAN Economic Community into a Global Service Hub,” with financial and logistical support of ERIA (Economic Research Institute for ASEAN and East Asia). It is led by Dr. Vo Tri Thanh, Vice President of the CIEM, the research team included Tran Binh Minh, Trinh Quang Long, Nguyen Cong Manh (CIEM) and Dinh Vu TrangNgan (Fulbright Economics Teaching Program). The views expressed here are those of the authors alone and do not necessarily reflect the views of ERIA, CIEM, or the Fulbright Economics Teaching Program

Figure 1: UNCTAD Classification of the Creative Industries



According to UNCTAD, the creative industries: (i) are the cycles of creation, production and distribution of goods and services that use creativity and intellectual capital as primary inputs; (ii) constitute a set of knowledge-based activities, focused on but not limited to arts, potentially generating revenues from trade and intellectual property rights; (iii) comprise tangible products and intangible intellectual or artistic services with creative content, economic value and market objectives; (iv) stand at the crossroads of the artisan, services and industrial sectors; and (v) constitute a new dynamic sector in world trade. They are comprises of four groups, including heritage, arts, media and functional creations (Figure 1). Lying under the functional creation group, the design industries include of interior, graphic, fashion, jewellery and toys. It is defined as “the creation and development of concepts and specification that optimize the functions, and value the apperance of products and systems for the mutual benefit of users and manufacturers”²

In Vietnam, creative industry is a new concept and has not yet been appeared in the classification of official statistics. Within the scope of this paper, the fashion design and interior design is considered as inputs in its respectively textile and garment industries and wood products processing and furniture manufacturing sector. They are regarded as

²According to the definition of the Industrial Designers Association of America, the American Institiet of Graphic arts and the Design Council, London.

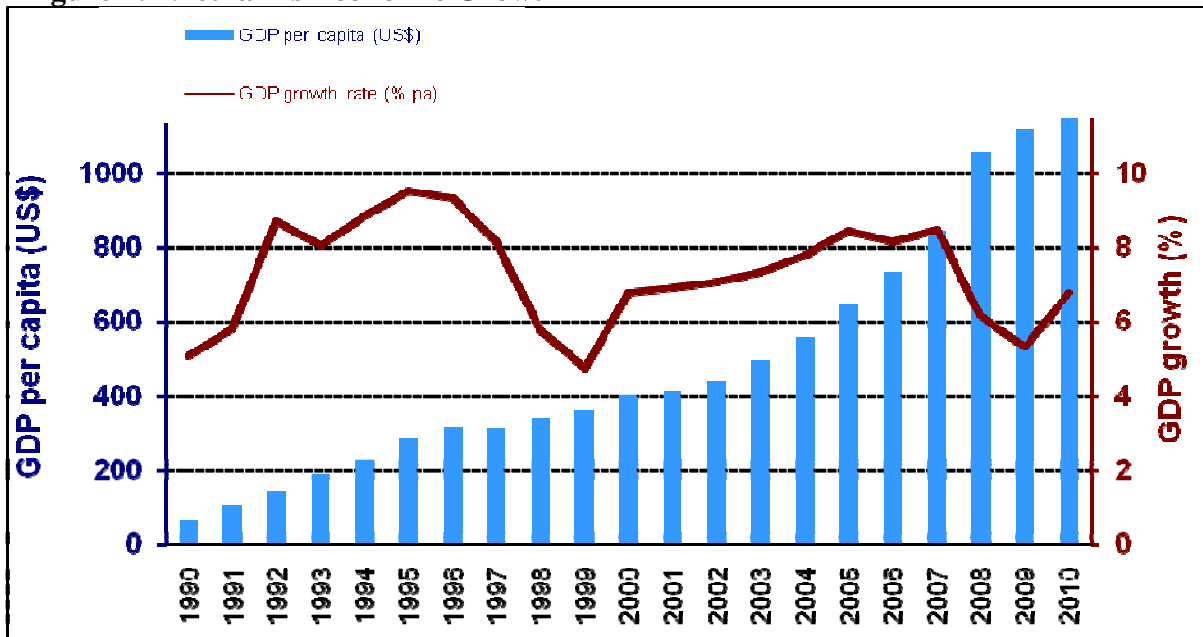
services, which can not be separated and not possible to isolate the design input from the final products, namely apparels, wood products and furniture. Therefore, the data for the industries of textile and garment, as well as wood products and furniture manufacture reflects the total value of final products, not the design content.

This paper concentrates on the two sub-sector of interior and fashion design in Vietnam, which is built upon the findings and recommendation from the national survey with key different stakeholders in these sectors. In responding to the need of understanding the development of ASEAN Economic Community into a global hub of services, the paper also provides some insights into the sectors, the profile of firms in the sectors, the characteristics that they owns, the SWOT analysis of the sector and some policy recommendation drawn from the survey.

1. Some Overview of the Economy

During the last ten year, Vietnam’s economy has been considered as one the fast-moving economy with positive growth rate. During 2006-2010, the average growth rate is estimated at 7 percent, higher than that of the countries in the region³. (Figure 2)

Figure 2: Vietnam’s Economic Growth



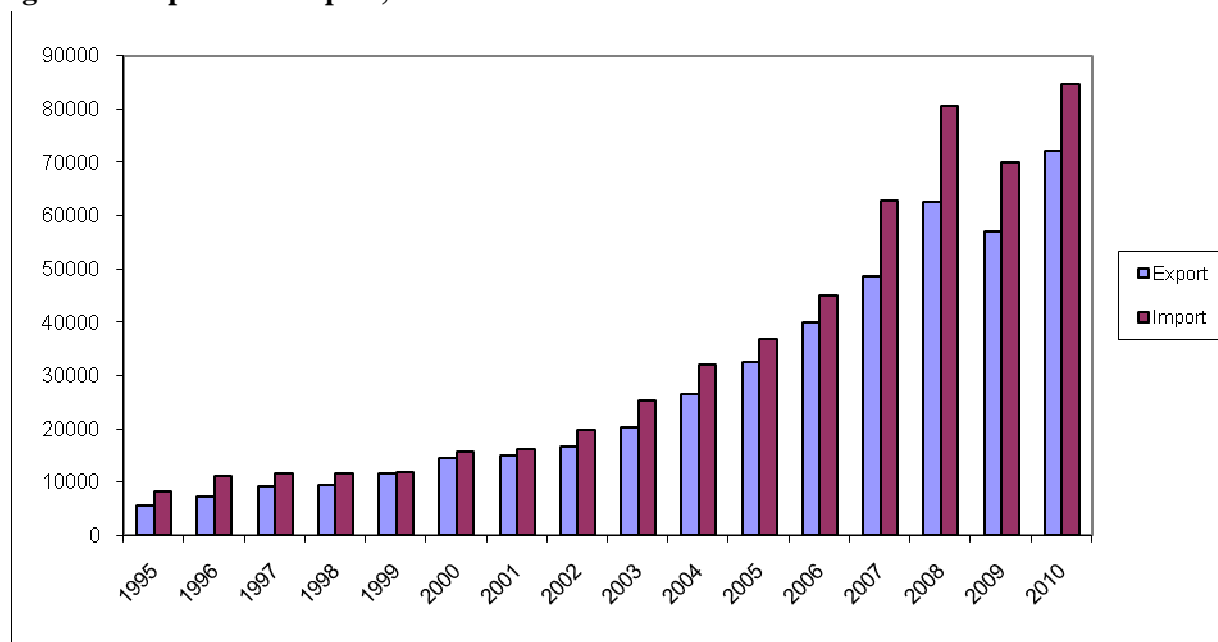
³According to ADB, during 2006-2010, the average growth rate of ASEAN countries is 5.6 percent, of which Thailand is at 3.6 percent, Malaysia at 4.5 percent, Philippines at 4.9 percent, Indonesia at 5.7 percent and Singapore at 6.5 percent.

Source: General Statistic Office, 2011

Although being affected by the global crisis and economic downturn, the growth rates in 2008-2010 have been at 6.31 percent in 2008, 5.32 percent in 2009 and 6.78 in 2010. By that, the economic scale and production capacity has been on the move. The Gross Domestic Product (GDP) at constant price has been doubled in 2010 (as compared to that of 2000) and in real term, it is 3.2 times bigger than that of 2000, attaining at USD 101.6 billion. GDP per capita in 2010 (in USD equivalent) has reached at USD 1,168, overcoming the level of low-income developing country.

The growth rates of the three sectors – i.e. agriculture-forestry-fishery, industry-construction, and services have maintained steady growth rate. The stable development of the agricultural sector has contributed to the assurance of national food security, and has played an important role in poverty reduction in the rural areas. The industry and construction sector has maintained high growth rate, in spite of being affected by the economic downturn in 2008. In 2010, the growth rate of this sector has reached at 15.3 percent. The services sector has been at the fastest growing sector, with expansion of market and the rapid development of tourism, transportation, and telecommunication.

Figure 3: Import and Export, 1995-2010



The export growth rate has been on the increase, except for 2009 (decrease by 8.9 percent) due to the global crisis and economic downturn. The average growth rate for 2006-2010 has been at 17.3 percent, higher than the planned figure. However, in response to domestic production, trade deficit has been at the average of 22.4 percent. With the controlling of import and some import restricted policies, the trade deficit in 2010 has been decreased to 17.5 percent. The export of services has been at high growth rate, attaining an average of 11.8 percent/year.

Table 1: Some Main Exported Goods

Unit: million USD

No.	Product (mill USD)	2005	2006	2007	2008	2009	2010
1	Crude oil	7373.5	8312.0	8487.6	10356.8	6194.6	4957.6
2	Coal	669.9	914.8	999.8	1388.5	1316.6	1610.7
3	Electronics, computers and parts	1427.4	1807.8	2165.2	2640.3	2763.0	3590.2
4	Articles of plastic	357.7	452.3	709.5	933.7	867.4	1049.3
5	Electrical wire and cable	518.2	705.7	882.3	1009.0	891.8	1311.1
6	Bags, pockets, wallets, hats and umbrellas	470.9	502.1	627.1	773.1	824.1	958.7
7	Footwear	3038.8	3595.9	3999.5	4769.9	4071.3	5122.3
8	Textile and sewing products	4772.4	5854.8	7732.0	9120.5	9065.6	11209.7
9	Pottery and glassware	255.3	274.4	334.9	344.3	267.2	316.9
10	Fresh, processed vegetables and fruit	235.5	259.1	305.6	406.5	438.9	450.5

11	Pepper	109.9	114.8	83.0	90.3	134.0	117.0
12	Coffee	912.7	980.9	1232.1	1060.9	1183.0	1218.0
13	Rubber	554.1	703.6	715.6	658.7	731.0	782.0
14	Rice	5254.8	4642.0	4580.0	4744.9	5969.0	6886.0
15	Cashew nut	109.0	127.7	154.7	160.8	176.0	195.0
16	Tea	91.7	105.4	115.7	104.7	135.0	137.0
17	Wood and wooden products	1561.4	1943.1	2384.6	2767.2	2989.3	3435.6
18	Fishery products	2732.5	3358.0	3763.4	4510.1	4255.3	5016.3

Source: General Statistic Office, 2011

Table 1 shows the main exported goods for Vietnam in some recent years. Except for some agricultural and fishery products, such as rice, coffee, vegetables, the main and leading group of products in the list can be named as textiles and sewing products, and footwear, showing the competitive advantages of Vietnam in manufacturing industries. A report by the Central Institute for Economic Management has shown that the manufacturing industries has accounted for nearly 70 percent of the Vietnam's export in 2010, valuing at USD 48.8 billion, increased by 35 percent as compared to that of 2009. This is considered as the highest growth and key industries in the export structure of the country. The textiles and garment sectors has been the first industries in the list, reaching an average of almost USD 1 billion/month. Wood and wooden products also appears in the list of top ten exported goods in Vietnam, amounting at USD 3,435.6 million in 2010.

2. Profile of Firms in the Selected Sectors

2.1. Fashion Design and the Textile and Garment sector

There has been no separated fashion design sub-sector in the manufacturing sector in Vietnam. At present, the fashion design work is set up as a part/session of production in the textile and garment, therefore there has been no clear data for the fashion design in particular. However, realizing the close linkage and the important of fashion design in the textiles and garment sector, the paper focus on proving an overview of the textiles and garment sector as a proxy for fashion design.

In some recent years, the textile and garment industry has significant growth rate of about 20 percent/year, export value has accounted for about 15 percent of the total export of the country. The gross output of the industry has increased 17.9 percent in 2008 (as compared to that of the 2007). Main products has been on the increase with textile growth of 11 percent, finished cloth of 8.9 percent, knitting clothes of 8.8 percent, and ready-made clothes of 12.6 percent. The significant development of the textile and garment sector has brought about the result that Vietnam has become one of the nine leading countries in textile and garment export, out of the 153 textile and garment export countries. (VINATEX, 2009)

Since the implementation of the VN-US Bilateral Trade Agreement and the fully membership of the World Trade Organization, the share and market of Vietnam's garment has been on the move. The US is leading market with its share of 57.7 percent in 2008, following by EU and Japan.

2.2. Some Main Characteristic of the Textile and Garment Sector

During 2005-2009, the number of enterprises in the textiles and garment industries has increased rapidly, almost doubled after five years. The total number of textile enterprises and garment enterprises in 2009 were 2,027 and 3,451 respectively. However, if the number of enterprises in the manufacturing sector accounted for about 20 percent of the total enterprises in the period, the textile enterprise only accounted for about 4.5 percent and garment enterprise of 7.5 percent. In total, the textile and garment

industry has accounted for 12 percent of the total enterprises in the manufacturing sector or only nearly 2.5 percent of the total enterprises in the economy. (Table 2)

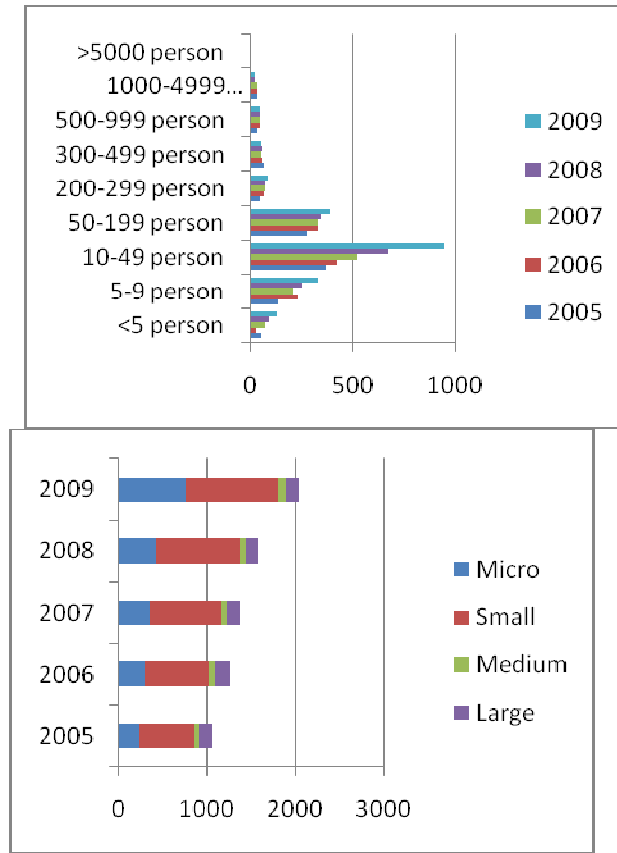
Table 2: Number of Enterprise in the Textile and Garment Industry (as at 31/12)

Economic activity	2005	2006	2007	2008	2009
<i>Total no. of enterprises</i>	112,950	131,318	155,771	205,689	248,842
Manufacturing	24,017	26,863	31,057	38,384	44,707
Manufacture of textiles	1,046	1,250	1,367	1,577	2,027
Manufacture of apparel	1,745	1,958	2,352	3,174	3,451

Source: Enterprise survey, GSO 2011

Figure 4 and figure 5 present the number of enterprises in the textile and garment industry by size of employees with two way of disaggregation, either by number of employees or by size of employees. According to the classification of the General Statistics Office, the micro enterprises are those having less than 10 employees, small of less than 49 employees, medium of less than 299 employees and large enterprises are the rest. Following this classification, in the textile industry, the micro and small enterprises have accounted for a largest share, with the concentration of the 10-49-employees enterprises. Medium and large enterprises has accounted for one fifth of the total enterprises, 18.5 percent in 2005 and up to 21.1 percent in 2009.

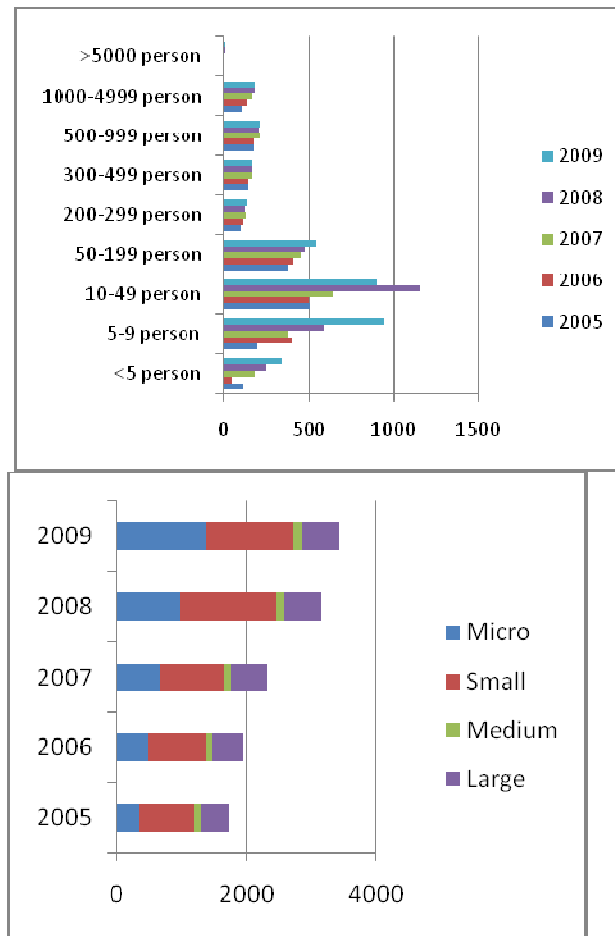
Figure 4: Number of Enterprises by Size of Employees in the Textile Industry



Source: Enterprise survey, GSO 2011

The garment industry also shares the same characteristic with textile industry. Small enterprises, having 10-49 employees, has largest share during the 2005-2009, which was 48.3 percent in 2005 and 39.4 percent in 2009 respectively. The micro enterprises have increased after five years, from 20.5 percent in 2005 up to 39.9 percent in 2009. In contrast with this, large enterprises have been on the decrease, from 25.2 percent in 2005 to 16.7 percent in 2009. The garment industry seems bigger than textile industry in terms of employees where there were 13 large enterprises with more than 5,000 employees. (Figure 4)

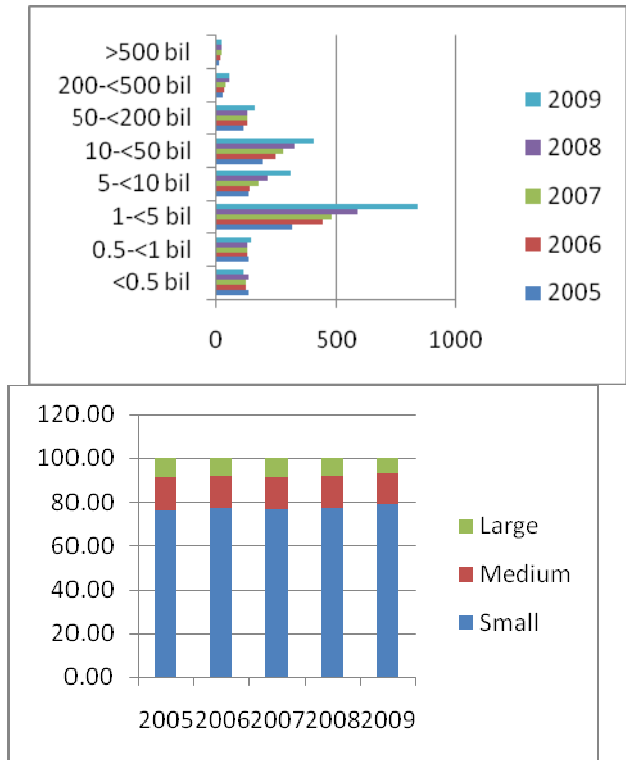
Figure 5: Number of Enterprises by Size of Employees in the Garment Industry



Source: Enterprise survey, GSO 2011

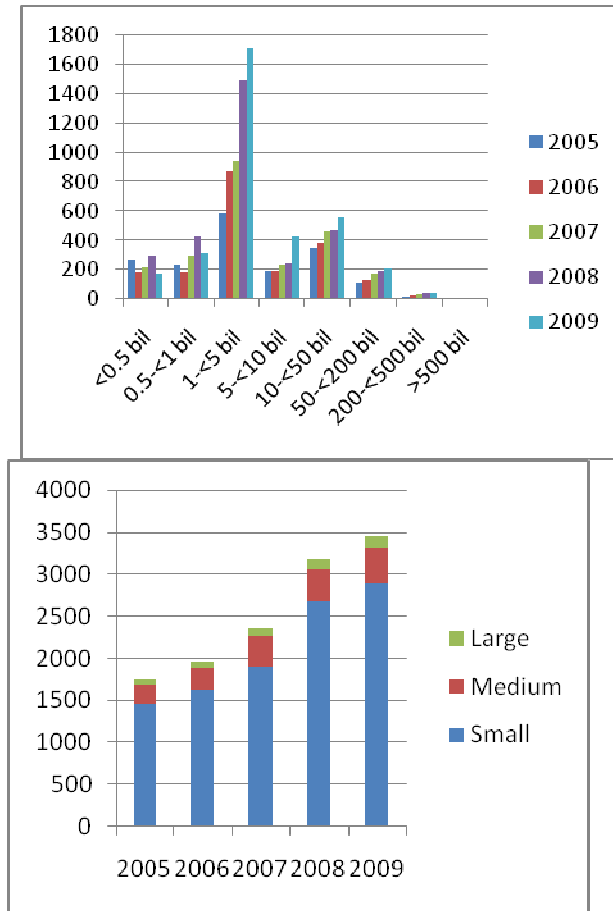
With regards to the size of capital, small enterprises are those having capital of less than VND 20 billion, medium of 20 to less than VND 100 billion, and the above are large enterprises (Figure 4). It is clearly seen in figure 6 and 7 that the small enterprises have played a big part in both textile and garment industry, with 76.4 percent in 2005 and 79.1 percent in 2009 and 83.8 percent in 2005 and 83.7 percent in 2009 respectively. The largest share among them is VND 1-less than 5 billion enterprise. The medium enterprises has accounted for 14.1 percent in 2009 for the textile industry while that of the garment industry was 12.1 percent. Large ones accounted for only small share of 6.8 percent and 4.1 percent respectively in 2009.

Figure 6: Number of Enterprise by Size of Capital in the Textile Industry



Source: Enterprise survey, GSO 2011

Figure 7: Number of Enterprises by Size of Capital in the Garment Industry



Source: Enterprise survey, GSO 2011

Of all the total number employees working in registered enterprises, the workers in manufacturing sector has been on the increase in 2005-2009 (from more than 3 million employees in 2005 to more than 4 million in 2009) and has accounted for a large proportion, nearly 50 percent of the total. As mentioned above, if the number of enterprises has accounted for only 12 percent, the number of employees in the textile and garment industry has accounted for a total of 23.3 percent of the manufacturing sector in 2009, of which the textile industry accounted for only 4.8 percent (198,371 employees) while that of the garment industry was 18.5 percent (764,879 employees) in 2009. (Table 3)

Table 3: Number of Employees in the Textile and Garment Industry

Sector	2005	2006	2007	2008	2009
Total	6,237,396	6,715,166	7,382,160	8,154,850	8,921,535
Manufacturing	3,099,386	3,401,627	3,773,533	3,943,221	4,133,943
Textiles	188,365	203,829	195,139	179,076	198,371
Garment	511,278	585,414	706,093	758,274	764,879

Source: Enterprise survey, GSO 2011

In general, it can be seen that the textile and garment industry comprises of small enterprise, with less than 50 employees and VND 20 billion. They are paid attention to due to its original nature of taking advantage of the cheap labor resources for processing export. The total number workers was almost 1 million workers in 2009, however, it is not stable. The main reason comes from its low income for the workers, leading to the fact that they are ready to move to other higher income industry. Therefore, in the textile and garment sector, although enterprises have increased their salary and benefits, the number of workers dropping out of the sector has increased as compared to newly recruited ones.

Another feature that the Vietnam's garment possesses is the simple manufacture of export for foreign partners. Through our interview with some big enterprises in the garment sector, although they have their own designers, the ability of designing as well as capacity of production is still limited. In some recent years, some small enterprises whose are towards the domestic market have their own design and market share, especially for medium and high income class, namely NEW NEM, IVY Moda and Eva De Eva. Even big enterprises such as Garco 10, Viet Tien (for garment) and PhongPhu and Viet Thang(for textile) have their own designing department, the model and design are not fully on their own and for their own market. Most of the design patterns are somewhat imitate the international trends or copying from the orders of their international partners.

The leading actor in the market is Vietnam National Textile and Garment Group (VINATEX), a big complex that comprises of the mother company VINATEX and its 120 joint-stock members. It also includes 5 textile and garment school, which have their own fashion design division, and a national Vietnam Fashion Design Institute. Despite the purpose of creating opportunities for talented designers to meet apparel firms and extending support to those with strong potentiality in product development,

the Vietnam Fashion Design Institute’s role in the sector is blurred. For the first time on 23 December 2011, the Vietnam Fashion Design Institute has their own study on “Color trend for fashion in 2012”, which is considered as the first professional and practical study, both for the textile and garment industry as well as for consumer. However, one of the regular activities that have been carried out by the Vietnam Fashion Design Institute is the organization of Vietnam Fashion Weeks and annual fashion design competition.

At this moment, only five textile and garment company have been listed on the stock market, namely Thanh Cong Textile and Garment Joint-Stock Company (TCM), Thai Nguyen Investment and Trading Company (TNG), BinhThanh Joint-Stock Company (GIL), Saigon Garment Joint-Stock Company (GMC) and PhuThinh – Nha Be Garment Joint-Stock Company (NPS), of which 3 are listed on the Ho Chi Minh Stock Exchange and 2 are listed on Hanoi Stock Exchange. Out of the listed companies, TCM is the biggest company with the charter capital of VND 447 billion and the production capacity of 20 million products per year. (Table 4)

Table 4: Some criteria of the listed companies (as at June 2011)

Code	Main product	Capacity (mil. products/years)	Total Asset (VND bil.)	Charter capital (VND bil.)	Rate of return (%)
TCM	Cotton clothes	20	2,021	447.4	9.47
GMC	Sports, jacket, short		465.2	88.7	5.28
GIL	Clothes, handbags	1.3	616.8	127.2	9.42
TNG	Jacket, trouser	10	881.8	134.6	3.37
NPS	Jacket, trousers		82.4	7.99	7.99

Source: Consolidated from HNX and HSX

The last layer in the profile of firms are micro and small enterprises which are the majority of the sector, whose activities are processing for bigger enterprises and not having frequent orders from international trading partners. For those enterprises, it is

not necessary to have separate design division because it is not as important as direct workers.

In conclusion, there has been no official data on the fashion design aspect of the textile and garment industry, it is difficult to have concrete comments on this part. One of the finding through our interview with key stakeholders and some apparel company is that even the textile and garment companies are small and mostly processing export, the design division seem to be blurred. Most of the design patterns are influenced by their international trading partner as well as the international trends. The very small domestic market share is dominated by fragmented and single fashion designer, such as NEW NEM, IVY Moda, Eva De Eva, FOCCI, NINOMAXX,... The enterprises in the sector are mainly processing export; their own design divisions are still finding a market room and consumer taste in affirming themselves.

2.3. Interior Design and the Wood Processing and Furniture

In similarity with the fashion design and as mentioned in the introduction part of the paper, the interior design strongly associated with the manufacture of wood and wood products and the manufacture of furniture as classification by the Vietnam General Statistic Office. Table 5 shows the overview of enterprises that are in the two sectors.

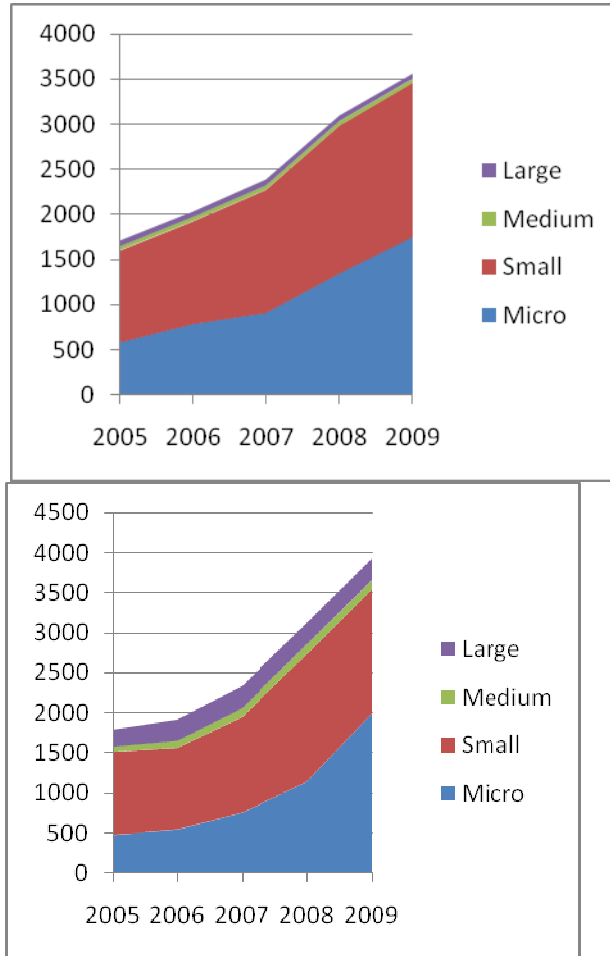
Table 5: Number of Enterprises in the Wood Products and Furniture

Economic activity	2005	2006	2007	2008	2009
<i>Total no. of enterprises</i>	112,950	131,318	155,771	205,689	248,842
Manufacturing	24,017	26,863	31,057	38,384	44,707
Manufacture of wood and wood products	1,710	2,032	2,390	3,098	3,562
Manufacture of furniture	1,796	1,921	2,343	3,126	3,930

*Source:*Enterprise survey, GSO 2011

There has been a significant development of the number of enterprises in the manufacture of wood and wood products and manufacture of furniture during 2005-2009. The number of enterprises has been doubled after five year, from a total of 3,506 in 2005 to 7,592 in 2009. In other words, of all the registered companied, the manufacture of wood and wood products and manufacture of furniture has accounted for only 3 percent in 2009, however, out of the manufacturing sector, they have contributed to 16.76 percent of the actors in the sector.

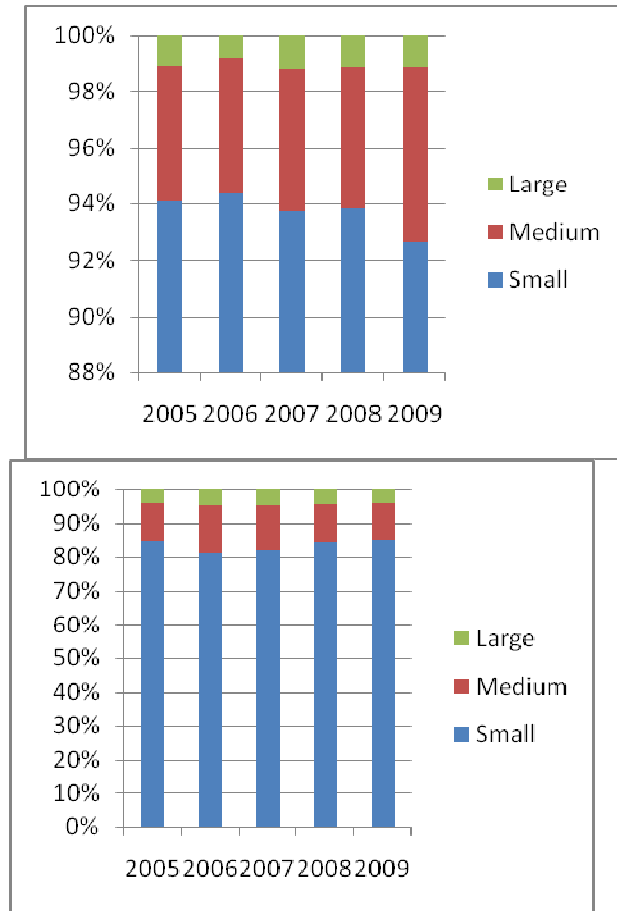
Figure 7: Number of Enterprise by Size of Employees, 2005-2009



Source: Enterprise survey, GSO 2011

The number of enterprises of the manufacture of wood and wood products is presented in the left-hand side of figure 7 and the manufacture of furniture is on the right-hand side. It is clearly seen in the figure that the majority of enterprises are small and medium in terms of employees, i.e. having less than 50 employees. Enterprises in the manufacture of furniture seem a little bit bigger with some bigger share of large enterprise, with 6.8 percent or 269 enterprises in 2009.

Figure 8: Number of Enterprises by Size of Capital



Source: Enterprise survey, GSO 2011

Figure 8 shows that of all the enterprises that are active in the manufacture of wood and wood products (the left-hand side) and the manufacture of furniture (right-hand side), the majority are small with the capital of less than VND 20 billion, which is about 93 percent for those operating in the manufacture of wood and wood products and about 83 percent for those operating in the manufacture furniture. The large enterprises, in term of capital with more than VND 100 billion, only accounted for a small share, 1 percent for the manufacture of wood and wood products and 4.3 percent for manufacture of furniture.

Table 6: Number of Employees, 2005-2009

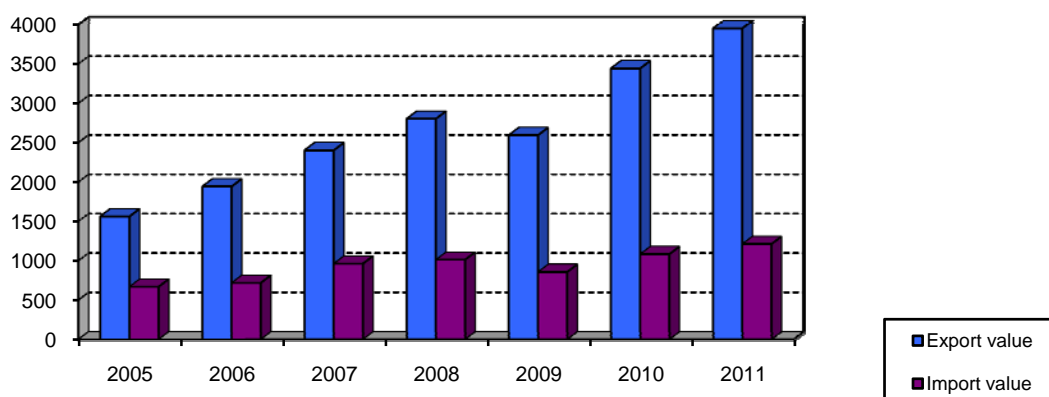
Sector	2005	2006	2007	2008	2009
Total	6,237,396	6,715,166	7,382,160	8,154,850	8,921,535
Manufacturing	3,099,386	3,401,627	3,773,533	3,943,221	4,133,943
Wood and wood products	113,979	112,440	124,477	130,443	126,940
Furniture	260,235	320,147	356,500	352,247	355,539

Source: Enterprise survey, GSO 2011

As at 31 December 2009, the total number of employees working in the manufacture of wood and wood products and manufacture of furniture was amounted at 126,940 and 355,539 persons respectively, accounting for 4.8 percent and 18.5 percent of the wider manufacturing sector. That is, in total, the two sectors have contributed up to 23.3 percent of the employees in the manufacturing sector or 5.4 percent of the employees in the registered enterprises sector.

One common feature of the manufacture of wood, wood products and furniture is the small and labor-intensive enterprise, which is also seen in the textile and garment industry. In some recent year, together with the development of society and increasing demand in having more luxurious wood furniture for medium and high income class in the country, there has been a significant number of interior design enterprise established. In addition to that, a numbers of individual interior designers have been developed to meet the niche demand of the market.

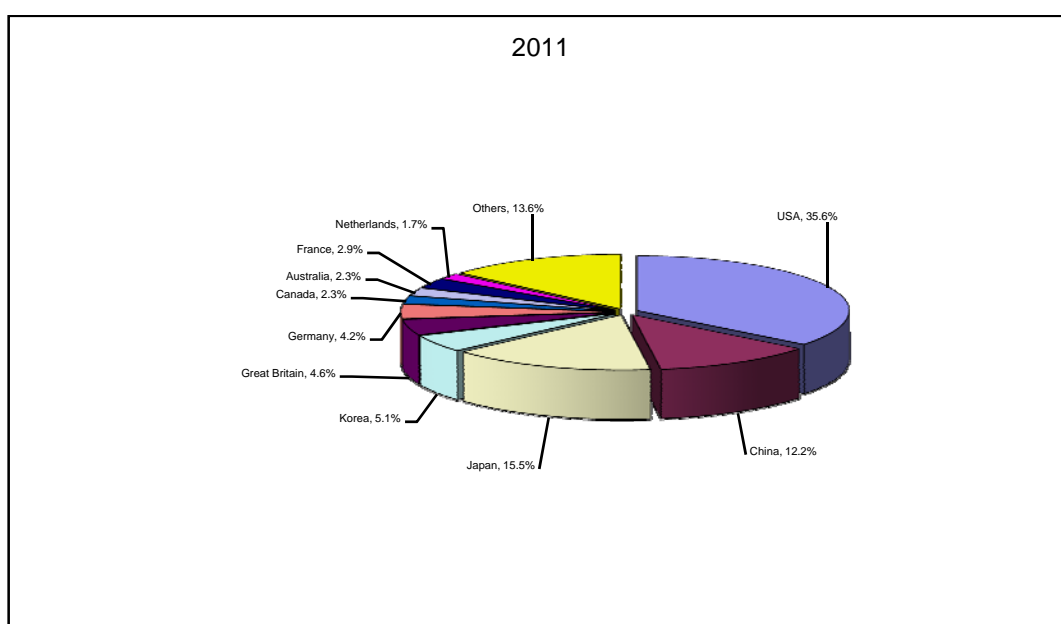
Figure 9: Export Value and Import Value of the Wood Products and Furniture Industry, 2005-2011



Source: MOIT, 2012

Figure 9 has shown the increasing trend of the wood products and furniture during 2005-2011. In spite of it, the wood products and furniture processing sector has experienced from the overall impacts of global crisis and economic downturn in 2008 and 2009. Therefore, the total export value of the sector in 2009 has decreased by 8.25 percent as compared to that of 2008. However, since the end of 2009, more orders have come into the sector, and new market has been developed, such as Russia, Latin America and Middle East, leading to an increase of 5.3 percent and amounting to USD 2.735 billion.

Figure 10: Export Structure by Market as at end of 2011



Source: MOIT, 2012

The break-down of export of wood product and furniture industry by market share has been shown in figure 10, where USA has been the largest with its market share of 35.6%, following by Japan (15.5%), China (12.2%). New other markets have been emerged in some recent years and still are on the increase (such as Great Britain and Germany).

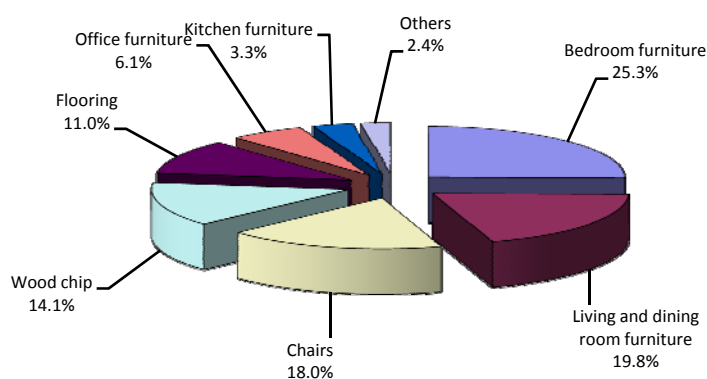
Table 7: Three main export markets of wood products and furniture industry, 2006-2011 (million USD)

Market	2006	2007	2008	2009	2010	2011
USA	744.1	944.3	1,045	1,100	1,400	1,423
EU	500.2	633.1	791.8	545	644.7	519.5
Japan	286.8	300.6	365.9	355.4	454.6	585

Source: Ministry of Industry and Trade, 2011

The leading market for wood products and wood furniture industry has been confirmed in table 7 with the three main export markets. Accounting for nearly 36% of the total export, the export value to the US market has amounted to USD 1,423 million in 2011, while that of the EU market and the Japan has been at USD 520 million and USD 585 million respectively.

Figure 11: Export structure by type of products in 2011



Source: Ministry of Industry and Trade, 2011

With regards to type of products, in 2011, the bedroom furniture and living/dining room furniture has accounted for the highest percentage of export, with 25.3% and 19.8% respectively. In total, the furniture has account for larger share in total export, with the sub-total of up to 54.5%, while the wood products account for the rest, with three type of chairs (18%), wood chip (14.1%) and flooring (11%).

In spite of no official data for setting up a profile of firms in the sector, the paper has developed its own firm profile based on observation and interview with key stakeholders.

The leading companies in the interior design industry seems to be the AA Construction and Architect Joint Stock Company (AA Corporation) and the Truong Thanh Furniture Corporation. The AA Corporation was established in 1990 in the production of wood products and luxury interior furniture. At the moment, with more than 2,000 employees, the company has supplied both for domestic and international market. More than 50 percent of its production are for export, AA Corporation produces both ODM (Original Design Manufacturer) and OEM (Original Equipment Manufacturer) to big market such as the US, UK, German, Japan, Srilanka and Cambodia. Employing traditional techniques in water gilding, marquetry, carving and hand polishing, within its production facilities for ensuring their products. For the domestic market, AA Corporation has been known through its brand name of AA Décor, Bellavita, NhaXinh, BoConcept, Teknion. The AA Corporation has its own interior design staffs, that make their own study on the market demand and individual customers. With a network of 3 factories and certified by ISO 9001 as well as by COC to produce Forest Stewardship Council (FSC) Products, AA Corporation is experienced in producing both loose furniture as well as architectural mill work products used in fit out projects.

Truong Thanh Furniture Corporation (TTF) is one of the leading domestic companies, which is in the 3rd position in terms of export value, after two foreign-invested enterprises. The foundation of TTF is a wood processing workstation in DakLak, a province in the Central Highlands, which was established in 1993. Currently, TTF is the leading company in the wood manufacturing and is the biggest enterprise out of the three listed companies in the stock market. The company owns a network of 8 wood processing manufacturers in Ho Chi Minh City, Binh Duong, DakLak and Phu Yen. In 2010, there are three groups of products in the Corporation, namely the exterior furniture (accounted for 37 percent), interior furniture (51 percent) and wood floor (12 percent). The export value of the company has amounted up to 85 percent of the total production in 2008. However, in some recent years, realizing the increasing demand of the sector, TTF has paid more attention to the domestic market, leading to 30 percent of domestic share in 2010.

The second layer of actors in the interior design industry is the three listed companies in the stock exchange market, namely DucThanh Wood Processing

Company (GDT), Thuan An Wood Processing Joint-Stock Company (GTA), and SAVIMEX (SAV). They are specialized in wood and wood products processing as well as furniture manufacture. However, the production is on average, 65 percent for domestic market and 35 percent for export.

Table 8: Some Selected Criteria of the Listed Companies

<i>Code</i>	<i>Market capitalization⁴ (VND billion)</i>	<i>Total Revenue (VND billion)</i>	<i>Profit after taxes (VND billion)</i>
GTA	119.6	286.4	9.2
GDT	224.0	174.3	30.8
SAV	318.8	403.4	14.6
TTF	747.2	1,901.7	23.1

Source: Consolidated from HNX and HSX

The second layer also experienced some other companies that have not been listed in the stock market but have medium operational activities such as Hoang AnhGia Lai Furniture (under the big Hoang AnhGia Lai corporation), Starwood Furniture (a 100 foreign-invested company), Thompson Furniture (a 100% foreign-invested company).

The third layer comprises of a variety of small enterprises that has accounted for large share in the sector, more than 80 percent of the total enterprises. Their purpose of operation is toward medium and lower income class in society. However, these enterprises do not have their own design staffs. The patterns and design are copied and adjusted from the existing ones and the quality is not as good as the bigger ones.

2.4. Some Common Characteristics of Interior and Fashion Design in Vietnam

The creative industries comprise of variety of types of development with special characteristics and different from the normal industries. Known as the nurturing industries in Vietnam, interior design and fashion design have some following characteristics:

⁴As at the end of the first quarter in 2010.

- Products of the interior and fashion design contain the factor of creative, therefore, to some extent, they are uncertainty. Designer and producers can not be sure of the profit of their products when they are sold in the market.
- Because the interior and fashion design is at the early stage of development, there is no leading trend in the sectors, they are being influenced by international trend, which is sometimes not suitable with Vietnam's tradition and culture, and can not be consumed.
- There is "colorful" team of designers that are finding a place in the market. Although some of them are known with certain products, the coordination among designers is still weak and conflict is a must. However, this is a common characteristic of not only the creative industries, but also other business sectors.
- The interior design sector has not been clearly defined. It is still mixed up and considered as one component of the larger construction sectors. That is also a reason why there has not any development plan yet for this sector.
- There is variety of products and they are different from each other. This characteristic can be interpreted to, in one hand, meet the increasing and different demand of the society, and to confirm the characteristic of immature sectors.
- The durability of the sectors is different. Interior design can possess this characteristic, but it is not true for the fashion design.
- The lifetime of a product is short. Containing the characteristic of creativeness, it takes time to produce one product, and it is not sure of the delay in production. It is appropriate with fashion design sector.

In the current context, the development of interior and fashion design in Vietnam is depended on some following trends:

- Being influenced and led by developed market such as France, the UK, China, and the US.
- The internationalism and localism is parallel existed. It is reflect in most of the stage of production, not only included in building market and consumers, development and distribution, but also in developing idea into products, which is known as individual creativeness.

- The sector is developing towards market-based demand.
- Within the industries, the creativeness of individual designers and groups is increasing, which play an important role of ideas and new approaches and increasing the value added of products and services provided for consumers.
- Digitalization is key in the design sector due to the strong development of informatics' infrastructure.
- The supporting industries is developing

3. Policy Review

3.1. Over Business Climate of the Sectors

The new Enterprise Law and Investment Law in 2005

The Law on Enterprises, which took effect on 1 July 2006 (replacing the previous Enterprise Law 1999 and adjusted State-owned Enterprise Law 2003) applies to all domestic, foreign-invested and State-owned enterprises established in Viet Nam and specifies voting procedures and quorum requirements in both limited liability companies and joint stock companies. The Investment Law, also coming into effect since 1 July 2006 and replacing the Law on Incentives for Domestic Investment and the Foreign Investment Law 2000, promulgate common application on investment activities, regardless of foreign or domestic sources of capital. These changes have been viewed as breakthrough in the economic development and thinking and reform process of legal and regulatory framework in Vietnam. The enactment of Enterprise Law and Investment Law in 2005 was implemented as there are additional conditions positively affecting the Vietnam economic reforms and development. It was the event that the country was joining WTO, whilst its economy has actually gained good momentums with high annual growth rates, thus making foreign investor redirect their capital flows from other countries into Vietnam. Updated information shows that FDI in Vietnam has risen with much larger scale and higher speed in comparison with previous years.

According to the “Doing Business 2012” report, the ranking of Vietnam’s overall business climate has fallen in 2011 because the country has failed to improve its electricity system. Also, this Report mentions the slow pace of administrative reforms in Vietnam. In general, the Vietnam has just improved only three out of the ten areas that the Report looked at, including construction permits, investor protection and contract enforcement. A worsening of conditions was seen in areas such as starting business (licensing), registering property, paying taxes and obtaining credit.

However it is believed in Vietnam’s ability to remain competitive and maintain sustainable economic growth over the long term because the Vietnamese government is taking actions in several key areas, including stabilizing the macroeconomic environment in Vietnam, protecting better investor’s rights in particular in the areas of licensing, protection of intellectual property rights and efficient enforcement in cases of IPR violations, continuing the implementation of infrastructure projects and guaranteeing reliable energy supply, improving the quality of labor force by promoting higher education and vocational training, tackling red-tape and corruption and continuing to reduce and simplify administrative burdens on all levels (should be at the high in the government’s agenda).

Over the last years, Viet Nam has greatly benefited from significant foreign direct investment, triggered upon its accession to WTO and the resulting liberalization in services sectors. While Viet Nam, over the last years, has renewed significantly its legal frameworks, the full and timely implementation of WTO commitments in practice represents a fundamental for Viet Nam’s ongoing attraction of FDI in 2012-2015. In facilitating this, the administrative procedures has improved as the Government has introduced and adopted the one-stop-shop approval for investment activities that reduce the time in setting up business, the number of documents required has reduced significantly, the licensing regulations, the opening of a branch, relocating branch procedures are simplified. Together with the implementation of Enterprise Law, the issuance of guiding decrees and circular has been in progress in further facilitating the business environment climate. Recently, the Decree 102/2010/ND-CP on 1st October 2010 (in replacement for Decree 139 of 5th September 2007) has been welcomed by the business community because it clarifies that companies established in Vietnam with foreign ownership of up to 49 percent can enjoy the same investment rules an conditions

as those applicable to local companies. Concurrently, those with foreign ownership of more than 49 percent will be subject to same conditions as applicable to foreign investors. This should make the acquisition and operation of companies with less than 49 percent foreign ownership easier. In addition to that, there are some certain areas that entitled to favorable investment conditions and incentives through investment regulations and tax regulation (import duty and corporate income tax).

At the beginning of 2011, the Vietnamese Government announced it would be emphasizing “quality over quantity” where foreign direct investment is concerned. This presumably meant that Viet Nam would be focusing on attracting high-technology value-added manufacturing from foreign companies. One important component of this is the implementation and enforcement of intellectual property rights. The Law on Intellectual Property Rights has been the first time passed in 2005 and being effected from 1 July 2006. The issuance of the Law has change the mindset and understanding of people in respecting, encouraging and rewards the products of human mind. The guiding under-law documents are on progress and the enforcement of IPR will help create an environment to motivate to produce new ideas and technologies; protect Vietnamese consumers from the danger of counterfeit products and attract more advanced foreign technology to Vietnam. However, the enforcement of IPR is still a problem because the attitude of Vietnamese public toward counterfeiting and IPR infringement remains ambivalent.

Policies related to the development of SMEs

The overall SMEs development plan 2011-2015 is on the drafting process. However, the latest seminar on recommending for development plan held at end of 2011 shows that SMEs in Vietnam, and is small in scale and weak in competitiveness. A survey carries out by the Ministry of Planning and Investment has revealed that nearly 50 percent of SMEs has capital less than VND 1 billion; 75 percent less than VND 2 billion and 90 percent less than VND 5 billion. The common difficulties of SMEs include lack of capital and access to land, with the addition comprise of weak management skills, low technology, small and fragmented market and lack of linkages with big enterprises. This requires a proper plan of amending regulatory framework as well as support from Government for facilitating the development of SMEs.

3.2. Policy Review related to the Fashion Design and Interior DesignFashion design

For the large textile and garment sector, the national strategy for the development of textile and garment industry till 2015 and orientation to 2020 has approved by the Prime Minister in 2008. The overall objectives for development of the industry is to become one of the key industries and one of the leading export industries which meet the increasing domestic demand, creating jobs as well as increasing the competitiveness and sustainable integration into the region and the global. To support for the overall objectives, the target for development till 2020 has defined the growth rate for annual production from 12 percent to 14 percent and for annual export of 15 percent and some main criteria as follows:

Table 9: Some Selected Criteria for the Textile and Garment Sector

Criteria	Unit	Target for large industry by		
		2010	2015	2020
1. Total revenue	Million USD	14,800	22,500	31,000
2. Total export	Million USD	12,000	18,000	25,000
3. Employment	Thousand people	2,500	2,750	3,000
4. Domestic content	%	50	60	70
5. Main products:				
- Fibre yard	1000 ton	20	40	60
- Fibre, synthetic fibre	1000 ton	120	210	300
- Other fiber	1000 ton	350	500	650
- Cloth	Million m ²	1,000	1,500	2,000
- Garment products	Million products	1,800	2,850	4,000

Source: VINATAS, 2010

Policy orientation and recommendation has been developed in the national strategy, including the followings:

i. Products:

- Concentrate on developing and increasing the competitiveness for the export of garment and textile industry; increase the local content for better effective production; pay attention to fashion design to have special and different products and gradually build the trademark for enterprises; increase the adaptation of quality management standard to meet the requirements of integration.
- Encourage domestic and foreign investment in the sector, especially on the production of synthetic fibre, replacing material and supporting industries
- Make a production plan for the development of exporting cloth with the leading role of the Vietnam Textile and Garment Association
- Make a development plan for cotton trees.

ii. Investment and production development

- For garment enterprises: Production base should be located where there are favorable resources of labor and transportation. Establish fashion centers, research institute for fashion design, material-providing centers and trading centers in Ha Noi and Ho Chi Minh City and big cities
- For fibre, clothing and dyeing enterprises: Construct specialized industrial parks and zones which have adequate conditions for production.

iii. Environmental protection

- Build the Environmental Assessment Report for the Garment and Textile and regulatory framework related to environment
- Have special treatment for serious polluted areas and construct water treatment system in garment and textile zones

- Adopt and conduct the Green Production Program in the sector, encouraging the adoption of ISO 14000 and creating good working conditions under SA8000
- Build and implement the roadmap for technology innovation in the sector towards environmental friendly
- Enhance the research and study on environmental issues
- Meet the requirement of environment and technical barriers in international economic integration

Interior design

At this moment, there is not clear legal framework for the development of interior design industry. It is only recognized as one component of the broader construction and design sector. Therefore, the existing Law on Construction in 2003 is seemed to be the highest and overall regulatory framework, which contains one Chapter with 2 Items, and 16 Articles for the development of the sector. However, there is no clear and targeted article on the interior design, which is regarded as one part of the architecture design. Some under-law and guiding documents have been issued since the effectiveness of the Law, but almost nothing touch upon the interior design.

4. SWOT Analysis

This section provides an analysis of the strengths, weaknesses, opportunities, and threats confronting Vietnam's creative services in the case of interior and fashion design. Our SWOT analysis is drawn from the initial results of our surveys on 17 respondents, including managers, designers, entrepreneurs, educators and policymakers from Hanoi and Ho Chi Minh City in the designated fields. The list of survey respondents is in Appendix 1.

Our preliminary findings suggest that while the country enjoys a number of strengths and opportunities for a thriving creative service industry, at least in the case of fashion and interior design, the challenges rooted from fundamental weaknesses are immense. We identify some of the key issues facing Vietnam, as the nation moves forward in an integrated global economy with increasingly sophisticated demands for creative goods and services. Our SWOT matrix is summarized in Appendix 2.

According to UNCTAD's Creative Economy Report (2010), "Design", including interior, graphic, fashion, jewelry, and toys, is classified as Functional Creations, which comprises the goods and services that are more demand-driven and services-oriented with functional purposes. Four out of seven UNESCO Cities of Design are in Asia (Kobe, Nagoya, Japan, Shenzhen and Shanghai, China). In the area of interior and fashion design, Vietnam is among the newcomers even compared with countries in the region. We will examine different factors that may affect the potential development of these designing services in Vietnam.

4.1. Strengths

Creative individuals

Vietnamese people from the ancient times were believed to be skillful, particularly with their hands, hence the existence of traditional handicraft villages has been persistent until now. There is an innate tendency to create something unique and different from what is seen and learned. Almost every respondent in our survey would agree that there is a large number of very creative individuals in the field of architecture, interior, and especially fashion design. One can go as far as saying "every Vietnamese is an artist". This creativity, however, exists and is more visible at the individual level.

Abundantly dynamic and talented youth

Vietnam has a population of nearly 90 million people. Over half of the labor force is under the age of 30. It is a country rich in labor and vigor, with great potential in services or any consumer markets. According to the most recent Population Census⁵, Vietnam has entered a period of "Golden Population", during which the proportion of

⁵Population Census 2009 Report, "Báo cáo kết quả chính thức, tổng điều tra dân số và nhà ở 1/4/2009," Ban Chỉ Đạo, Tổng điều tra dân số và nhà ở trung ương, July 2010.

children below 15 falls below 30%, and the elderly above 65 is below 15% of total population. With a population of over 86 million people, the numbers of people aged 15-65, the main contribution to our labor force has increased to nearly 70%. In other words, two thirds of the population is in their working ages, creating a young and abundant labor force for economic development activities. The textile and garment industry alone has employed over 3 million workers, of which over 1.3 million are industrial workers, taking up to 10 percent of the total industrial workers nationwide⁶.

Educators, managers, and senior designers often commented that there is a young Vietnamese generation of very passionate soon-to-be, or want-to-be designers. This group of young designers has a strong thrive for knowledge, which they seem not to get from arts schools or the traditional training channels. Many have taken up almost any opportunities to practice, either by working alongside with the more senior designers in an apprenticeship, or for learning-by-doing purposes. These young designers are said to have a lot of new and bold ideas. They are also very up to speed with the latest trends, are fully informed about discussions, events, and demands around the world. They are active seekers for opportunities to study abroad, participating in designing contests, or fashion events around the world. They are also very ambitious, with strong desires to become internationally known in the bigger world. If properly trained and motivated, over time with more experience and exposure, these young and energetic designers could be a great source of growth for the field.

Culturally valued details

One cultural characteristic has been an excessive focus on details, subtle sophistication, the best, the selected few, over massive production, or large quantities (“*quýhòitinhbátquýhồđã*”). This characteristic is pervasive across all service sectors, but are of particular importance to the designing industries. The attention and demand for detail, or detailed differences, serves every market segment, from low to high-end customers. There is a great strength in miniscule product differentiation that calls for creativity.

⁶Vietnam Textile and Apparel Porter, <http://www.vietnamtextile.org.vn>.

4.2. Weaknesses

An uneven playfield for SMEs

While garment, textile, and furniture manufacturing firms are mostly large ones with a lot of capital and support from the state, interior and fashion design firms are usually small. The competition for resources and support among large and small firms is a source of weakness for potential designing firms.

From 2004 to 2007, while the state sector has absorbed over half of the growth in capital, sales growth was much slower than other sectors, and job growth was negative. As a result, with such an impressive growth rate and export performance over the past two decades, Vietnam however does not have internationally competitive firms. Most export successes have come in the forms of agricultural products and raw materials, or the low-technology, labor intensive manufacturing industries. Vinatex is a reputable garment producer, but has not yet moved upstream to textile, and thus remains a low-skilled and lower-tier contractor to many other firms. These labor- and import-intensive large firms cannot compete in the global market until they find a way to move up the production chain to capture more value added.

Insufficient education and training

While there is a young, passionate, and dynamic generation of new designers, unfortunately they are not best equipped with a good training program. Almost every of our respondents acknowledged an insufficient training, the lack of professionalism, and the out-of-date materials that are mostly theory with very little, even out-of-date, practice. There is a weak linkage between the education and training curriculum, and the real demands from employers in practice. As a result, employers often have to “retrain” the new graduates. Even the educators from different universities share similar views, reflecting their limited capability in expanding knowledge, given a rigid framework that is barely up to date. Moreover, designing, whether in the forms of arts, architecture, or industrial designing, is a new field.

This problem is not new, and not specific to the design industry. It is difficult to exaggerate the problems facing Vietnam’s education at all levels. However, in an area with constantly evolving contents, which requires a large amount of hands-on practice, it is more important than any others to have faculty and training programs that reflect the “creativity” component outside textbooks. As a result, each designer receives small

pieces from his formal training, and picks up the rest from whatever opportunities he may find, through apprenticeships, short-courses, on-the-job training, or the internet. Those who can afford, or those who are lucky or talented enough to find scholarships for a program overseas could realize their potential through a period of time absorbing into an environment abroad. Many designers commented that it was not until they left the country, and came back, that they realize the tremendous potential, or creativity the Vietnamese endow. Unfortunately, but not surprisingly, not everyone who is trained overseas come back.

Lack of managerial capacity

There is a strong consensus among our respondents that while the workforce has very talented people at the individual level, we have not been able to bring them together and make a talented, productive team. There is a lack of professional management, insightful decision makers, and action takers. In some views, “good artists are not good managers,” or “managers do not speak artists’ languages.” Decisions are often made in an ad-hoc base, with little systematic or general assessment. Compounded with the lack of vision and strategies, firms with weak managerial capacity often function on a basis of “trial and error,” which can be costly. Contracts in both the input and output markets are being negotiated and evaluated on a case-by-case basis, formulating a fragile production unit. There is also a lack of communication skills, including foreign languages, even among the young managers.

As a result, the lack of effective team work continues to push designers to separate ways and work more or less in isolation. Ironically, business management is among the most flourishing fields in many universities, mostly private, in Vietnam. The quality of management has seemed to make very little progress.

Small businesses, not an industry

There is a strong desire among the artists that their products are not *arts for arts sake*, but that they are marketable as well. Creative entrepreneurs therefore are not hard to find. Many if not most of the very talented designers, both in fashion or interior décor, would have an independent business, functioning on a basis of small contracts with large corporations, or responding to individual demands. Since 2008, the British Council office in Ho Chi Minh City has organized frequent networking events for

artists, designers, and the creative entrepreneurs in the area. These events attract a large number of highly energetic, business-minded creative entrepreneurs who share a love for art, but are also seeking ways to marketize their talents. The number of small designing companies is no longer few and far between.

However, the market has not succeeded in scaling up these creative talents into large scale production. For the case of fashion design, large corporations are reluctant to sign contracts with “creativity” terms. For them, this item is hard to price, with a value hard to evaluate, so they are not ready or willing to invest time into an intangible, never-existed product such as “a new design”. Large garment corporations are still heavily dependent on a mass production of standardized products using original designs from clients. Their value added is simply the low assembly labor cost.

For example, according to the Vietnam Textile and Apparel Association 2010 report, Vietnamese textile and garment exports are 60% CMT, 38% FOB, and 2% ODM⁷. The total value added from textile and garments is only 25% of total exports value (\$11.2 US billion in 2010), with a profit margin of 5-10%, and 70-80% imports of input materials.

As a result, the design industry has limited capacity to compete without achieving economies of scale. Small businesses has a limit to self grow, and large corporations are not willing to expand their creative components of production. Designing is costly, and until the full cost can be shared, there is a socially suboptimal level of investment in creativity businesses. At least for the design industry in Vietnam, it is possible that the story of the 1990s as Hobday (2003)⁸ mentioned still carries on to the 2000s.

⁷CMT (Cut Make Trim) is the most basic form of garment manufacture, where garment firms are provided all input materials and designs from foreign buyers, and would only carry out the most labor intensive tasks of cutting and tailoring. Under FOB (Free on Board), the garment firm is responsible for obtaining fabrics, with fabrics accounting for between 50-80% of the final FOB price, but still use the foreign firms’ designs. ODM (Own Design Manufacturing) is the highest production modality, where Vietnamese producers would design their own products and purchase their own inputs.

⁸Mike Hobday (2003), “Innovation in Asian Industrialization: A Gerschenkronian Perspective,” Oxford Development Studies, Vol. 31, No. 3, September 2003.

Table 10: Technological Progress in South East Asia

	Singapore	Malaysia	Thailand	Indonesia	Vietnam
1960s	Assembly				
1970s	Process engineering	Assembly	Assembly		
1980s	Product development	Process engineering	Assembly	Assembly	Assembly
1990s	R&D	Product development	Process engineering	Process engineering	Assembly

Source: Hobday (2003)

For the interior design industry, similar story holds. Small businesses have less capacity to upgrade to the most recent technology, or experiment with new material inputs. The construction project bidding process hardly cover a new or creative interior design that is home-grown. As results, consumers would choose between a low-cost, existing design, or a high-cost, imported design from abroad. There is very little room to industrialized new designing ideas.

Poor supporting industries

Vinatex, the state-owned national textile and garment corporation, claimed to take up 80% of Vietnam's capacity in spinning, 50% in weaving, knitting, dyeing and finishing, and 45% in garment production. Among over 40 of Vinatex's member firms, 22 only manufacture garments, while 14 of the 18 textile firms produce garments as well as fabrics⁹. According to the designers, however, the limitations in the supply of high quality fabric is a major weakness holding back the fashion designing industry. Fabrics are critical to the final cost and quality of a garment item. The domestic market has not provided the quality products that serve designers' need. Imported fabrics, on the other hand, could come cheaply from China, or more expensively from Japan and other countries.

⁹Nadvi and Thoburn (2003), "Vietnam in the global garment and textile value chain: implications for firms and workers," DFID Globalisation and Poverty Programme Working Paper.

Similarly in interior design and home furnishing, there is a very limited selection of quality input materials from domestic markets. Most designers rely more on the international markets, with different levels of tolerance for costs, import taxes and procedures, as well as the long periods of time it takes to process orders. The lack of a strong support for input materials is a major drawback, remarkably weakening the competitiveness of both design industries.

Ineffective associations

Most of our respondents are either not aware of the existence of any business associations in their field, or commented that these associations only functions intermittently, with little effects. Most forums or meetings organized by these associations are on the basis of information and experience sharing, informal recruiting channels, or business idea exchanges. There is little connection between the associations and universities, and the market. These business associations have not been able to “connect the pearls”, relating individual talents across the country to help forming a coherent strategy for the industry development at a broader level. In short, associations play almost no impacts in enabling small private designing firms in becoming more competitive, generating information about export markets, supporting research and development. As a result, the many small but dynamic companies continue to struggle on their own.

4.3. Opportunities

Information inflow from media and social networks

Being open to the greater market outside means a great strength for the designing industries. In the case of fashion design, the international market plays an important role in informing domestic designer what the world population are demanding, and how domestic young people respond to social trends. For interior design, new ideas for designs and materials come more from the interaction with the outer world and social networks. This openness to the outside world is also evident in the rapid growth of internet usage in Vietnam. In the last ten years, from a Vietnam where almost no one has access to the internet, now at least over a third of the population has been accessing the internet resources. The majority of internet users are the young (aged 15-30).

Table 11: Internet Usage and Population Statistics

YEAR	Users	% Pop.
2000	200,000	0.3 %
2005	10,711,000	12.8 %
2007	16,737,129	19.7 %
2008	20,669,285	24.0 %
2009	22,779,887	25.7 %
2010	24,269,083	27.1 %
2011	30,248,846	34.8 %

Source: Vietnam Internet Center (VNNIC, <http://www.vnnic.vn/>)

Similarly, there have been impressive progresses and developments in the Vietnamese media market in all forms. The press has played an increasingly important role not only in delivering news and information, but also serves as a forum for debates about social, economic, and political issues. Radio and television programs have also gone through rapid changes, delivering the most updated worldwide news and information. As discussed earlier, the cost of having internet connection has gone down so dramatically and the network effects are so vast that almost anyone could be online. There are still debates about the amount of freedom, or the unintended consequences of the increased openness in public media. But it is hard to deny that a more open media market brings in the latest information and knowledge about suppliers and demanders worldwide. This is a great opportunity for the functioning of any market.

Vibrant domestic markets

As a result of economic growth, the standards of living for many people in Vietnam have improved. Families have more resources to invest in educations, health, and social activities. There are fewer people who have to care about having enough to eat and to wear. Many households have choices about the quality of goods and services they consume, and they spend more on recreational activities, or products of quality or style. As more people can afford to read books and magazines, buy a cell phone, be online, go

to movies, or spend time socializing at home or outside, their demands for design intensive products go up. As people care more about how they look, and if their home is comfortable and cozy, opportunities for interior and fashion designers are becoming more abundant.

Demanding international markets

The increasingly demanding market for sophisticated products is a great opportunity for Vietnamese designers. Together they create a “high-end” segment of the market, in which firms compete by brand-names, new ideas and designs, with cultural characteristics. Many firms have started having their office or showrooms in Singapore, Japan, and some countries in Europe. Higher demands from international markets create a great incentive for Vietnamese designers to reach out and “learn to serve” the high-end customers. Demand creates supply, and improves firms’ capacity to invest more in productivity and differentiation. The demand for sophisticated products also forces designers to revert to the unique styles through cultural characteristics.

4.4. Threats

Cheap labor

Many investors when considering Vietnam in their investment portfolio puts “cheap labor” as a score of attractiveness. This is becoming a threat instead of a source of strength especially for the creative industries. When investors come to Vietnam for the cheap labor, they may have exhausted all other options, and Vietnam becomes a “producer of last resort.” There is very little room left for creativity cultivation, demands for products that are skill intensive. There is simply very little resources devoted to the development and marketing of new design ideas.

Such types of low cost investments result in garment factories chronically in labor shortages, high labor turnover rates, of factory workers suffering from low wages and poor working conditions. Wages and compensations paid for workers in these factories cannot attract talented designers who work for ideas. Attracting foreign investments with cheap labor is a threat to the development of a skillful labor force, and prevents the economy from producing more sophisticated products in larger units.

High costs of doing business

For all businesses, especially small and medium enterprises, infrastructure is one major contributing factor to the high costs of doing business in Vietnam. Despite a high level of investment, Vietnam is still undergoing various infrastructure bottlenecks. The design industry is both directly and indirectly affected by the public provision of electricity, water, and transportation. Vietnam yet cannot produce enough electricity to power the country's major cities and industries without seasonal rolling blackouts and other interruptions.

Besides a lack of access to capital and land, small businesses may find it difficult to form partnerships and trade across national boundaries. Many of our respondents commented that they needed to take great efforts in forming connections and business network overseas. It was further suggested that support from a business association in this matter would be valuable, especially with during the early phase of development for small designing businesses.

Global competition and China

Vietnam continues to run large trade deficits with China. Compared to other countries in the region, Vietnam's trade deficit with China ranked highest in absolute terms and has grown at an alarming rate. A close look at the specific commodities imported from China reinforced many problems identified earlier for the designing industries, such as supporting machinery and materials, including textile yarn, fabric, clothing and accessories.

Table 12: Top Ten Vietnam Imports from China

2007/09 three year average, USD millions

Textile yarn, fabric	1,927
Iron and steel	1,858
Telecom sound equipment	1,031
General industry machines	856
Petroleum, petrol products	773
Road vehicles	712
Electrical machines, parts	693
Power generating mach	628
Special industry machines	587
Clothing and accessories	507

Source: UN Comtrade

While the market is full of “cheap Chinese goods”, protection is clearly not a solution. Only when domestic firms can improve their competitiveness, by making and producing differentiated products, with high quality and trusted brand-names, can the designing industry found a position in the global market, attracting international demands. Interestingly, many of our respondents were still looking for some “protection” from the state, either in the form of tax subsidy or trade tariffs. When the mindset that the government needs to protect an infant industry is still imbedded in many business leaders, it will be a great challenge for the state to create a playground that fosters competition and a healthy development of creative service markets.

A “creativity is free” mindset

In many Vietnamese people’s mind, creativity is a godsend, some people have it, some others do not, and no one should have to pay for it. The idea of “creative products,” or “marketable creativity” is not new, but bringing creativity to the market is a learned process.

Added to this challenge is a problem of “a nation in rush.” Vietnam is among the countries with very high saving rate (over 40% of GDP). As a result, one would expect a lot of resources could be mobilized for investments. However, most investments in Vietnam has relatively short life cycles. People prefer to reap the rewards quickly, and tend to invests in goods or services with high returns in the shortest time. Much investment therefore has been put in real estate, the stock markets, or more recently, gold and dollars trading. Long term investments such as education, health, and especially research, innovation activities, are the last items on the desired investment list.

Racing to the bottom

The pressure to compete with cheap products abroad, especially China, may force domestic firms to join a “race to the bottom” and compete by price. When costs are cut, something has to go, and most likely that is quality, and the willingness to invest in new designs. Firms and businesses end up delivering low price, low quality products. Firms advertise themselves and take great pride in being “the cheapest,” not “the best.” As a habit, consumers are not faithful to any brand-name, they continue to seek cheap products if that is the only differentiation firms are making. Businesses cannot rely on cost cutting strategies, and certainly market competition will not sponsor a long-term designing capacity building. As designers seek ways to create the cheapest products, quality, reputation, brand-names will be the trade-off. Large corporations will continue to struggle to move out of FOB into ODM production mode. As a result, workers are trapped in a production cycle using only low-skilled labor and cheap inputs. That is exactly the suicidal recipe for the creativity business.

This section presents some preliminary results from our examination into the interior and fashion design services in Vietnam. We identify some of the issues facing Vietnam as we enter a new phase of economic development, and respond to a set of new demands for sophisticated, skill-intensive goods and services. This analysis sets out the key strengths, weaknesses, opportunities, and threats over the medium to long period. Rather than cataloging all of the challenges or opportunities facing Vietnam, we have focused on issues that we believe deserve policy attention, both at home and from a regional viewpoint. The next sections will discuss the policy recommendations that

could foster the development of the design industry, and creative services in general, for Vietnam.

5. Policy Recommendations

Policy to foster the development of the creative economy must recognize its multidisciplinary nature – its economic, social, cultural technological and environmental linkages. Key elements in packages to shape a long-term strategy for the creative economy should involve concerted inter-ministerial actions to ensure that national institutions, a regulatory framework and financing mechanism are in place to support the strengthening of the creative and related industries.

At the national level, some following policy should be paid attention, including:

- Improving the supporting infrastructure for the fashion and interior design: regulatory framework, development strategies, and supporting policies;
- Creating significant step in trade promotion, such as establishing wood products and furniture storage at the targeted market, buliding a network of sales or direct sale in those market;
- Increasing awareness and advocating for having better understanding of the industries
- Enhancing the linkages between creative industries (fashion and interior design) with financial sector for having better investment opportunities
- Developing support program for enterprises in designing for interior industry
- Enhancing the implementation of Law on Intellectual Property Rights to facilitate the international trade and to protect the right of knowledge.

- Protecting the basic cultural resources for ensuring the culture and creative industries
- Promoting supporting policies and encouraging the development of SMEs
- Closer link a between education and practical production
-

At the regional level:

- Soft and hard infrastructure
- Information exchange and knowledge sharing
- Common fund for supporting the new ideas and creation and for networking

Appendix 1

List of Survey Respondents

Fashion Design

1. Công ty TNHH Thời Trang Song Nam (MASCHIO)
2. Công ty TNHH thiết kế và kinh doanh thời trang ACQUA GUSTO
3. VC Modeling
4. Công ty TNHH Nguyễn Công Trí
5. Tiến Lợi's House
6. Viet Tien Garment Corporation
7. ADS International Design & Art Center
8. Công ty TNHH Quỳnh Paris
9. British Council

Interior Design

1. University of Architecture, Ho Chi Minh City
2. Van Lang University, Department of Industrial Arts, Ho Chi Minh City
3. Institute of Architecture, Association of Architects, Vietnam
4. Công ty TNHH Lũy Tre Làng
5. Công ty TNHH Đạt Sanh (Sanh Decor)
6. Công ty cổ phần xây dựng kiến trúc AA (AA Decor)
7. Tập đoàn Vingroup (Vingroup)
8. Công ty cổ phần Bethoda

Appendix 2

SWOT Matrix – Interior and Fashion Design Services in Vietnam

STRENGTHS	WEANESSES
<p>Creative individuals</p> <p>Abundantly dynamic and talented youth</p> <p>Culturally valued details</p>	<p>Uneven playfield for SMEs</p> <p>Insufficient education and training</p> <p>Lack of managerial capacity</p> <p>Small businesses, not an industry</p> <p>Poor supporting industries</p>
OPPORTUNITIES	THREATS
<p>Information inflow from media and social networks</p> <p>Vibrant domestic markets</p> <p>Demanding international markets</p>	<p>Cheap labor</p> <p>High cost of doing business</p> <p>Global competition and China</p> <p>A “creativity” mindset</p> <p>Racing to the bottom</p>