

## **Building Prolific Entrepreneurship Ecosystems in ASEAN Insights from India**

### **Roundtable on Technology and Distribution Innovation in HealthTech**

Date: 8 September 2021

Time: 2:30 - 4:00 pm, IST / 4:00 - 5:30 pm, WIB

#### **Background of the Study**

This study is conducted by CIIE.CO and ERIA. The purpose of the study is to open collaboration and peer learning between India and ASEAN and share knowledge and tools relevant to entrepreneurship ecosystems in the South Asian region. As part of this study four open virtual roundtables will be conducted with thought leaders and relevant industry experts from India and ASEAN. Each of the roundtables will be based on a theme which is relevant and important for the Indian and ASEAN entrepreneurship ecosystems, with the first roundtable focusing on incubators.

#### **Objectives of the Roundtable**

With this second in the series of roundtables, we aim to introduce the Indian and ASEAN healthtech innovation ecosystems to various stakeholders from the region, from the lens of startups as well as policy. We will be focusing on the telemedicine and e-pharmacy innovation ecosystem and would be looking forward to achieving the following objectives in our moderated discussion.

- Highlight and analyse the developments in the telemedicine and e-pharmacy innovation ecosystem
- Trace the future trajectory of these innovations
- Analyse the impact of Covid-19 on the adoption of disruptive technologies
- Explore the need of healthcare data interoperability - privacy and security
- Analyse the gaps in terms of policy and regulatory framework and come up with actionable policy recommendations/interventions

#### **Outcome of the Roundtable**

Based on the roundtable discussions and secondary research, a policy brief will be published which can be used by policymakers, investors, incubators and other ecosystem stakeholders, to design and implement actionable policy interventions.

**Speakers:**

- Dr. Satya Prakash Dash, Former & Founding Head Strategy, DBT-BIRAC, India, Board Member, Venture Center, India
- Ms. Nita Tyagi, Core Volunteer Healthcare, iSPIRT
- Ms. Von Leong, Co-Founder & General Partner, Purpose Venture Capital
- Mr. Alfonsius Timboel, Chief Product Officer, HaloDoc

**Moderator:**

Mr. Chintan Antani, Associate Vice President-Seed Investing, CIIE.CO

**1. Healthtech Ecosystem in India**

India's healthcare ecosystem is on the verge of a paradigm shift. After remaining resistant to digital reforms for the longest time, the sector is now open to innovation and digital technology-driven healthcare delivery that became a necessity owing to the pandemic. Within the healthcare universe, healthcare technologies, popularly known as "Healthtech" has been in the spotlight with rapid adoption of technology. Healthtech sectors include telemedicine (online doctor consultation, remote diagnosis & more), e-pharmacy (online sale of medicines and pharmaceutical products), online fitness and wellness, healthcare IT & analytics, home healthcare & personal home management. Healthtech accounts for less than 1% of the overall healthcare industry in India, and was estimated at USD 1.9 billion (2020), implying a huge market opportunity. India has more than 5,000 healthtech startups and the healthtech market is expected to grow at a CAGR of 39% to touch USD 5.0 billion by 2023.<sup>1</sup>

The pandemic underlined the weak healthcare infrastructure in the country, however, its disruptive nature also inspired promising innovations. There has been an increased adoption of teleconsultation, online diagnostics, e-pharmacy, remote diagnosis and monitoring etc., which has catapulted the healthtech sector to a path of high growth. For example, the government's eSanjeevani initiative (national telemedicine service), launched in November 2019, had facilitated 3 million consultations by March 2021<sup>2</sup>. The consumer adoption that healthtech has been able to achieve would have taken at least another 4-5 years in a non-Covid scenario. It is expected that, in the future,

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<sup>1</sup> [Indian healthtech sector to see 39% CAGR: Livemint](#)

<sup>2</sup> [Govt. of India's telemedicine service completes 3 million consultations](#)

healthtech might operate on a hybrid model, with almost 15-20 percent of the Indian healthcare services expected to shift from physical to virtual service.<sup>3</sup> Given the sensitive nature of healthcare, there is a need for a robust policy and regulatory framework to back healthcare innovations. Thus, it is important to discuss how such a framework can encourage innovations within the ecosystem, without compromising patient safety & security.

### **1.1 Policy and Regulatory framework - Focus on Telemedicine and e-Pharmacy**

The Drugs and Cosmetics Act (1940) regulates the manufacture and sale of drugs in India, however it does not mention e-pharmacies. As this leads to uncertainty, the draft e-pharmacy rules (2018) was proposed by the government, however they have not been notified yet. On March 25, 2020 in response to the nation-wide lockdown, the Telemedicine Guidelines (2020) were notified. These guidelines laid down the norms regarding consultation by doctors via phone, video and chat applications. However, given that, the regulatory clarity around the e-healthcare industry does not extend to the e-pharmacy industry, and that online delivery of medicines cannot be separated from online consultations, a standardised regulatory regime needs to be set up to provide clarity to the stakeholders. The lack of proper rules has also prevented large investments into the e-pharmacy space. In the absence of clear regulations, e-pharmacy startups have started offering online doctor consultations and online diagnostic services besides operating as marketplaces and catering to patients as a platform for ordering medicines from the sellers that adhere to the Drugs and Cosmetics Act and Rules of India. Other regulations, like the Information Technology Act and the Narcotic Drugs and Psychotropic Substances Act, also apply. For instance, 1mg is a digital healthcare platform that acts as a one-stop shop for consumers providing both e-pharmacy and online consultations, along with online diagnostics and lab testing services.

### **1.2 Management of Healthcare Data in Telemedicine & E-Pharmacy**

Since e-pharmacy and telemedicine involves an online medium of exchange and storage of healthcare data, it is crucial to understand the policies and regulations that apply to such mediums. The Information Technology (Reasonable Security Practices and Procedures and Sensitive Personal Data or Information) Rules 2011 regulates the exchange of sensitive personal data between patients and healthcare professionals. The Digital Information Security in Healthcare Act (DISHA 2018 - Proposed) provides

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<sup>3</sup> [Telemedicine can transform the Indian healthcare system](#)

stringent provisions for data safety and privacy. The Personal Data Protection Bill (PDP 2019 - Proposed) aims to protect the privacy of individuals and governs the relationship between individuals and entities processing their personal data. While DISHA takes a more rigorous view of individual's control, PDP has a more lenient approach, leading to different positions being enunciated by DISHA and the PDP Bill.

### **1.3 Proposed Health Data Management Framework**

Apart from data protection, the need of the hour is interoperability of healthcare data. Healthcare data in India is fairly fragmented, given the interaction of citizens ranges across multiple healthcare providers viz. diagnostic centres, hospitals, medical practitioners and pharmacies. If this data can be made interoperable to be shared across providers, it will make things seamless and also save time and money. For example, a physician does not have to ask a patient to re-do a scan that was already done in the recent past.

The Electronic Health Records Standards (2013/2016) recommends the adoption of interoperable electronic health informatic standards in electronic health and medical records. The Health Data Management (HDM) Policy (2020) aims to digitize the entire healthcare ecosystem of India. HDM sets out the minimum standards for data privacy protection that should be followed across the board. The HDM stems from the National Health Policy of 2017 and the resultant National Digital Health Blueprint (NDHB), which was intended to create an enabling and interoperable digital framework to support universal health coverage while ensuring the security of sensitive personal medical data. However, experts have pointed out drawbacks, ranging from allowing Aadhaar (identity card) to be used for creation of health IDs to excessive collection of personal data and leaving scope for data re-identification. In a nutshell, data security and privacy remains an overriding concern in the field of telehealth.

## **2. Healthtech Ecosystem in ASEAN**

For Southeast Asia (SEA) consumers in this mobile-first region, healthtech solutions are increasingly becoming a lifestyle staple. Digital tools are bringing healthcare solutions to consumers' fingertips, giving them access to customised, patient-first healthcare experiences. Southeast Asia's high mobile penetration rates and number of mobile users has allowed the digitalization of healthcare through the proliferation of health-related mobile apps. Currently in eight ASEAN nations, over 55% of their

population are active internet users and enjoy over 90% mobile network coverage of their populations.<sup>4</sup> This growing number of mobile users have fueled openness for healthtech innovation and opportunities in SEA. The region is enjoying strong growth in telehealth, digital therapeutics, diagnostics, remote patient monitoring and analytics.

However, demand for healthcare in the region has never been greater, especially with the current Covid-19 pandemic. As ASEAN demographic level will continue to rise faster (e.g.: Malaysia, Philippines and Indonesia population are expected to go up by 40 percent by 2050), the region is still facing the longstanding problems such as shortage of physicians/doctors, understaffed hospitals and unequal access and standards of healthcare across SEA.

The critical needs for a better healthcare response during the pandemic combined with the changing demographics of SEA means that an intervention is due for healthcare systems in ASEAN member states. The healthcare sector in the region needs to look for innovative solutions to figure out how to be more effective and efficient without spending excessively, and thus, need to leverage its technology for a better healthcare solution.

## **2.1 Robust Actors Defining the Healthtech Ecosystem in ASEAN**

Various actors and players are beginning to take different approaches to define the Healthtech ecosystem in the region. Across SEA, nontraditional entrants such as industrial and retail conglomerates, banks, consumer-tech companies and telco-companies are now as important as the traditional healthcare incumbents such as insurers, providers and government agencies.<sup>5</sup> Furthermore, as collaboration and strategic partnerships are critical to scale up the business, many corporates and healthtech ventures are also increasingly entering into partnerships to scale digital health services. For instance, the region's leading app such as Halodoc, offers an integrated healthcare content, consultation, and medicine purchase to a collaboration for medicine delivery between regional ride-hailing tech companies such as Go-Jek. In 2019, the healthtech sector in SEA saw a record-breaking funding level (266 million USD) compared to 2018 (118 million USD) as deal volume rose at a

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<sup>4</sup> [Reaching 650 million: how digital technology is key to achieving universal health coverage in ASEAN](#)

<sup>5</sup> [McKinsey. The future of healthcare in Asia: digital health ecosystem](#)

CAGR of 63% – with Singapore and Indonesia continuing to account for the majority of the region's funding.<sup>6</sup>

The growing number of actors, capital and consumers in SEA healthtech ecosystem has called for a need for a practical policy framework and healthcare governance to regulate the business models, manage the distribution innovation and assist the implementation of healtech services in the region.

## **2.2 Policy Framework and Challenges Ahead**

Southeast Asian governments have recognized the need for healthcare reforms and have put forward policy plans to move in that direction. E-health and healthtech present huge opportunities for ASEAN governments to translate the various healthcare policies in the past decade into wider practice. The Masterplan on ASEAN Connectivity 2025 estimates that the potential of digital disruption in healthcare in the region can result in economic benefits of USD 20-53 billion by 2030.<sup>7</sup>

Some ASEAN countries like Singapore, Philippines and Thailand have developed policies/framework that facilitate the use of technology in healthcare. In Singapore, [national telemedicine guidelines](#) have set clear principles around areas such as AI and data governance, medical devices, and telemedicine. [The Personal Data Protection Act](#) introduced in 2012 and advisory guidelines for healthcare were also issued by the Singaporean government to ensure data protection. With its [2014-2020 eHealth Strategic Framework Plan](#), the Philippines envisioned that eHealth would enable widespread access to health care services and health information . Similarly, as part of Thailand 4.0, the Ministry of Public Health has developed a [2017-2026 eHealth Strategy](#) to develop Thailand as a medical hub in ASEAN by 2025.

However, as it stands, all countries in ASEAN have multiple major IT investments, across sectors that are plagued by issues of fragmentation in investments, uncoordinated planning, and low uptake of technologies. Moreover, many of the governments are still facing problems in the regulatory implementation. For instance, in Indonesia, there is still no general law on data protection. In the Philippines, the major issues to implement eHealth Strategic Framework is the fragmented health system which lacks health information exchange allowing for the sharing of health data that would allow more efficient provision of private and public healthcare.

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<sup>6</sup> [Southeast Asia VC healthtech landscape](#)

<sup>7</sup> [Masterplan on ASEAN connectivity 2025. The ASEAN Secretariat](#)

### **3. Conclusion**

The Covid-19 pandemic has accelerated the trajectory of the healthcare ecosystems across both India and the ASEAN region. Furthermore, in both ecosystems inventive technologies in the form of healthtech (with a special emphasis on e-pharmacy and telemedicine) have been paving the way forward, which has also led to collaborations between various stakeholders in the sector to fuel innovative disruptions. Recognizing the importance and need for healthtech, governments across both the ecosystems have created, or are in the process of creating policies and frameworks to regulate this space. However, each region has its own drawbacks in terms of regulation, implementation, and privacy. Therefore, it becomes critical to not only discuss the development & future trajectory of this space, but also to analyse the gaps that currently exist and to consider the implications and solutions to such issues.