



ASEAN ON POINT

20 / 04 / 2021

**PREPARING ASEAN WORKFORCE
FOR POST-COVID-19**

ASEAN ON POINT PUBLIC FORUM SERIES

In response to the global coronavirus pandemic, the ASEAN Secretariat (ASEC) and the Economic Research Institute for ASEAN and East Asia (ERIA), will co-host a series of public forums – ‘ASEAN on Point’ - to address issues of importance to the advancement of ASEAN. The forums will provide a platform to bring together representatives of diverse stakeholders to share knowledge on the latest research and insights on relevant topics on post-pandemic recovery in order to inform the policy discourse. It is hoped that the insights and recommendations from the forums can contribute to different sectoral work in ASEAN towards recovery. The vision of these Forums is to ‘Build Back Better’ so that the region’s recovery policies result in a more resilient, inclusive, and sustainable region.

SPEAKERS:

- Ms Rosanna A. Urdaneta
- Mr Ingo Imhoff
- Mr Eugene Ho
- Ms Huynh Thanh Tam

MODERATOR :

- Dr Rashesh Shresta

TIME	AGENDA
2:30 – 2:45 PM	<p>Welcoming Remarks</p> <p>Ms Lydia Ruddy Director of Communications, ERIA</p> <p>Opening Remarks</p> <p>H.E. Kung Phoak Deputy Secretary-General of ASEAN for the ASEAN Socio-Cultural Community</p> <p>Mr Jesus Lorenzo R. Mateo Undersecretary for Planning, Human Resources and Organizational Development, and Field Operations of the Department of Education, Philippines Chairperson of the ASEAN Senior Official Meeting on Education (SOM-ED)</p>
2:45 – 3:15 PM	<ul style="list-style-type: none"> Ms Rosanna A. Urdaneta, Deputy Director General for Policies and Planning of the Technical Education and Skills Development Authority (TESDA), Philippines Mr Grahame Dixie, Executive Director of Grow Asia Mr Ingo Imhoff, Programme Director, Regional Cooperation Programme in TVET (RECOTVET) Mr Eugene Ho, Head of Corporate Social Responsibility, East Asia & Pacific, SAP Ms Huynh Thanh Tam, Product Measurement Consultant, Product Quality Department, Bosch Vietnam Co., Ltd <p>Moderate Panel: Dr Rashesh Shrestha, Economist, ERIA</p>
3:15 – 4:00 PM	Open Discussion with Q&A
	<p>Closing Remarks</p> <p>Ms Lydia Ruddy Director of Communications, ERIA</p>

PANELISTS AND MODERATOR



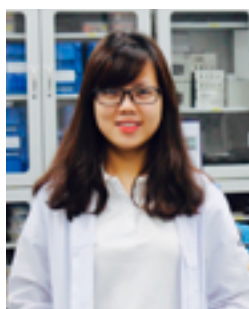
ROSANNA A. URDANETA is the Deputy Director General for Policies and Planning of the Technical Education and Skills Development Authority (TESDA), Philippines. Her leadership and foresight has driven TESDA into international prominence while securing the relevance of technical vocational education and training (TVET) at the national level. She is instrumental in spearheading key policy reforms directed at guaranteeing the readiness of the TVET sector for the Fourth Industrial Revolution. She further facilitated the strengthening of industry participation and partnership in TVET through the formulation of a blueprint for the TVET sector in the country known as the National Technical Education and Skills Development Plan 2018 to 2022.



INGO IMHOFF is the manager of the German government's Regional Cooperation Programme on Technical and Vocational Education and Training in the ASEAN region (RECOTVET). RECOTVET has the objective to strengthen human resources, institutional capacities and know-how of TVET systems in the ASEAN region. The programme has been working since 2014 with partner organisations including the ASEAN Secretariat and the South East Asian Education Ministers Organisation (SEAMEO) as well as German bilateral TVET programmes in Cambodia, Indonesia, Lao PDR, Myanmar, the Philippines and Vietnam. Current priorities of RECOTVET include business and industry cooperation in TVET and strengthening the capacities of TVET systems to adjust to digitalisation and industry 4.0.



EUGENE HO is the Head of Corporate Social Responsibility, East Asia & Pacific and a member of the Global CSR Leadership at SAP, overseeing SAP's CSR efforts across 17 markets in the Asia Pacific region. He is responsible for grant investments and employee volunteerism, focusing on youth employment and economic empowerment to advance the Sustainable Development Goals.



HUYNH THANH TAM is the Product Management Consultant for Bosch Vietnam Co., Ltd. Tam has been with Bosch Vietnam Com Ltd for more than 8 years. She studied at Bosch vocational training program for first 3 years and has nearly 5 years of experience in Quality. Tam graduated in 2017 and started her first professional career as a Quality Technician at Laboratory of Quality Department. She became a specialist in 2019 and now a consultant.



DR RASHESH SRESTHA is an Economist with research interests in labor markets, economic development, and human capital investment. At ERIA, he conducts academic research and leads policy-oriented research projects on a wide range of themes including human capital, education, global value chains, trade facilitation, regulatory management system, and financial inclusion. Prior to joining ERIA, he was an Associate Lecturer at the Australian National University. He earned his PhD from the Department of Agricultural and Applied Economics at the University of Wisconsin-Madison. He is originally from Nepal.

In response to the global coronavirus pandemic, the ASEAN Secretariat (ASEC) and the Economic Research Institute for ASEAN and East Asia (ERIA), is co-hosting a series of public forums – ‘ASEAN on Point’ - to address issues of importance to the advancement of ASEAN. The forums will provide a platform to bring together representatives of diverse stakeholders to share knowledge on the latest research and insights on relevant topics on post-pandemic recovery for the policy discourse. The insights and recommendations from the forums are intended to contribute to different sectoral work in ASEAN towards recovery. The vision of these Forums is to ‘Build Back Better’ in ensuring the region’s recovery policies result into a more resilient, inclusive, and sustainable region.

The digital and technological transformation and Fourth Industrial Revolution (Industry 4.0) bring implications to the economies, industries and employment across ASEAN. Job creation or transformation, innovations, evolving job categories/ descriptions, intensified productivity, skills gap, adaptability of human resources and education to the changing labour market demands, life-long learning culture through up-skilling and re-skilling, and new forms of employment relations are some of the emerging issues that need to be addressed. Especially in light of the impact of COVID-19 on the ASEAN socio-economic spheres, ASEAN needs to manage the transition by preparing its human resources for the future of work. Skills development through Technical and Vocational Education and Training (TVET) and life-long learning are key to building back better. With the capacity of TVET to rapidly respond to changing labour markets, it has the potential to: (i) support employment opportunities, (ii) increase competency and productivity, (iii) improve income of workers, (iv) promote enterprise competitiveness, (v) heighten job security, and (vi) support digital skills to advance in line with Industry 4.0.

In this view, ASEC and ERIA, in coordination with the Department of Education (Dep-Ed) of the Philippines who is also the Chair of ASEAN Senior Officials Meeting on Education (SOM-ED) will be jointly organising a special episode on TVET titled ‘Preparing ASEAN Workforce for Post-COVID-19’. This forum will also serve as the 3rd episode of the 2021 ASEAN and SEAMEO Month Webinar Series, the initiative spearheaded by the Dep-Ed Philippines, aimed at providing platform for sharing of regional policy responses related to the COVID-19 pandemic.

Some of the topics to be featured in this episode include: TVET governance, quality and financing, particularly with respect to participation rates, access to formal and non-formal TVET especially in rural areas, public spending for TVET, quality of TVET and its relevance to the needs of businesses and industries in the ASEAN region.

The Forum will focus on the opportunity to accelerate the transition to an ASEAN workforce that is ready to take on the jobs that will come with Industry 4.0, highlighting the challenges faced by the TVET sector as well as discussing policy options to overcome the adverse impacts of COVID-19.

OPENING REMARKS

In his welcoming remarks, Deputy Secretary-General of the ASEAN Socio-Cultural Community, H.E. Kung Phoak, underlined the challenges presented by the COVID-19 Pandemic and the Fourth Industrial Revolution, particularly in exacerbating skills gap in ASEAN.

To address these challenges, he emphasised on the importance of regional collaboration highlighting the following regional initiatives aimed at preparing human resources to be future ready through the promotion and advancement of TVET:

1. Adoption of the ASEAN Declaration on Human Resources Development in the Changing World of Work, which among others agreed to promote the utility of TVET by portraying the decent and employment opportunities, school-to-work transition and career progression of TVET graduates;
2. Development of the ASEAN Work Plan on Education 2021-2025 which among others will work towards enhanced access to quality initial and continuing TVET that is responsive to changing labour market demands
3. Establishment of the ASEAN TVET Council which aimed to facilitate coordination, research and development on innovations and monitoring of regional programmes that would support the advancement of TVET in the region.

While the importance of TVET is increasingly recognised in international discourse and policies, the prominent issues within TVET sector, namely gender disparity and the poor public's perception, were also further highlighted. H.E. Kung Phoak concluded his remarks by emphasising the need for cross-sectoral collaboration between government institutions, the private sector, practitioners, and development partners to fully harness the potential of TVET as a means of creating a well-equipped ASEAN talent pool that can contribute to economic growth and productivity.

Undersecretary for Planning, Human Resources, and Organizational Development, and Field Operations of the Department of Education Philippines and Chairperson of the ASEAN Senior Official Meeting on Education (SOM-ED), Mr Jesus Lorenzo R. Mateo, also delivered welcoming remarks. Mr Mateo highlighted the benefits of TVET for a post-pandemic ASEAN as a measure to counter the unprecedented impact of the COVID-19 crisis that has hit the region's economy, society, and people. Efforts must be made to shift public perceptions of TVET, which is often considered less prestigious than other forms of education, thus greater awareness on the importance of skills-based learning and its relevance to every occupation is needed. The Philippines' is looking to bring into focus the three lenses of education – basic education, higher education, and TVET – during their tenure chairing the ATV and SOM-ED. To envision a resilient workforce in the region, Mr Mateo stated that ASEAN will need to create responsive policies to build back stronger and better in a post-pandemic world.

PRESENTATIONS

The organisers invited three guest speakers representing the government and industry sectors in addition to a TVET graduate to speak on their experiences and insights on the outlook for the educational programme in ASEAN. The speakers highlighted the benefits of technical and vocational education and training towards building an adept workforce in Southeast Asia ahead of Industry 4.0 but were quick to point out that obstacles are at bay. The Panel Discussion was moderated by Dr Rashesh Shrestha, ERIA Economist, who underscored the need for a rethink of policies and strategies as well as 'fresh thinking' to move ASEAN's TVET systems forward.

Deputy Director General for Policies and Planning of TESDA, Philippines, Ms Rosanna A. Urdaneta, provided a public sector overview with her presentation titled 'Developing an Adaptive, Resilient, and Future-Ready TVET Systems in ASEAN.' Job disruption, rising unemployment, growing poverty, and deepening inequalities are some of the matters Southeast Asia must grapple with after the COVID-19 crisis ends – all of which are on an accelerated path towards the Fourth Industrial Revolution. The future of work post-pandemic reveals continued growth for high-skilled workers in STEM fields and healthcare, however, workers in the low- and middle-skill jobs are expected to face the largest negative impact.

With Industry 4.0 and the pandemic spurring the creation of an increasingly sophisticated and tech-savvy world, the ASEAN workforce will require retooling coupled with more advanced digital and cognitive skill- sets to remain employed in the future. While ASEAN's TVET sector is one solution towards supporting a future-ready regional workforce, the pandemic has also shed light on the existing problems preventing the educational programme from providing relevant skills and quality training. Among the issues Ms Urdaneta found included lack of ICT equipment and digital resources, low digital literacy, weak internet access, limited digital-based curricula as well as the low capability of learning facilitators.

Proposed solutions Ms Urdaneta provided included strengthening industry partnerships, utilising digital technologies to deliver training, adapting the TVET curricula to a post-pandemic world of work, and enhancing the digital competencies of TVET trainers. The recommendation of developing a responsive and agile TVET policy was also mentioned by Ms Urdaneta who is confident that a resilient TVET system can sufficiently capacitate ASEAN's workforce with essential skills of the present and future world of work.

Programme Director of Regional Cooperation in TVET (RECOTVET), Mr Ingo Imhoff, discussed the importance of reimagining and redesigning technical and vocational education and training in a post-pandemic ASEAN. Early in his presentation, Mr Imhoff highlighted the diversity of TVET systems between ASEAN Member States (AMS) and cautioned against generalising the region's TVET systems. For TVET to deliver on its promise of reducing youth unemployment and readying young people for work, factors such as well-equipped schools and effective quality management must be addressed. With the Fourth Industrial Revolution imminent, combined with a post-COVID-19 world, TVET systems in ASEAN face changing work processes and the adoption of advanced digital technologies in certain economic sectors. As a growing number of companies invest in TVET systems in ASEAN, the next challenge is ensuring that access to educational and training resources for small- and medium-sized enterprises is met should high-tech TVET become privatised.

Bringing the old circle of challenges of TVET together with issues related to digitalisation could motivate people to overcome the educational programme's challenges in the region. However, a collaboration between TVET institutions and companies will be equally significant as industry players can assist with the provision of state-of-the-art equipment as well as tailor the curricula in line with the demands of the labor market. Mr Imhoff quoted from an ILO report: 'If the affordances of digital TVET are to crystallise, the fundamentals of TVET as a three-way collaboration between employers, students (or employees) and educational institutions have to be improved.'

Mr Eugene Ho, Head of Corporate Social Responsibility, East Asia & Pacific of SAP, shared key industry insights and recommendations on how ASEAN's TVET systems can improve to ensure youth employability in Industry 4.0. Sharing SAP's experience, Mr Ho explained how SAP turned to public-private partnerships to equip educators and students with the competencies sought by the German firm. These efforts have been part of SAP's preparation for Industry 4.0, or what Mr Ho described as 'the last mile before we enter the industry' where the company's growth is expected to create 280,000 new consultant roles in the SAP ecosystem from 2020-2024 according to IDC.

Based on SAP's experiences, Mr Ho relayed five recommendations, the first of which was the government's key role in ensuring that youths remain employable in the coming future. Investing in youth employability will allow AMS to be economically viable while reducing the social costs of unemployment. For TVET systems in ASEAN to be effective, Mr Ho suggests there be a regional skill qualification credential system to uphold quality standards. Second is strength-based learning which works on the strengths of the individual; third is lifelong learning which focuses on encouraging TVET students to embrace e-learning as it will be a part of the lifelong learning experience; fourth is industry skills which would see employers embed industry-led skills and globally-recognised industry certification into the curriculum; fifth is an internship which would require standardising such programmes that Mr Ho finds should last at least 6 months. Currently, the different standards applied in various schools across AMS are disadvantageous in the eyes of employers thus Mr Ho recommends that ASEAN find a solution to standardise the TVET system. Although Mr Ho finds that support for his five recommendations may be difficult to garner, the most pertinent is the standardisation of internship programmes.

For Product Measurement Consultant, Product Quality Department of Bosch Vietnam Co., Ltd., Ms Huynh Thanh Tam, the TVET experience and qualifications put her on the path of her career success. While pursuing her studies, Ms Tam gained the chance to join an intensive on-the-job training at the Bosch Vietnam Co., Ltd factory which led to employment at the company in 2017. Ms Tam praised the training approach, skills-building, and knowledge she gained as part of her TVET experience that enabled her to develop her career path. Despite having a positive experience through the system, Ms Tam still hopes that the issue of gender disparity can be addressed in ASEAN's TVET institutions, specifically having greater female participation. Voicing similar suggestions made by Mr Ho, Ms Tam underscored the importance of lifelong learning of TVET graduates and workers for career advancement.

SUMMARY OF QUESTIONS AND ANSWERS

The pandemic forced us to close down our education institutions and rely on e-learning. How was the TVET system affected by the pandemic and what lessons have we learned?

If online learning is going to be more prevalent even after the pandemic is over, how do we ensure its effectiveness? What changes are required, for example, training teachers on online delivery of course materials? And how can education institutions adjust?

Ms Urdaneta admitted that while the pandemic caused massive disruptions across various sectors including education, TVET stakeholders are heralding in a new era by focusing on the 'new normal.' To ready itself, mobilisation between the government, industry, and academe would be needed to realise the plans set forth for the 'new normal.' Ms Urdaneta further explained that the retraining of trainers, incorporating digitalisation and digitisation in TVET practice as well as establishing a blended and flexible delivery systems process must also be conducted to thrive in the post-pandemic world. Despite the obstacles which emerged due to COVID-19, Ms Urdaneta stated that there is a silver lining in that 'this has made us also realise that the pandemic is a dress rehearsal for the Fourth Industrial Revolution.'

Mr Imhoff added that the pandemic forced a change in mindset where 'everyone has seen that we need to get to a point where TVET institutions can be as resilient as possible under the circumstances, despite knowing that not all TVET teaching can be digitalised.' He praises the speed of delivering distance learning in TVET schools as 'a step in the right direction' thus moving forward, TVET students should be given access to know-how within a work environment that will be significantly more digitalised. Mr Ho concurred Ms Urdaneta and Mr Imhoff, however, outlined the disparity of digital infrastructures across parts of Southeast Asia and called for improvements to facilitate digital learning. Mr Ho suggested an idea where AMS come together to initiate a single curriculum for specific vocational occupations and share it amongst each other.

Many developed countries including Germany have a very sophisticated TVET system. How should ASEAN countries improve the quality of the TVET system? What sort of other cooperation can there be between developed countries and the ASEAN region to improve the TVET system?

What are some examples of reforms being done in ASEAN? What are some areas of cooperation among ASEAN countries and with developed country partners on revamping the TVET system post-pandemic?

Mr Imhoff discussed the need to capacitate TVET institution managers, headmasters, and teachers to play an active role in quality assurance and quality development. Doing so would encourage key agents to improve the quality of the teaching and learning process. Mr Imhoff shared that RECOTVET has been working with various governments to incorporate training on quality assurance into the local or national in-service training curricula. Mr Imhoff reassured that there is plenty of cooperation between developed countries and ASEAN concerning the TVET system which has resulted in strong and innovative TVET systems in the region. To further spur innovation into the TVET systems, Mr Imhoff suggested that ASEAN explore specific partnerships with industrial partners or implement a systemic follow-up via an annual TVET report.

Ms Urdaneta stated that one of the goals of the ASEAN TVET Council is to ensure ASEAN's TVET systems are quality-assured. Thus, improving digital readiness, capacity-building of TVET stakeholders, and utilising labor market information to strengthen labor market orientation are some of the outcomes of the proposed ATC work plan. Although it is difficult to predict a post-pandemic world, the demand for TVET systems is increasing and Ms Urdaneta assured participants that the ASEAN TVET Council is actively tackling the challenges and intensifying its efforts to realise its goals.

Mr Ho emphasised the significance of working with the industries that can assist TVET systems with training materials as well as content and software support, as SAP has done via its University Alliance Program. Industry players like SAP also possess insights on the trends and outlook of the labor market that can be shared which Mr Ho finds can benefit TVET stakeholders.

Change in skill requirement after the pandemic – what skills need to be imparted by the TVET system and how skills demand might change due to the lasting consequences of the pandemic? For example, if the gig economy-type jobs are going to be even more common, is there a role for the TVET system? What about training for content creators for social media platforms?

Mr Ho acknowledged that the gig economy had been increasingly popular before COVID-19 struck, but its popularity has since skyrocketed. Based on Mr Ho's findings, the pandemic triggered changes in necessary skill sets as ASEAN has experienced 6-8 years' worth of digitalisation in 1 year especially in the e-commerce sector. This increased adoption of technology has resulted in the proliferation of digital marketers to meet the current trends, but Mr Ho stated that it is more important to assess whether the same skills will be relevant in the medium-term.

As such, conducting a 'pulse check' on industry and commerce is integral to better understanding what skills will be required to partake in an emerging industry. One example that can be further explored is green energy and solar panels which have seen trillions of dollars of investment and Mr Ho believes ASEAN's TVET systems can work on to develop the skills that will be needed for this growing sector.

Mr Ingo stated that TVET should not limit itself to the role of equipping learners with a comprehensive skill set to take up temporary roles in the gig economy. He added that the sector itself will have to decide which industry skills TVET should equip its students and workers with.

When it comes to the gig economy, Ms Urdaneta admitted that emerging industry has found a perfect home in the Philippines. To keep up with industrial progress, TESDA has been studying the Singaporean model on micro-credentialing to realise its ultimate goal of tapping private institutions or the industry to become training providers to the TVET system.

What can you say about reskilling or upskilling the existing workforce through the TVET program to deal with the recovery post-pandemic?

Mr Imhoff relayed his experience of reskilling workers based on a partnership with a corporation in Viet Nam that provided a modular qualification framework for various technical occupations for individuals who were laid off due to the pandemic; the initiative was part of the German bilateral TVET cooperation programme for reform. Through this experience, Mr Imhoff advised that there be incentivisation to motivate workers to enroll in learning programmes focused on upskilling or reskilling, and to demonstrate that such programmes will be beneficial when workers are integrated into the labor market once more.

How can the general education system and the TVET system work together to impart holistic skills especially to the youths?

Ms Urdaneta underscored the importance of general education in the learning process which provides the necessary skills for an individual to pursue higher education and facilitate lifelong learning. The Philippines has undertaken efforts to impart skills to its youth through the Philippines Qualifications Framework which calls for discussions on all processes as a means of maintaining quality assurance mechanisms. Ms Urdaneta added that the government is currently working on linking TVET into higher education via the Philippine Credit Transfer System. TESDA and the Commission on Higher Education additionally offer latter-rise education programmes that would allow an easier transition and progression between TVET and higher education. These various efforts are geared towards offering students and workers career opportunities and educational advancement.

POLICY RECOMMENDATIONS

Issue: TVET Sector Requires Improved Multi-Sectoral Cooperation

Recommendation: ASEAN Leaders, the industry, private sector, academe, and international development partners work closely to issue policies that are agile and responsive.

Rationale: Reforming ASEAN's TVET systems to be future-ready cannot be done alone thus a multi-sectoral approach must offer solutions and create policies that adequately respond to the challenges faced. Governments play a key role during the final stretch of Industry 4.0 by ensuring youths are employable in the future; investing in ASEAN's youths is an economically viable answer and helps reduce the social costs of unemployment.

The growing list of necessary changes to the regional TVET system and the upcoming 'new normal' will require stakeholders from various sectors to provide answers that are agile, effective, and responsive. Successfully facilitating the regional TVET systems would also make the sector less vulnerable to future disruptions.

Issue: Stronger TVET and Industry Collaboration Needed

Recommendation: ASEAN's TVET stakeholders to push for greater industry collaboration to keep pace with the demands of the Fourth Industrial Revolution.

Rationale: Preparing for Industry 4.0 will require more tools and resources which ASEAN's TVET systems may not currently have. Forging stronger industry collaboration gives TVET institutions the chance to gain the ICT equipment, manpower, and insights regarding future-ready skills. Industry players are equipped with trainers who are well-versed in digitalisation, sophisticated equipment, and information on future trends of the labor market which can then be passed on to TVET instructors. Micro-credentialing is another possible solution that would tap industry and private institutions to become training providers to the TVET system.

A TVET-Industry collaboration would especially ease the transition of TVET systems that is under increasing pressure to digitalise as online learning is likely to remain post-pandemic. Through industry collaboration, TVET students are provided with on-the-job training thus upon completion of their studies, graduates would benefit from having working experience, enhanced employability skills, and potentially direct employment. As more companies invest in ASEAN's TVET systems, it is equally important to ensure small- and medium-sized enterprises continue to gain access to education and training resources in the future.

Issue: Insufficient Digital Infrastructure across AMS

Recommendations: Invest in and strengthen the digital infrastructures across ASEAN.

Rationale: School closure during the COVID-19 crisis was a major shock to ASEAN's TVET systems that were not all equipped with the tools or resources for digital/online learning. To keep up in the post-pandemic world and during the Fourth Industrial Revolution, AMS must strengthen its existing digital infrastructure as there are disparities throughout Southeast Asia. For ASEAN's TVET systems to provide digital/online learning and for the ASEAN TVET Council to follow through on its objectives, it must be facilitated through adequate digital infrastructures.

Issue: Inadequate Labor Market Information Systems Available

Recommendations: Update, improve, then utilise labour market information systems (LMIS) to identify future trends in skills and work post-pandemic as well as before the Fourth Industrial Revolution.

Rationale: Lacking LMIS makes it difficult for ASEAN's TVET stakeholders to examine the short- and long-term impact of the COVID-19 crisis. By not optimising skills forecasting tools, decision-makers are left to guess work or generalise perspectives which are problematic given the numerous differences of Southeast Asia's industrial structures and TVET systems. Effective use of LMIS would bolster graduate employability, but it also gives way for effective policies to tackle persisting issues of the regional TVET system.

Issue: ASEAN TVET Systems' Curricula Need an Upgrade and Standardisation

Recommendation: Work with cross-sectoral partners to develop curricula that are in line with labor market demands. AMS should cooperate to create a standardised, regional TVET curriculum.

Rationale: Initiating industry partnerships, for example, gives TVET decision-makers the chance to develop a comprehensive curriculum incorporating industry, soft, and digital skills that can fill in the skills gap. AMS must also grapple with the reality that the TVET curricula lack standardisation as it differs per country and institution hence AMS can explore cooperation where Member States pilot a single curriculum for specific vocational jobs then share their findings. To enable an easier transition between TVET and higher education, ASEAN can explore ways of linking TVET into the higher education system.

Additionally, TVET graduates are poised to regularly adapt and adjust their skill set as part of their career advancement in the Fourth Industrial Revolution, therefore, TVET students should be encouraged to embrace lifelong learning during their studies. Digital-savvy learning methods such as e-learning or the gamification of learning resources can be adopted as part of embracing lifelong learning.

Issue: TVET Instructors Require Digital Skills Enhancement

Recommendation: Capacitate or retrain TVET instructors with digital skills that are in line with future demands as well as turning to industry or the private sector for assistance.

Rationale: The pandemic revealed the digital weaknesses of TVET instructors particularly as distance learning continues to be a mainstay. To effectively deliver the learning programmes digitally, TVET institution managers, headmasters, and teachers must be capacitated with enhanced skill sets that would allow for blended and flexible course delivery. ASEAN's TVET system must not limit itself to only equipping learners with a skillset to fill up temporary roles in the expanding gig economy. As such, the industry or private sector can supplement the region's TVET system with company trainers who can help capacitate TVET instructors with the important skill sets needed in a post-pandemic world.

Issue: Upholding Quality Assurance across Regional TVET Systems

Recommendation: Create quality assurance mechanisms and change the mindset of TVET institution leaders to also be focused on quality development.

Rationale: AMS must encourage TVET institution leaders including managers, headmasters, and teachers to adopt a problem-solving mindset that would help to identify which processes can be improved even after finding success. Such effort would push for quality development and ultimately, greater quality assurance of the TVET systems in ASEAN. Furthermore, AMS must make sure that TVET degrees become comparable over time as part of a country's general educational system. AMS may also consider publishing an annual TVET report as well as exploring targeted partnerships with industrial partners as part of monitoring its quality assurance mechanisms.

Issue: Encouraging the Regional Workforce to Reskill or Upskill

Recommendations: Incentivise workers to enrol in learning programmes.

Rationale: To transition in a post-pandemic world, AMS must reskill or upskill its workforce particularly because the world of work has changed since the start of the COVID-19 pandemic – something that TVET can fulfil. However, TVET systems must demonstrate that the programme benefits workers once they re-enter the labour market. Moreover, workers who require upskilling or reskilling must earn a living while learning – a criterion not offered in adult learning programmes like TVET – hence, AMS must consider incentivising workers to relieve this burden.

Issue: Enhancing Public Perception of TVET

Recommendations: Promote the importance of the TVET system as skills-based learning that is relevant to all occupations.

Rationale: TVET is viewed as a less prestigious form of education in ASEAN which results in society opting for other education pathways. This diminishes TVET's ability to equip future workers with the necessary skills that will be sought-after ahead of Industry 4.0. Thus, TVET can be promoted for its skills-based, quality, and relevant learning to attract the public into enrolling in the programme.

Issue: Shortage of Women in the Regional TVET System

Recommendation: Boost female participation in the TVET system as trainers and trainees.

Rationale: There is a stark gender disparity in ASEAN's TVET system where its institutions are short of female involvement as students and educators. AMS need to address the gender disparity gap by turning to innovative solutions that highlight the benefits of vocational learning for women. ASEAN could initiate an assessment to better understand the difference between men's and women's study preferences.



ROSANNA A. URDANETA

Deputy Director General
Technical Education and Skills Development Authority

DEVELOPING AN ADAPTIVE, RESILIENT, AND FUTURE-READY TVET SYSTEMS IN ASEAN



ASEAN on Point Public Forum
Preparing ASEAN Workforce Post-COVID-19
20 April 2021

85M^{*}

Jobs to be displaced
across 15 industries by 2025

97M^{*}

Jobs to be created
in emerging industries

33M^{}**

Global unemployment
increase in 2020

119M^{*}**

Additional poor
globally in 2020

Collective and coordinated response
from all the stakeholders

*World Economic Forum, October 2020; **International Labour Organization, January 2021; and ***World Bank, January 2021.

Future of Work

Growing job demand:

1. Data Analysts and Scientists
2. AI and Machine Learning Specialists
3. Big Data Specialists
4. Digital Marketing and Strategy Specialists
5. Process Automation Specialists
6. Business Development Professionals
7. Digital Transformation Specialists

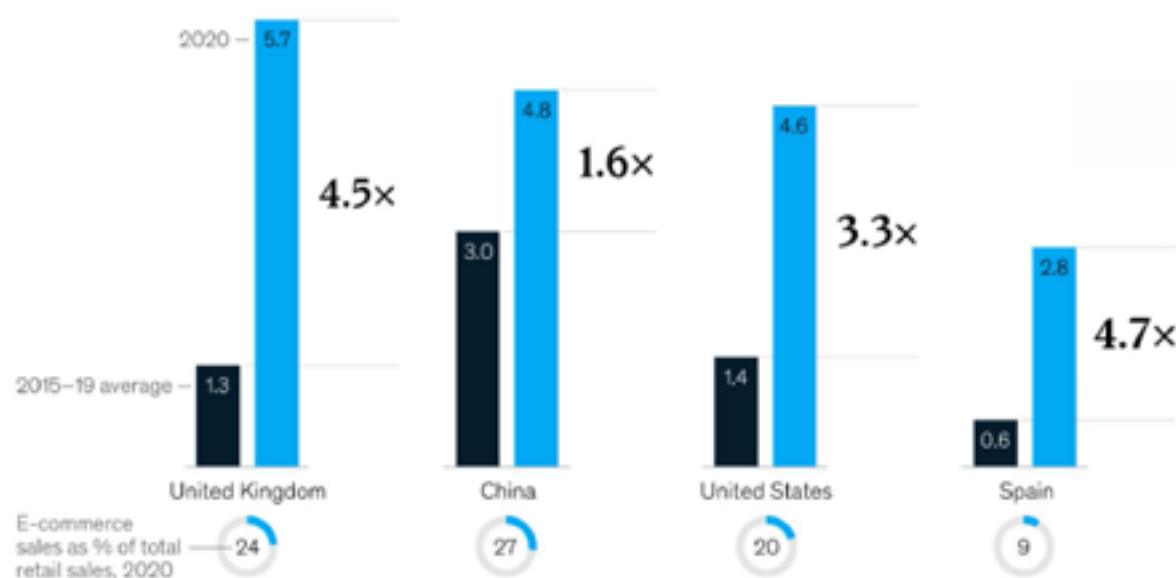
Decreasing job demand:

1. Data Entry Clerks
2. Administrative and Executive Secretaries
3. Accounting, Bookkeeping and Payroll Clerks
4. Accountants and Auditors
5. Assembly and Factory Workers
6. Business Services and Administration Managers
7. Client Information and Customer Service Workers

The COVID-19 pandemic forced the 4IR

E-commerce has grown two to five times faster than before the pandemic.

Year-over-year growth of e-commerce as share of total retail sales, percentage points



Source: World Economic Forum, October 2020 (<https://www.weforum.org/agenda/2020/10/covid-19-accelerated-the-future-of-jobs-here-s-how-to-protect-workers-9ed626584d/>)

Source: McKinsey Global Institute, February 2021 (<https://www.mckinsey.com/featured-insights/future-of-work/the-future-of-work-after-covid-19>)

COVID-19

Disrupted different sectors including the **EDUCATION SECTOR**



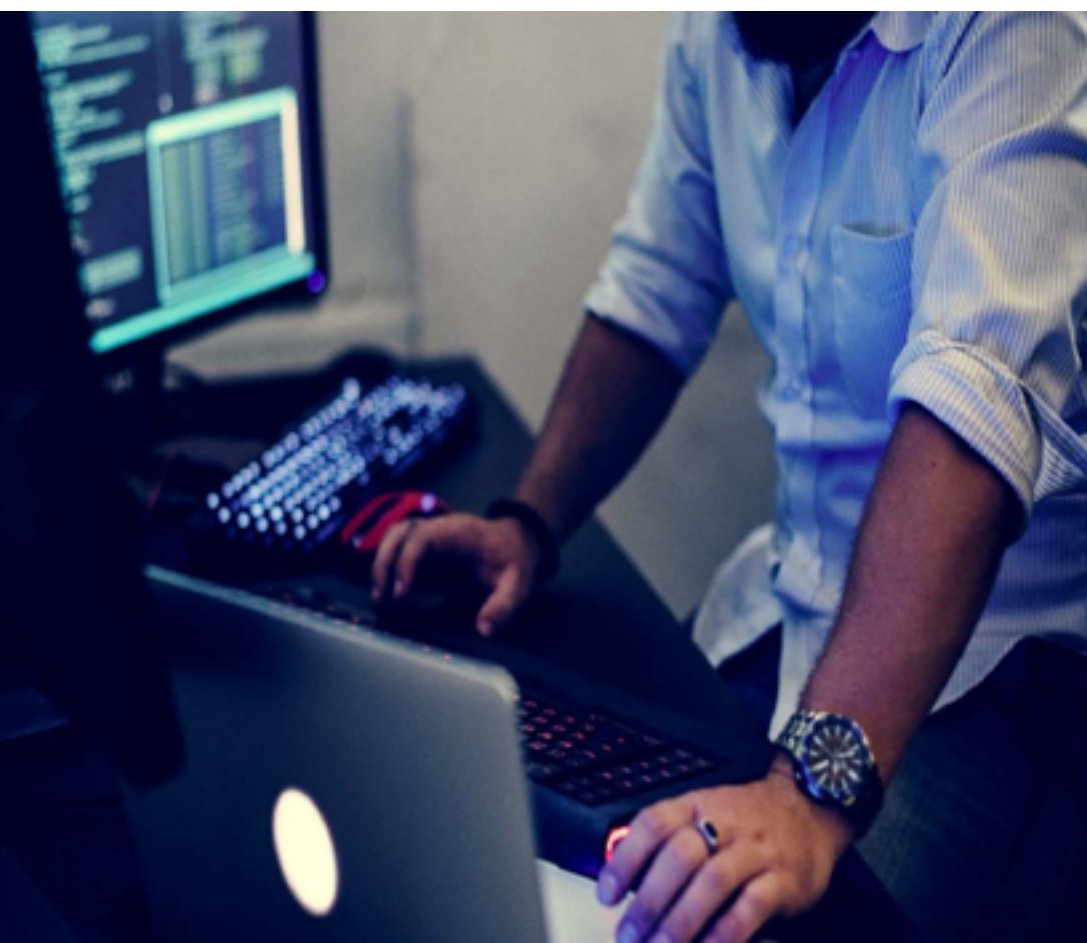
1.04B Students worldwide are affected by the pandemic*

TVET is needed for retooling the labor force



COVID-19

has demonstrated the importance of **DIGITAL READINESS, FLEXIBILITY, AND AGILITY** of our TVET systems



CHALLENGES of flexible learning in TVET both for the TVET providers and learners

Lack of ICT equipment and digital resources

Low digital literacy

Poor access to the internet

Limited online/digital-based curricula

Digital competencies of learning facilitators


ASEAN TVET Council

a cross-sectoral body that will coordinate, develop, monitor regional programmes




Focus areas

 Market-responsive Workforce

 Research

 TVET Image

 Quality Assurance

 Qualification of TVET Professionals

 TVET Implementation and Financing

TVET

remains a viable answer to meet skills needs of the 4IR and address the unique challenges brought about by the COVID-19 pandemic as long as it is **demand-driven**



Towards an adaptive, resilient, and future-ready TVET systems



Develop agile and responsive TVET policies



Utilize digital technologies in training delivery



Adapt TVET curricula to post-COVID-19 future of work



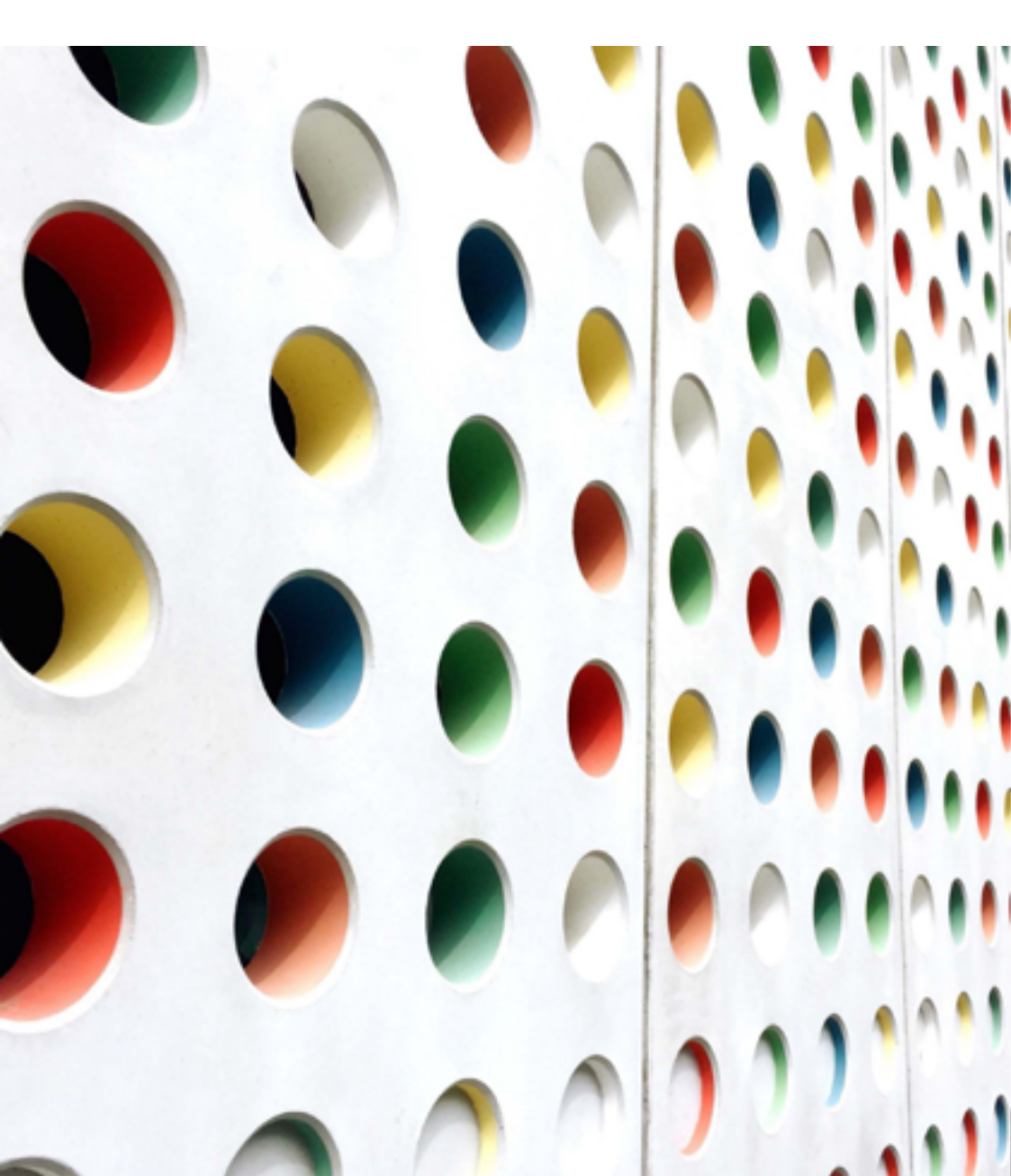
Reinforce the digital skills and future-oriented competencies of TVET trainers



Intensify skills forecasting and LMIS



Strengthen industry partnerships in all areas of TVET

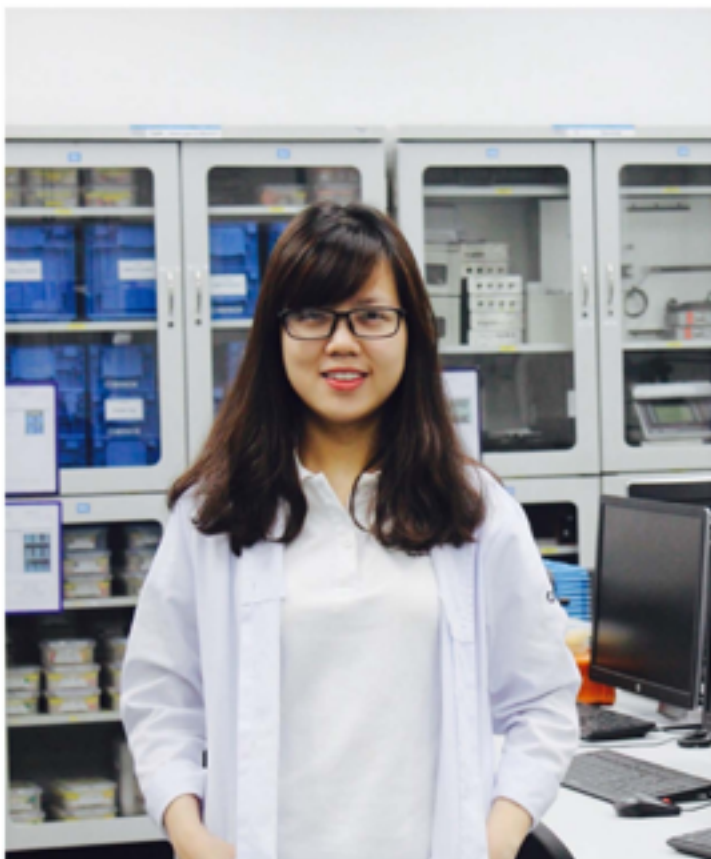


“ASEAN on Point” Public Forum Preparing ASEAN Workforce for Post- Covid 19

EXPERIENCE SHARING

HUYNH THI THANH **TAM** (MS.),
BOSCH VIETNAM CO.,LTD

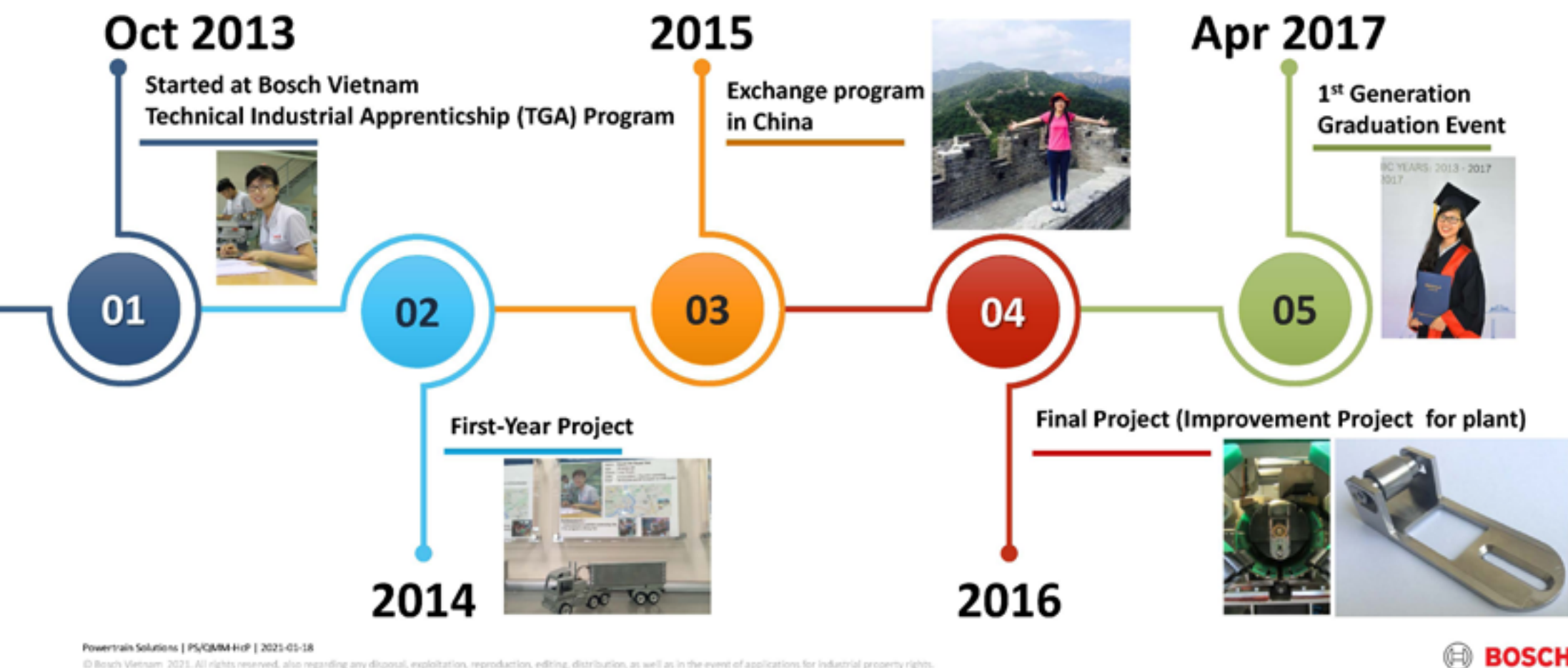
Experience Sharing – Huynh Thi Thanh **Tam** (Ms.) General Information



- ▶ Huynh Thi Thanh **Tam**
- ▶ Email: Tam.huynhthithanh2@vn.bosch.com
- ▶ Position: Product Measurement Consultant, Quality Department, Bosch Vietnam Co.,LTD
- ▶ Short Introduction: Tam has been with Bosch Vietnam for more than 8 years. She studied at Bosch vocational training program for first 3.5 years and has nearly 5 years of experience in Quality department.

Experience Sharing – Huynh Thi Thanh **Tam** (Ms.)

My Vocational Education and Training Journey



Experience Sharing – Huynh Thi Thanh **Tam** (Ms.)

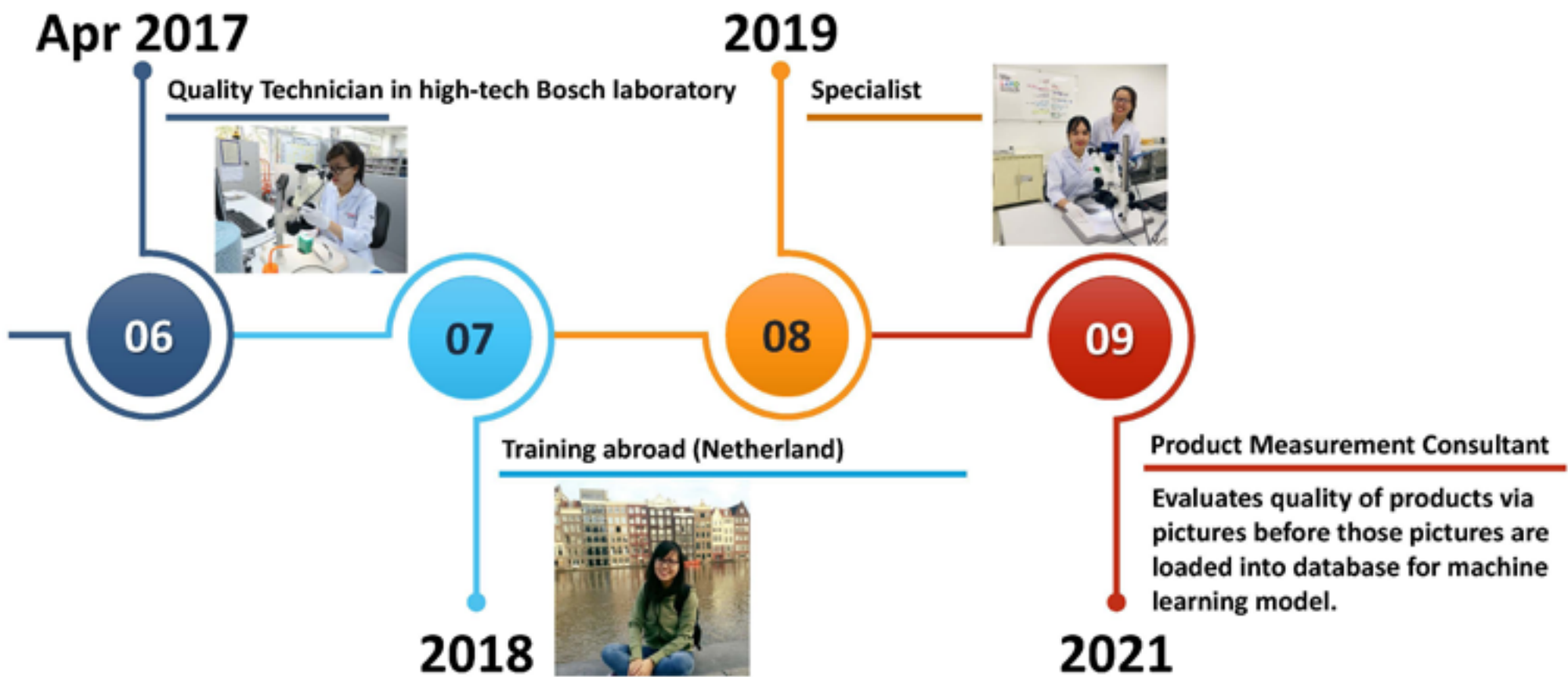
Standard Training Program – Mechanics, Mechatronics



Theoretical studies and practical training combined to gain broad knowledge!

Experience Sharing – Huynh Thi Thanh Tam (Ms.)

My TVET career



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Experience Sharing – Huynh Thi Thanh Tam (Ms.)

Highlights

- There are good training programs for students to choose in Vietnam (e.g Bosch Vietnam and LILAMA 2 cooperation program)
- Right decision to join the vocational training program to equip technical skills for plant requirements
- Technical education and training is also suitable for girls (activities: Girl's Day (TGA program); Diversity Day (Plant)...
- Finish the training program is just a starting point, the huge challenge in professional working is that I need to continuously improve my skills and competencies.



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THANK YOU FOR YOUR ATTENTION!

