

# E-FORUM: MANAGING PANDEMIC CHALLENGES AND OPPORTUNITIES OF TVET IN THE ERA OF DIGITALISATION

IN CONJUNCTION WITH THE 32<sup>ND</sup> SEAMEO VOTTECH GOVERNING BOARD MEETING



**28 OCT**  
THURSDAY



**9.00AM - 5.00PM**  
BRUNEI TIME (GMT +8)



**VIRTUAL**  
VIA ZOOM & YOUTUBE



**SEAMEO VOTTECH**

"Preparing TVET for Industry 4.0"

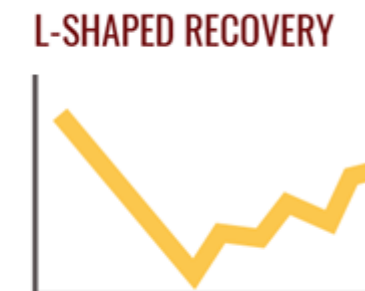
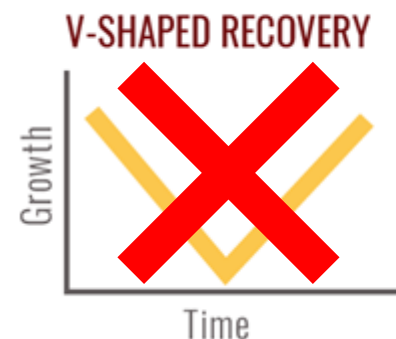
## Initiatives in advancing TVET in ASEAN's New Norm: RECOTVET's Perspective

**Ingo Imhoff**  
**Programme Manager**  
**Regional Cooperation in TVET (RECOTVET)**

# The New Norm?

The future development of the COVID-19 crisis remains uncertain

Scenarios:



Policy response are experimental

Lack of data for more targeted response (e.g. re-training)

**New objective** for businesses, employees, **schools**: **Resilience**

**TVET  
SCHOOLS  
AND  
COLLEGES  
DURING  
COVID**



# Resilience of a TVET Institute

## Reaction to COVID crisis: Go digital!

- **digital marketing** via social media, **online admissions**
- **e-learning** platform, **content**, **learning management** system
- **digital collection of fees**
- **student communication**, **student records**
- ...

# Resilience of a TVET Institute

## Challenges:

- Adequate **equipment** to create digital content
- Access to **broadband / PC access** by students in rural areas (need for mobile app)
- Revision of **training schedules**
- No real substitutes for **practical training units** (more simulation?)

# Resilience of a TVET Institute

## Challenges:

- Easier access and more user-friendly **online learning software**
- **Self-studying** practice and discipline of students (?!)
- **Upgrade for TVET teachers** to create virtual content and make online training more attractive (not all digital natives)

# Old challenges in TVET prevail...

Lack of infrastructure and  
equipment



Lack of quality and practical  
skills of TVET teachers



Poor image of TVET



Outdated curricula and  
didactics

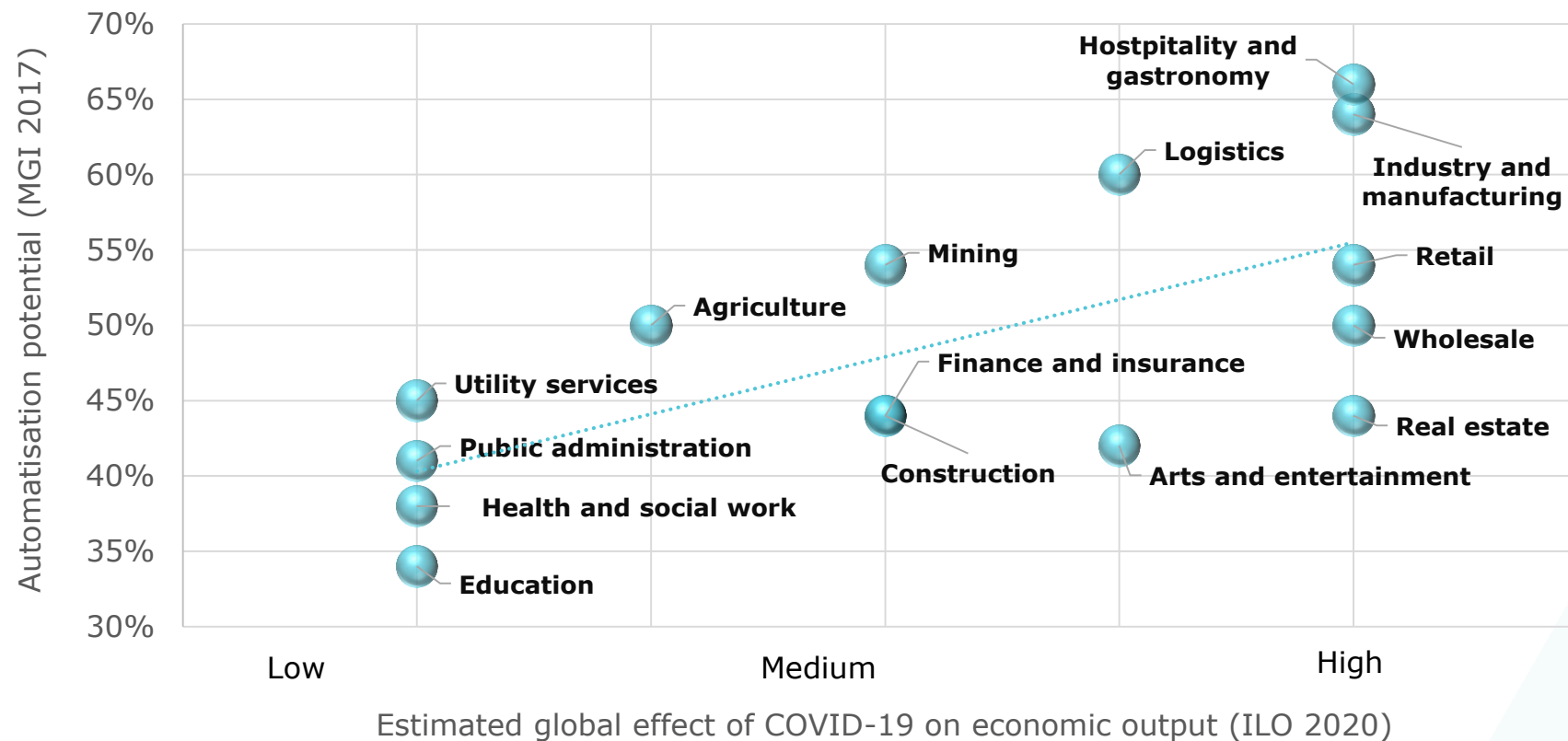


Inadequate quality  
standards



# COVID may advance Digitalisation / Automation

Estimated global COVID-19 impact in relation to automatisisation potential of sectors





# The New Norm!

## **ASEAN Investment Report 2020-2021: Investing in Industry 4.0**

2019: ASEAN FDI: USD 182bn (record) 11.9% of FDI worldwide

2020: ASEAN FDI: USD 137bn (COVID) but 13.7% of FDI worldwide  
=> strong flow in infrastructure related industries  
and digital economy

2021: **New all time FDI record** for ASEAN expected

# I 4.0 / Digitalisation is here to stay

Labour intensive industries, e.g. **Garment Sector** Vietnam:

Total labour force increased **but** low-skilled labour decreased

- Weaving, textile, dying labour force 50-70% replaced (in 10 years)
- Garment 15-30% replaced (in 10 years)
- Increase in highly skilled groups: designers, supply chain managers, e-commerce, programmers, maintenance engineers

# For the companies this translates to two major challenges...



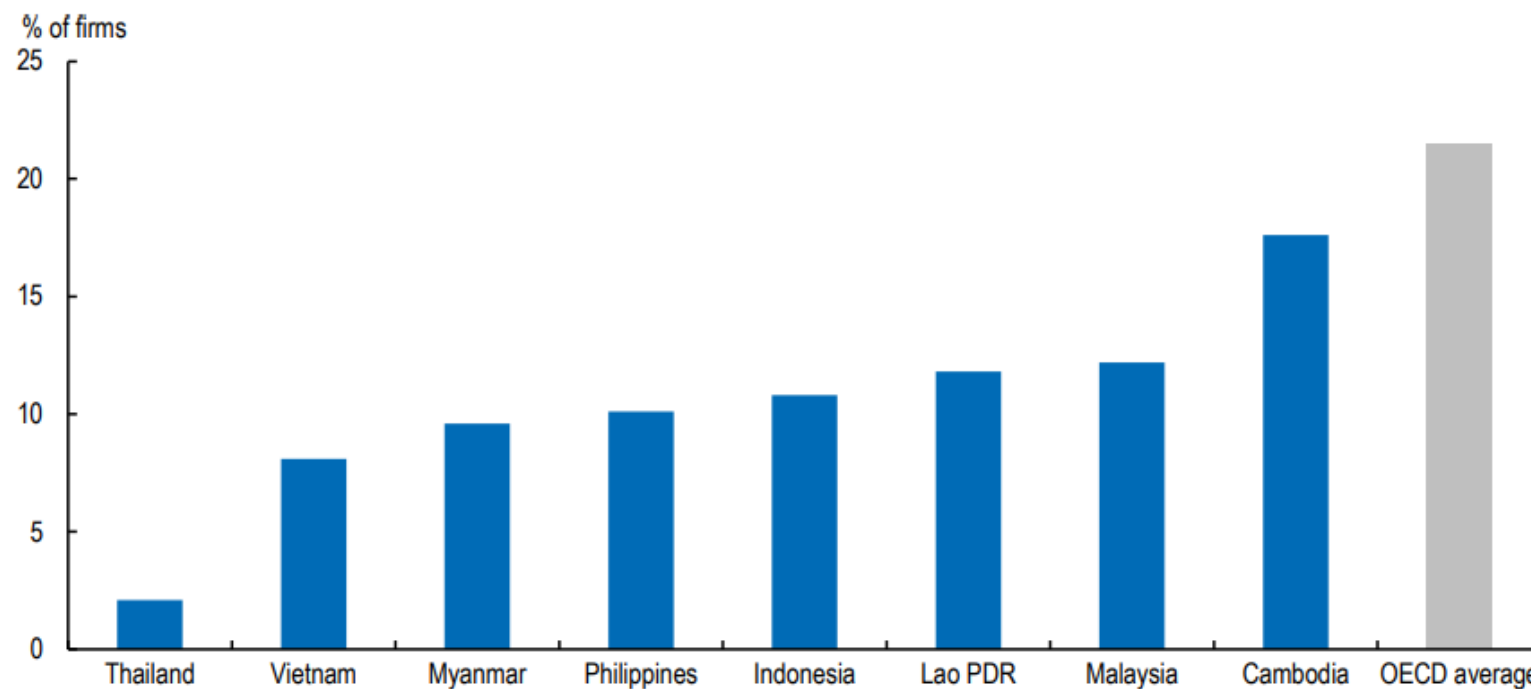
**Shortage of Skilled Workers**

**Changing Competence  
Requirements**



# Shortage of Skilled Workers

Percent of firms identifying an inadequately educated workforce as a major constraint



Source: World Bank (2020), "Enterprise Survey"

# Shortages are magnified through the COVID-Pandemic

90% of enterprises reported disruption of their training and staff development programmes

45% reported complete suspension of training and staff development programmes (50% among MSME, 30% among large enterprises and MNC)

Skilled workers have left the workforce, migrated

# Changing Competence Requirements

**TVET 4.0:** Comparative analysis on qualifications and competences of skilled workers for digitalised work in Germany (BIBB):

- More than **1/3 of companies are highly digitalised**, 1/5 have low degree of digitalisation
- **Highly digitalised and less digitalised companies coexist** and will continue to do so.
- **44% see increase in demand for skilled/highly skilled workers**, 41% see constant demand
- Routine tasks in jobs are decreasing, **complexity is increasing.**

# Changing Competence Requirements

**TVET 4.0:** Comparative analysis on qualifications and competences of skilled workers for digitalised work in Germany (BIBB):

- **Competence requirements are increasing**
- All jobs are affected by digitalisation but **changes and degree are job specific**
- **Job profiles change gradually** as technologies are introduced and organisation of work is modified
- **Companies adjust in-company training** in line with digital transformation

# Changing Competence Requirements

**TVET 4.0:** Comparative analysis on qualifications and competences of skilled workers for **digitalised work** in Germany (BIBB)

Digitalisation calls for **broad competences** including:

- Professional knowledge and competences
- Learning skills
- Understanding of (specific) systems and processes
- Digital competences
- Flexibility



# Implications of Digitalisation for TVET

TVET 4.0: Comparative analysis on qualifications and competences of skilled workers for digitalised **work in Germany** (BIBB)

## Challenges:

- In some professions: **initial training** does not prepare well enough yet for digital requirements (e.g. farmer, textile technician, machine operator)
- **Schools** are partly not adequately equipped, **teachers** not adequately qualified
- Potentials: **Stronger cooperation of schools and TVET institutes with companies**, incl. internships of teachers

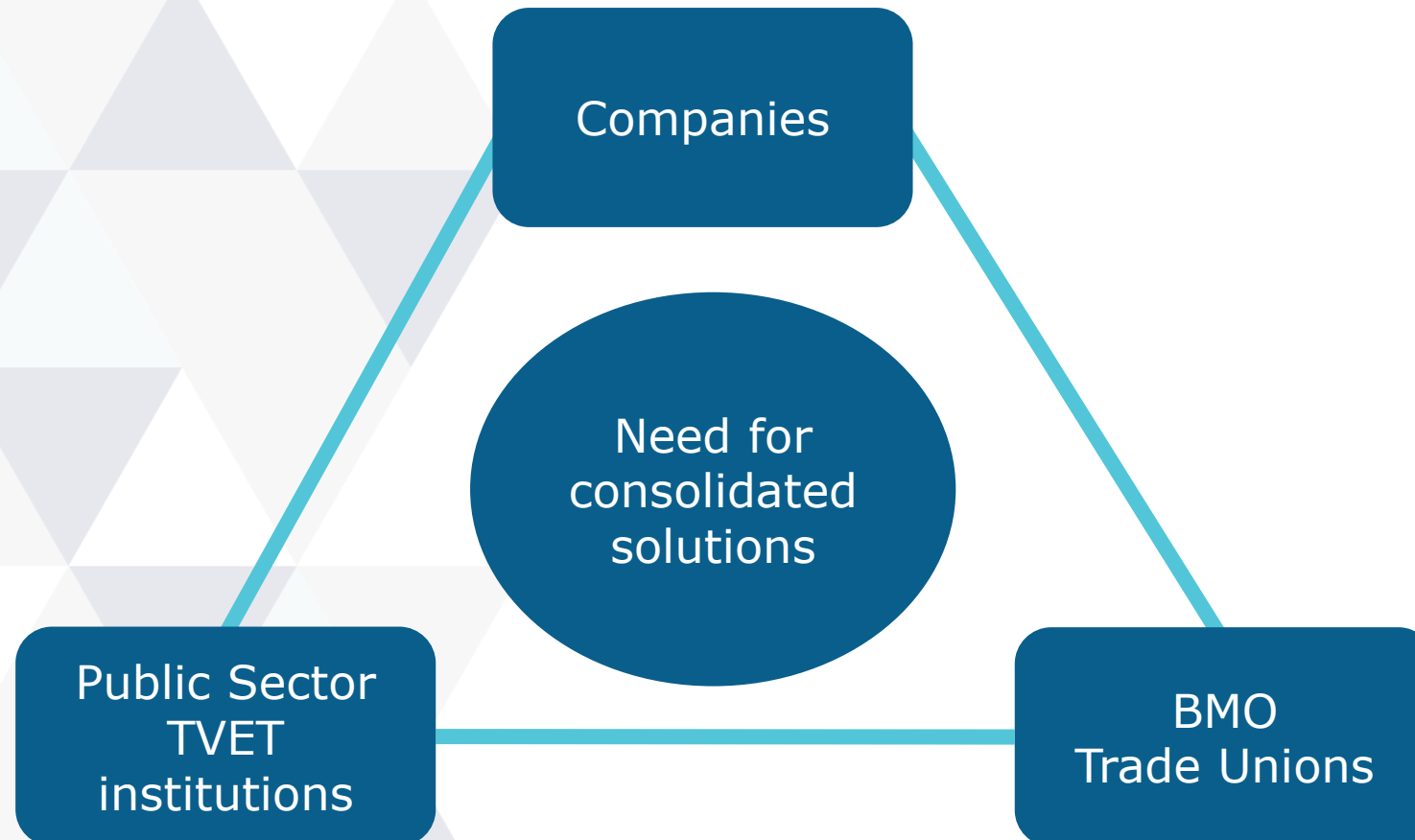
# Using the Momentum

...

## ...for a concerted effort to “Build Back Better”

- Improving **labour market data** and **skills forecasting** as a basis for reforms
- Structuring and **quality assuring digital education programmes**, learning from each other what works when
- **Systematic upgrading of the TVET ecosystem** (regulation, infrastructure, equipment, teacher training, curricula & didactics)
- **Strengthening Public Private Partnerships for TVET** including professionalisation and standardisation of in-company training

# We need a broad **policy-practice dialogue** of the vocational community



# There are many good examples...

## Companies

- Qualify in-company training & trainers
- Invest in training
- Partner with other companies, schools and colleges
- Collaborate with BMO in skills councils

## Governments

- Invest in digitalisation of education and centres of excellence
- Update regulations, standards and curricula
- Promote teacher training, life-long learning
- Cooperate with the private sector

## Regional Organisations

- Establish new multi-stakeholder platforms for exchange and learning
- Offer online information and learning opportunities
- Set agendas, advance harmonization and cooperation

# RECOTVET's Contribution

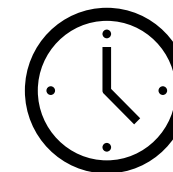
*"Improve the capacity of  
the region's TVET systems  
to adapt to the  
requirements of  
digitalisation"*



# Virtual In-Service Trainings



## Duration per Module



5-day training  
8 hours per day

## Flipped Classroom Format



100% virtual:  
50% synchronous  
50% asynchronous

## Target Group



TVET Teachers, Trainers,  
TVET Management  
Personnel

**Module 1**  
Innovative  
teaching and  
learning for  
industry  
changes due  
to industry  
4.0

**Module 2**  
Professional  
development  
training for  
technical  
vocational  
education  
and training  
(TVET)  
teachers in  
industry 4.0

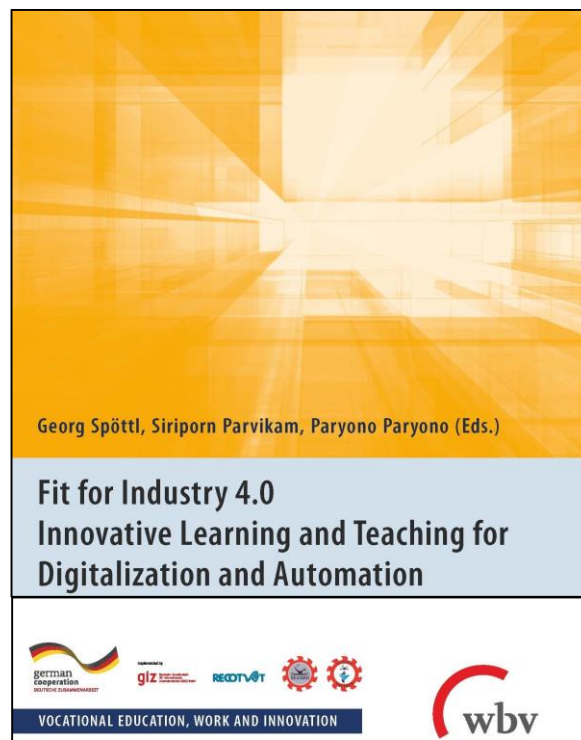
**Module 3**  
Curriculum  
Design for  
Industry 4.0  
Work  
Process

**Module 4**  
Quality  
assurance  
and Quality  
Developmen  
t in TVET  
institutions

**Module 5**  
Industry and  
TVET  
institution  
Linkages

**Fit for Industry 4.0**

# Modules for in-service TVET teacher training



Support 12 new demand-driven learning offers for **SEA-VET Learning**



Collaboration with  
RECOTVET partners



5 online training  
modules developed



176 multipliers from  
11 countries trained

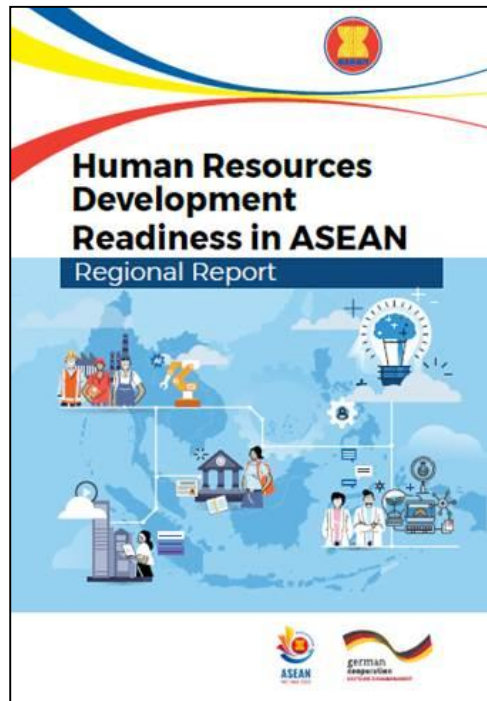


Over 600 TVET teachers  
benefited



*The Online Regional In-Service Training for TVET personnel is conducted on the SEA-VET Learning Platform, hosted by SEAMEO VOTTECH*

# Supporting the ASEAN Declaration *HRD for the Changing World of Work* and its *Roadmap*



**15 key actions for  
ASEAN policy-makers**

**Adopted by ASEAN  
Leaders in 2020**





# SUPPORTING THE CHAIR OF THE ASEAN TVET COUNCIL



## ASEAN TVET Council TOR

Workshop on TVET agenda and governance in ASEAN, Jun 2019

## ASEAN TVET Council Stakeholders Survey

Presented at the ATC Inaugural meeting, Mar 2020

## ASEAN TVET Council (ATC) Launching

Official launching of the ATC at the ASEAN High level conference on HRD for the Changing World of Work, Sep 2020

## ATC Work plan 2021 – 2030

Workshop to develop the ATC Work plan, Jun 2021  
ATC Organizational development process



# Promoting Private Sector Participation in TVET



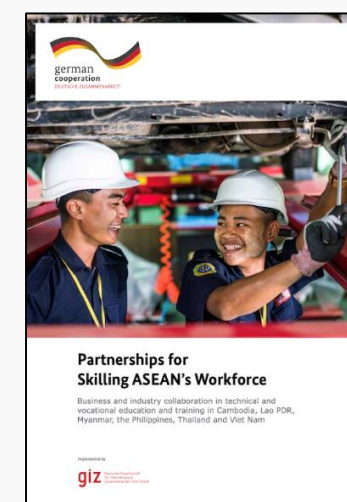
**Standard** for in-company trainers in ASEAN countries



**45** recommendations of the private sector for ASEAN policy makers



ASEAN Skills Development **Award** with ABAC



Analysis **status quo** in ASEAN

# Promoting Private Sector Participation in TVET



Cooperation with the ASEAN-BAC and AFWC  
on Business Dialogue and digital skills

# Design Thinking for new TVET Services of Business Membership Organisations



# Cooperating countries and partners





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