Digital Skills for TVET in Cambodia

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1-Digital Economy and Social Policy Framework of Cambodia 2021-2035

"Digital Economy and Social Policy Framework of Cambodia 2021-2035"

 Vision: "Building a vibrant digital economy and society by laying the foundations for promoting digital adoption and evolution in all sectors of society, the state, the people and the business community."

Summary of Strategic Priorities under the Foundations and Pillars of Building a Digital Economy and Society

No.	Description	Strategic Priority
Foundations	Infrastructures	Digital Connectivity
		FinTech Infrastructure and Digital Payment Systems
		Logistics and Final Destination/Last-mile Delivery
	Digital Reliability and Confidence	Legal Framework
		Cybersecurity Management
Pillars	Digital Citizens	Digital Leadership
		Pool of Digital Talent Human Resources
		Digital Citizens
	Digital Government	Digital Government and Public Services
		Keys to Boosting Digital Performance
		Data-based Governance
	Digital Businesses	Enterprise Digital Transformation
		Entrepreneurship and Startup Ecosystems
		Digital Value Chains
Impacts of digital transformation on the economy and society		

Cambodia Digital Economy and Society Roadmap 2021-2035 (drop) _____

PHASE 1 (2021-2025):

- Building Digital Foundations and Digital Adoption.
- Develop ICTs Infrastructure.
- Design the institutional and legal framework as well as human resources.

PHASE 2 (2026-2030):

- Digital Adoption and Digital Transformation.
- Continuous human resource development and practices.
- Modernize the state system and public services.
- Strengthen regional and global cooperation.

PHASE (2031-2035):

- Digital Transformation.
- Accelerate strong foundations, more capable human resources, and a more favorable ecosystem environment.
- Stimulate a participatory digital society with high use of technology.

2-Cambodia's TVET ecosystem

Cambodia's TVET ecosystem (1)

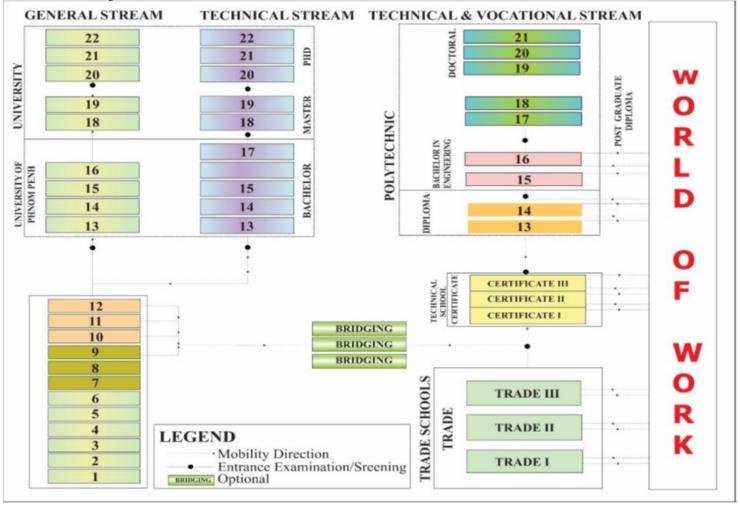
- National Training Board (NTB): was established in 1996 to develop a long-term plan for technical vocational education and training (TVET).
 - The NTB was given the authority to take action and not just collect reports.
 - The NTB is responsible for:
 - ✓ Preparing TVET policy and national training plans.
 - ✓ Coordinating and orienting TVET work to meet the needs of the national economy.
 - ✓ Proposing projects to renew and develop the TVET system.
- Ministry of Labour and Vocational Training: Developing and implementing labor laws and regulations, Overseeing vocational training programs, Promoting employment and social protection, Fostering labor relations, Collecting and analyzing labor market data

Cambodia's TVET ecosystem (2)

- General Department of Technical and Vocational Education and Training (DGTVET):
 - ➤ Dept. of Labour Market Information,
 - ➤ Dept. of Training,
 - ➤ Dept. of Standard and Curriculum,
 - ➤ Dept. of Quality Assurance,
 - > Dept. of Policy and Strategy,
 - ➤ Dept. of Training Institute Management.
- TVET Institutes:
 - ➤ Under DGTVET (37),
 - > Under relevant ministries,
 - ➤ Private,
 - NGO-based,

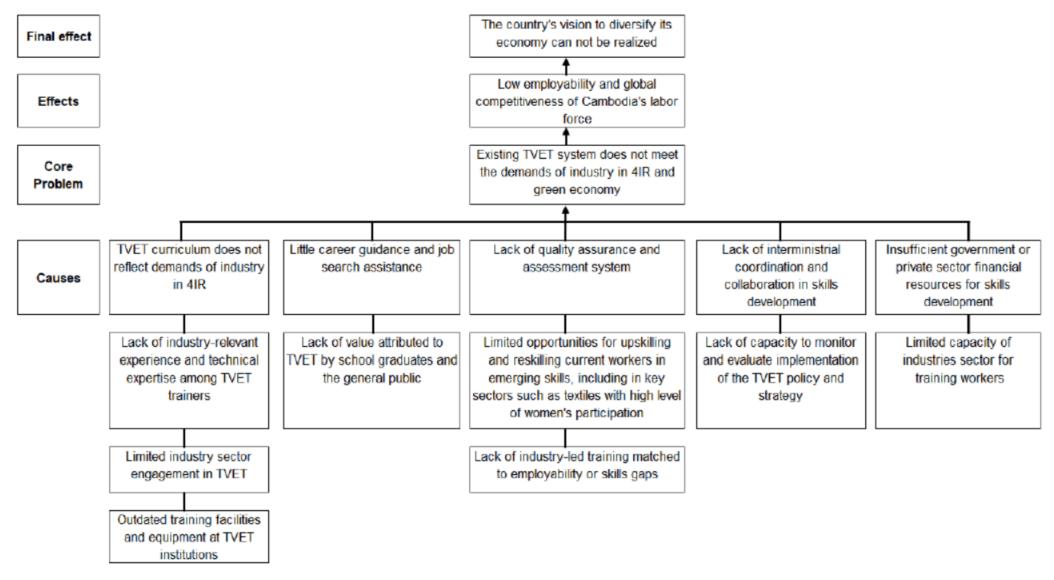
- Skills Development Fund: is a financing mechanism that was established in 2023 to support demand-driven an sustainable skills development in the country. The SDF is managed by a Board of Directors comprising representatives from the Ministry of Economy and Finance (MEF), relevant line ministries, and industry leaders.
- Development partners:
 - the Asian Development Bank (ADB),
 - Agence Française de Développement (AFD)
 - ➤ the International Labour Organization (ILO),
 - the Japan International Cooperation Agency (JICA), and
 - the Swiss Agency for Development and Cooperation (SDC)

Education System in Cambodia



Source: MLVT. 2021. "General Information of TVET Institutes." Ministry of Labour and Vocational Training(MLVT)

Problem Tree of Cambodia's TVET



Source: ADB. 2022. 'Proposed Programmatic Approach, Policy-Based Loan for Subprogram 1, Loan, and Administration of Loan, Kingdom of Cambodia: Skills for Future Economy Sector Development Program'. Asian Development Bank.

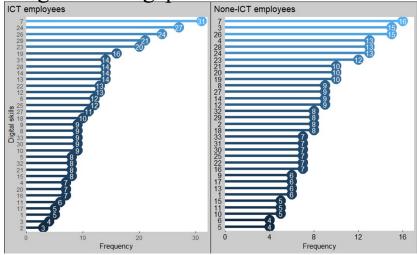
3-Digital Skills Assessment: Firm Survey (2021)

What is digital skills

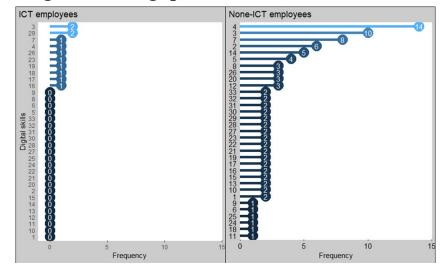


Source: ECORYS UK (2016)

Digital skills gaps in non-ICT firms



Digital skills gaps in non-ICT firms



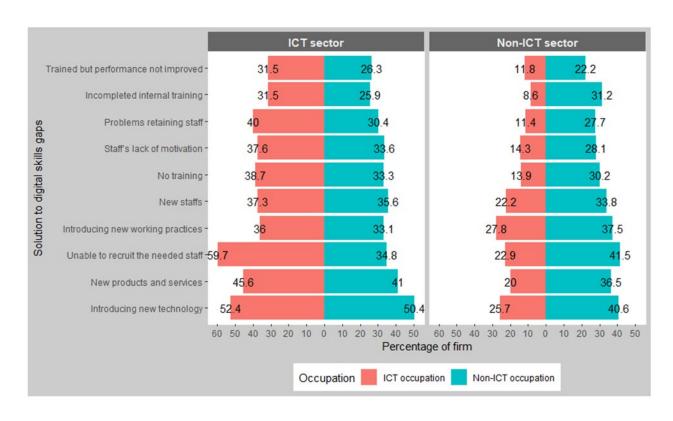
ICT firms were more likely to report more digital skills gaps in their ICT employees than in non-ICT employees. The top-five digital skills gaps in ICT employees were Software skills, Developing and re-purposing content, Applications/programming skills, Creativity and innovation using technology, and Digital skills specific to changing workplace environments.

The top-five digital skills gaps in non-ICT employees were Software skills, Writing, Applications/programming skills, Communication skills, and Solving information, software and technical (hardware) problems.

In contrast to the ICT firms, non-ICT firms report more digital skills gaps in their non-ICT employees than ICT employees. The top-five digital skill gap in non-ICT employees were: Communication skills, Writing, Software skills, Numeracy, and Retrieving and storing information.

There were very little digital skills gap in ICT employees in non-ICT firms.

Reason for digital skills gap



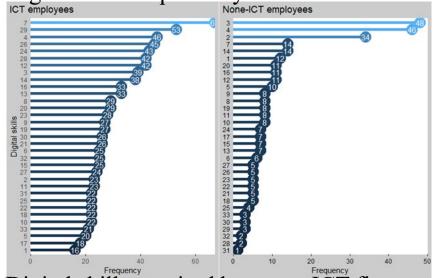
According to the firm survey, the most likely reason for skills gap in the current employees can be caused by:

- the introduction of new technology,
- failure of recruiting the employees with the required qualifications,
- development of new services or products,
- introduction of new working practices, and
- new staffs.

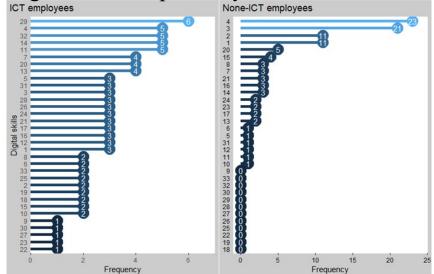
On the other hand, the result of the KII suggests that one of the reasons for skill gap and shortage can be due to the skills mismatch.

DIGITAL SKILLS DEMAND

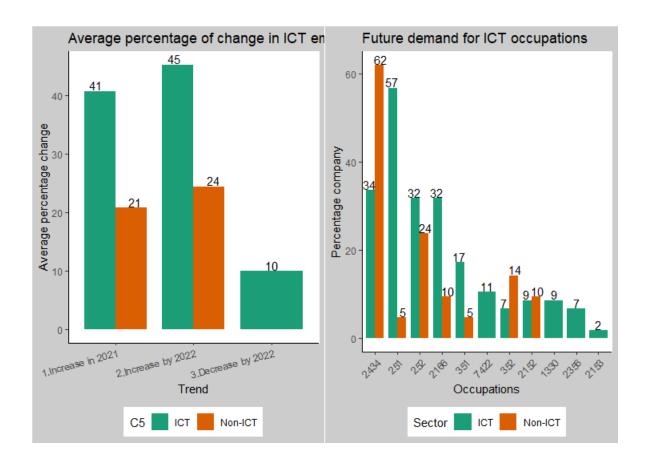




Digital skills required by none- ICT firms



- The top-five digital skills required by ICT firm for ICT employees were
 - Software skills,
 - Creativity and innovation using technology,
 - Communication skills,
 - > Applications/programming skills,
 - > Developing and re-purposing content.
- In addition, the result from our key informant interview pointed out that coding skills is very important.
- The requirement for non-ICT employees included:
 - Writing,
 - Communication skills,
 - Numeracy,
 - Software skills, and
 - > Retrieving and storing information.



- Most company reported that ICT employee would increase by more than 20 percent in 2021 and 2022,
- The top-five most required ICT occupations were
 - ICT sales professionals,
 - Software and applications developers and analysts,
 - Database and network professionals,
 - Graphic and multimedia designers,
 - Information and communications technology operations and user support technicians.

2-Digital skills in formal TVET – Challenges and Opportunity

Digital skills in formal VET – Challenges and Opportunity

Digital skills in formal Technical and Vocational Training Institutes:

- ICT programs are widely provided to trainees who would work in the ICT sector. These programs typically cover a range of topics, including computer programming, software development, web design, and data science.
- Digital skills in non-ICT programs are still limited, except in a few good TTIs (Technical and Vocational Training Institutes). This is because many TTIs lack the resources and expertise to teach digital skills in a comprehensive way.
- The digitalization of training materials and methods, and equipment such as smart classrooms, smart labs, digital content, and simulations is also limited. As a result, many TTIs are not able to provide training that is up-to-date and relevant to the needs of the labor market.
- The digital presence of TTIs is also not good. Many TTIs have inactive/outdated website or social media presence. This makes it difficult for potential students to find out about the programs offered and for employers to find qualified candidates.

Digital skills in formal VET – Challenges and Opportunity

Challenges at the macro-level:

- The TVETMIS (Technical and Vocational Education and Training Management Information System) is underdeveloped. This system is used to track the performance of TTIs and to collect data on the skills needs of the labor market. However, the system is not fully functional and does not provide the information that is needed to make informed decisions about the development of digital skills in TVET.
- Certified Standard and Curriculum packages are not widely available online and complicated. This makes it difficult for TTIs to adopt and implement new standards and curriculums.
- The job portal is not widely used by the employers and employees. This makes it difficult for employers to find qualified candidates and for trainees to find jobs.
- The occupational profile database is not available. This database would provide information on the skills required for different occupations. This information would be helpful for TTIs in developing programs that meet the needs of the labor market.

Conclusion

- Cambodia is committed to building a strong digital economy and society that will benefit all of its citizens. This will be done by promoting the adoption and use of digital technologies in all sectors of society, including the government, the private sector, and the education system.
- Digital skills are essential for success in today's economy, as the demand for these skills continues to grow.
- The Cambodian government, TTIs, employers, and development partners need to work together to invest in the development of digital skills in the workforce.
- This can be done by addressing the challenges described earlier.

Thank you for you attention