

Why Digital Literacy Matters?

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Digital transformation has been considered as the forefront of policy in many countries as they thrive to fully embrace the fourth industrial revolution. Because digital technologies have become more advanced as well as ubiquitous, everyone is surrounded with digital equipment, such as smart phones, smart devices and many other modern gadgets which help improve quality of life and professional experiences. It is noteworthy that while such modern and advanced technologies are available to us, an ability to use them effectively and wisely is essential in the digital world. Furthermore, as we are bombarded with vast information and communication on the internet, it prompts us to consider their authenticity in order to avoid being misled and misinformed. For these reasons, digital literacy has an important and indispensable role in the digital environment and in the information age.

❖ Definitions of Digital Literacy

Definitions of digital literacy vary across contexts and differ among scholars. According to Gilster, he simply defines digital literacy as an ability to comprehend and make use of information from different types of digital sources (Bawden, 2018). In other words, this definition is an extension of the traditional form of literacy, meaning that an individual can read, write and absorb information using technologies and digital formats. A more comprehensive definition of digital literacy takes into account the evaluative consideration pertaining to digital literacy. In this regard, digital literacy is considered as an ability to locate and consume, create and communicate digital content (Paul,

Kerkshoff & Spires, 2017). Locating and consuming digital content on the internet or the Web requires us to be able to find and evaluate accuracy and relevancy of information. Creating digital content can be done by various means, such as writing and texting on digital devices as well as making video content using the specialized editing software. Since creating digital content now can be done with ease, being able to communicate the content via online platforms and social media networks like Facebook and Twitter is also considered one of the integral parts of digital literacy.

European Commission, European Parliament and European Academics identify the term “digital literacy” by applying and incorporating some basic ICT skills into it, which has been frequently used interchangeably with digital competence, digital skill, or e-Competence (Department of eLearning, n.d.). In a Digital Competence framework, developed for achieving consensus about digital competences, the abovementioned EU institutions have classified five areas of key digital competences, as followed: 1) Information – locating, identifying and analyzing information; 2) Communication – communicating and sharing digital content using online tools and platforms; 3) Content-creation – creating and editing content and information (words, images, videos), as well as dealing with intellectual property rights and licenses; 4) Safety – protecting personal data and digital identity with proper measures; 5) Problem-solving – identifying digital needs and making informed decisions to solve problem by using proper digital tools and means.

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Digital Competence Framework



Source: EU Delegation to the Republic of Serbia¹

❖ Roles of Digital Literacy

As knowledge is a crucial part of the development of human resources and society as a whole, digital literacy plays a significant role in individuals' capacity development and an increasingly digitalized society. Digital literacy enables youth to seize advantages of available and existing digital resources to serve for their educational and professional purposes and improve self-development. As long as they have access to digital devices and basic technology skills, learning and acquiring academic materials and other resources can be done with much lesser effort through various digital means, including online libraries, video conferences and virtual classrooms. In addition, basic technology skills that individuals have cultivated throughout educational stages will also benefit their future professional careers whether it is a freelance work or for offices. Thus, even the ability to product documents and construct pivot

tables through basic Microsoft Office programs such as Word and Excel are considered one of technology skills in demand (Angeles, 2014).

Another role of digital literacy is its contribution to the development of digital economy and society. As a matter of fact, the traditional economic activity has now been reformed and replaced by a more advanced form, known as the digital economy², which almost entirely relies on the interconnectedness among technologies, data, business and people (Deloitte, n.d.). Furthermore, interactions among people, organizations and machines have become increasingly connected, which is known as hyper-connectivity, due to the use of the internet and other technologies, including sensory technology, Internet of Thing (IoT) and virtual systems. In order to participate in the digital economy, as a result of the rapid progress of more and more advanced technology from the industrial revolutions, citizens must be digitally competent enough to engage in

¹ See more at EU Delegation to the Republic of Serbia. (2018, January 17). *New measures to boost key and digital competences, as well as the European dimension of education*. Retrieved from <https://europa.rs/new-measures-to-boost-key-and-digital-competences-as-well-as-the-european-dimension-of-education/?lang=en>

² For more details about Digital Economy, see Kong, R. (2019, July 29). *Understanding Digital Economy*. Cambodia Development Center. Retrieved from http://cd-center.org/wp-content/uploads/2019/07/P127_20190729_V11S5.pdf

various electronic platforms such as e-businesses and other digital economic transactions. It will require them to possess at least basic knowledge of ICT like data management, word processing and online research so as to understand and utilize the use of the modern technologies.

Correspondingly, the development of digital society will require participation of digitally literate citizens. As a case study for a country that has been transformed into a digital society, Estonia is labelled as the leading country whose society has successfully undergone tremendous technological transformation in almost all essential aspects of the society. Estonian government, for instance, had introduced the idea of e-Governance to the people since 1997, and it has been investing tremendously in many other e-solutions such as e-Tax, digital ID, i-Voting, Blockchain and e-Resident (e-Estonia, n.d.). One among the contributing factors to the success of digital transformation of Estonia is the promotion of digital literacy in education sector. Since late 1990s, internet has been accessible to all Estonian schools, and computer literacy has become a priority in education for the country (Mansel, 2013). As a consequence, digital literacy rate of the Estonian people who have basic digital skills is higher than the average rate among EU-28 (European Commission, 2019).

❖ Digital Literacy for Digital Transformation in Regional and Cambodia Context

There has been a growing attention to digital transformation as the world economy is being shaped by digital technologies and the coming into reality of the fourth industrial revolution. Notably, ASEAN has put remarkable efforts trying to tap into the prospect of digitalizing the region to accelerate its economic growth. Under the chairmanship of Thailand in 2019, ASEAN aims to push the region forward by taking advantage of the fourth industrial revolution and further developing the digital economy of the bloc. To realize such ambitions, Thailand has proposed 12 economic development deliverables, five of which are concerned with the

Industry 4.0, namely Declaration on Industrial Transformation to Industry 4.0, Digital Integration Framework Action Plan, ASEAN Innovation Roadmap, Guidelines for Developing a Skilled Digital Workforce, and Guidelines for Digitizing Smaller ASEAN Businesses (Sagar, 2019).

Although ASEAN has great potentials for digital transformation, the region still has many challenges regarding digitalization and technology to encounter. The most concerning problem is the digital divide among the ten members of ASEAN. For example, while internet users per 100 of the population of Singapore, Malaysia and Brunei were between 70 and 80, the user density was less than 20 in Cambodia and Laos (Basu Das, 2018). Moreover, Singapore is the only ASEAN member that stands out in terms of digitalization capability and digital competitiveness as it appears in the top 10 of the United Nations ICT Index and the top 20 of the Economist Intelligence Unit Digital Economy Ranking (Luo, 2016). ASEAN countries also share a common barrier to a robust digital economy which is the lack of skilled workforce, and this problem has restrained and downplayed ASEAN's competition capabilities in information technology sector (Basu Das, 2018).

Likewise, a low level of digital literacy among citizens is also an obstacle to ASEAN digital community. In an informed and inclusive society, citizens must have access to information and opportunities so that they will not face the risk of being marginalized and placed at the periphery in such technological and digital development. To take advantages of digital media and the internet as well as to create such a complete digital society, it is significantly necessary for ASEAN to further build and enhance digital literacy of its citizens by incorporating four fundamental elements of digital literacy such as the basic competency in using digital devices, skills to evaluate authenticity of online information, carefulness of choosing appropriate information to share online and the understanding of safe online behaviors (Wu, 2019). Hence, digital literacy shall be prioritized in education programs in with a wide range of

comprehensive participation and support from both the government and private sectors in order to equip citizens with digital literacy and competency.

Despite the fact that ASEAN is still low in terms of digital literacy in general, utmost efforts by ASEAN member states to promote digital literacy are remarkably noted. For instance, the Digital Economy and Society Ministry of Thailand has implemented Net Pracharat program to provide four million people with digital literacy training course in order to bridge the digital divide and improve e-commerce capability among communities in the country (Tortermvasana, 2018). Access to free Wifi and cheap broadband infrastructure are also funded for over 40,000 villages under the program. Likewise, the government of Singapore has also collaborated with Facebook, in which they have launched a digital literacy initiative, known as “We Think Digital”, to promote digital literacy for the citizens (Channel News Asia, 2019). The program is initiated by Facebook with assistance from experts which includes four modules that help train internet users to develop skills in using digital technology with safety and responsibility.

As the world is moving towards the fourth industrial revolution, Cambodia has expressed and put significant efforts to adapt itself to a changing digital environment and technological advancements to achieve economic growth and socio-economic development. Prime Minister Hun Sen, for instance, gave instruction to the Supreme National Economic Council to form a working group in gathering inputs for the formulation of an all-inclusive Digital Economy Policy Framework, in which the promotion of digital literacy will be incorporated into the whole framework (Office of the Council of Ministers, 2019). In terms of education, Ministry of Education, Youth and Sport of the Kingdom of Cambodia has collaborated with the Kampuchean Action for Primary Education (KAPE) and Thun Thean Seksa (TTS) in an implementation and expansion of the New Generation Schools (NGS) program aiming to improve education standards in science and

technology (Voun, 2019). With the assistance from Microsoft, furthermore, the NGS will also include digital learning tools such as the use of software and mobile applications in classes. (Voun, 2019).

Nevertheless, Cambodia as a lower-middle-income country still has tons of works at hands to deal with before fully transforming itself into a complete digital society. Most of the challenges are concerned with human capital, digital infrastructure, governance and digital innovations. The country also stands behind some of other more developed ASEAN member states in terms of basic digital aspects. For example, the internet penetration growth rate in Cambodia was 12% – if compared to 28% in Vietnam and 29% in Myanmar – while digital literacy and skills are correspondingly low, thereby affecting the job markets in the country (Heng, 2019). To cope with such problems and to achieve a full-fledged digital transformation in the country, a long-term strategic planning in key areas, including education, digital infrastructure and legal frameworks, is required and must be among the priorities. Cambodia has built considerable momentum to prepare for the opportunities and challenges of Industry 4.0. Also, while much effort has been made to spur the development in the digital sector, it is important to recognize the role of digital literacy as it is one of necessary components to build a digital economy and digital society. At the same time, the promotion of digital literacy and skills must be encouraged so that Cambodians can equally make the most of technologies, particularly in the context of the industry 4.0 and digital economy.

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