

# Digital Technology Literacy and Life Skills and Their Impact on Poverty Reduction

Raden Parianom<sup>1</sup>, Indri Arafti<sup>2</sup>, Desmintari<sup>3</sup>

<sup>1,2,3</sup> Universitas Pembangunan Veteran Jakarta, Indonesia

[radenparianom@upnvj.ac.id](mailto:radenparianom@upnvj.ac.id), [indri.arafti@upnvj.ac.id](mailto:indri.arafti@upnvj.ac.id), [desmintari@upnvj.ac.id](mailto:desmintari@upnvj.ac.id)

## Abstract

*Various national and regional level reports project that Indonesia's economic growth will be driven by the development of digital technology. Das et al. (2016) predicts that, by 2025, digitalization will have an impact of 150 billion US dollars (US) and additional jobs for 3.7 million people. This potential can be seen from, among other things, the number of start-up technology companies (or commonly referred to as startups) which is growing significantly.). Das et al. (2018) also projects that the potential for electronic commerce (e-commerce) in Indonesia in 2022 will reach 55 billion to 65 billion dollars. The impact will be felt on the absorption of labor, including female workers. This calculation gives great hope for Indonesia to accelerate its economic growth. However, to what extent can growth driven by the development of the digital economy guarantee an increase in the quality of life for all levels of society? Can the digital economy in the future reduce inequality which is currently quite high? Furthermore, the Life Skills program is intended to improve the Life Skills ability which is specifically organized to provide learning opportunities for young people of productive age in order to acquire knowledge, skills and develop an entrepreneurial spirit which is supported by a creative, innovative, professional, responsible mental attitude, and dares to take risks in managing their potential and their environment as a provision to improve their quality of life. The purpose of this study is to analyze the role of digital literacy in economic technology and the role of life skills programs in reducing poverty.*

## Keywords

digital technology; life skills;  
poverty



## I. Introduction

The rapid development of digital technology around the world has brought many countries, including Indonesia, to the Industrial Revolution Era (Revin) 4.0. The transformation towards this era can be felt more and more in various aspects of human life, especially in the business sector. Digital economy development enabling the emergence of new business models that can enhance the experience customer experience (customer experience) because its activities are more efficient and responsive to customer market needs.

Das et al. (2016) stated that Indonesia has a very high economic growth potential of the development of digital technology. Digitalization is predicted to have an impact with value of 150 billion United States (US) dollars by 2025 and additional jobs for 3.7 million people. This potential can be seen from, among other things, the number of start-up (or regular)

technology companies called startups) which is growing significantly. Indonesian startups grew from 1,400 companies in 2017 to 2,200 companies in 2019. This figure puts Indonesia in second place in Asia and fifth in the world after the US, India, UK and Canada, as reported by the Startup website Ranking (2020). Das et al. (2018) also project that the potential for electronic commerce (e-commerce) in Indonesia will reach 55 billion to 65 billion dollars in 2022. The impact will be felt on the absorption of labor, including women.

In recent years there have been many studies around the world that show financial literacy plays an important role in reducing poverty, reducing income inequality and increasing economic growth. However, this is not the case in Indonesia, most of the people still have low incomes with low levels of education and live in remote areas that are still not affordable by financial institutions. Mastery of seven basic literacy agreed by World The Economic Forum in 2015 became very important not only for students, but also for parents and all members of the community. The seven basic literacys include literacy, numeracy, scientific literacy, basic literacy, digital literacy, financial literacy, and cultural and civic literacy.

The National Financial Literacy and Inclusion Survey (SNLIK) conducted by the Financial Services Authority (OJK) shows that the Indonesian financial literacy index in 2016 increased from 21.84% in 2013 to 29.66% which means that out of every 100 Indonesians only around 30 people who belong to the well literate category. This shows that there was an increase in financial understanding (well literate) in 2016. In 2016, there were only thirteen provinces out of a total of thirty-four provinces that had financial literacy levels above the national average.

Many poverty reduction policies have been pursued by the government, including poverty reduction by using Appropriate Technology (TTG). Article 1 of Law No. 13 of 2011 concerning Poverty Reduction states that the handling of the poor is carried out by the government, local governments and or the community in the form of program policies and empowerment activities, assistance and facilities to meet the basic needs of every citizen. From these two provisions there are several things that should be interpreted, namely; poverty reduction can be done by using appropriate technology, the role of local government is a necessity (Jack C. Pleno: 1994), community participation is an important factor for the success of poverty reduction by using TTG (Craty and May, 1995 in Hikmat 2004), and To support the success of poverty reduction with TTG, it is necessary to provide ongoing assistance (Law No. 18 of 2008 concerning Environmental Management). Appropriate technology, can be done using economic digital literacy

Furthermore, poverty reduction can be pursued through life skills behavior. The development of life skills prioritizes the following aspects: (1) relevant abilities to be mastered by students, (2) learning materials according to the level of development of students, (3) learning activities and student activities to achieve competence, (4) facilities, adequate learning tools and resources, and (5) abilities that can be applied in the lives of students.

In general, life skills education aims to function education in accordance with its nature, namely developing the potential of students in dealing with their roles in the future. WHO (1997) defines life skills as skills or abilities to be able to adapt and behave positively, which allows a person to be able to deal with various demands and challenges in life more effectively. Based on the above understanding, it can be interpreted that life skills education are skills that can practically equip students in overcoming various kinds of life and life problems.

Chapo-Wade (2018) details the differences between digitization and digitization again. According to Chapo- Wade, digitization refers to the internal optimization of work processes

(for example, work automation and minimization of paper usage) which results in reduced costs. Temporary Therefore, digitization is a strategy or process that does not only focus on usage technology, but more deeply, namely a complete change of a business model. If traced again, digitization is not possible without digitization. This can be interpreted as internet users in Indonesia belongs to the category of digital natives group (Gunawan, 2020). Furthermore, digitization opens up the path to digital business and digital transformation. Adopt digital services, such as intelligence artificial intelligence, cloud computing, and analytics, are business optimization. However, it has not certainly a digital transformation if it does not pursue new revenue streams or developing new products and business models.

The term Life Skills is defined as the skills that a person has to be willing and brave to face the problems of life and livelihood naturally without feeling pressured, then proactively and creatively seek and find solutions so that they are finally able to overcome them (Directorate General of PLSP, Directorate of Technical Personnel, 2003). ).

The indicators contained in these life skills are conceptually grouped: (1) Self-awareness skills or often also called personal skills ( personal skills ) (2) Rational thinking skills ( thinking skills ) or academic skills ( academic skills ) (3) Social skills ( social skills ) (4) Vocational skills ( vocational skills ) are often also referred to as vocational skills, meaning skills that are associated with certain fields of work and are specific ( specific skills ) or technical skills ( technical skills ).

According to Jecques Delor said that basically this life skills program adheres to four pillars of learning, namely as follows:

- a. Learning to know (learn to acquire knowledge)
- b. Learning to do (learn to be able to do / work)
- c. Learning to be (learn to be a useful person)
- d. Learning to live together (learn to be able to live together with others)

Life Skills Education is broader than just work skills, let alone manual skills. Life skills education is an educational concept that aims to prepare students to learn to have the courage and will deal with life's problems naturally without feeling pressured then creatively find solutions and be able to overcome them. The development of life skills programs generally comes from in the study of the following areas: (a) The World of Work, (b) Practical Living Skills, (c) Personal Growth and Management, and (d) Social Skills. Employability skills refer to a set (series) skills that support a person to perform his or her job successfully. Based on the above background, the purpose of this paper is to see the effect of digital literacy and life skills indicators on poverty levels. To answer the research objectives above, three digital literacy indicators and three life skills indicators are used. And for poverty used indicators of income and sales of SMEs.

The results of this study are expected to provide benefits both theoretically and managerially. For theoretical benefit this research is expected to provide academic insight for all para researcher as knowledge addition and ingredient input in research on matters related to fintech and MSMEs. Managerial, the findings of this research also expected could give benefit for para perpetrator SMEs in developing their business to improve business performance, by paying attention to the aspects of digitizing MSMEs and financial literacy businessman SMEs.

## II. Review of Literature

Internet is increasingly important for the lives of many people. During the COVID-19 pandemic, for example, the role of the internet becomes much more important when everyone has to stay at home: work and study from home. To address the challenges and harness the opportunities offered by digital technologies during this crisis, participants shared a concern

to recognize and protect digital rights in particular around the areas of privacy and inclusion (Hariati, 2021). The use of digital technology worldwide is increasing, especially since the COVID- 19 pandemic in early 2020 (Yugo, 2021). Therefore, the existence of the internet needs to be repositioned, especially in relation to the rights of citizens. Globally, internet access has indeed been recognized as an achievement that must be pursued by everyone country. This is reflected in the Millennium Development Goals (TPM) 2000–2015 and increasingly encouraged in the 2015–2030 Sustainable Development Goals (TPB). Edwards (2012) mentions that, substantially, the internet has a "transformative" meaning. He enable everyone to exercise their right to express their opinion and support progress Public. On the other hand, the absence of the internet can interfere with one's life from the side education and work. Jalli (2020) also wrote about the importance of the internet in support the learning process during the COVID-19 pandemic. Quality of learning and the ability of students in areas with limited internet networks will be left behind when compared in areas with better internet networks.

Sczosczkiewicz (2018) writes that internet access itself has been discoursed by United Nations (UN) since 2011 to become one of the components of human rights (HAM). This discourse re-rolled in 2016 in a non-binding UN resolution which states that the severance of internet access is considered as severing the right of opinion which is is a human right as stated in Article 19 of the Universal Declaration of Human Rights (Universal Declaration of Human Rights). The debate whether the internet should be a human right or not is very lively on social media.

Cerf (2012) considers the internet as an enabler or a support that allows the realization of – human rights, not as a human right itself. Technology, according to Cerf, should not be human rights as technology continues to evolve. This is different from the human rights attached to human beings at all times and applies universally without national borders. For Cerf, internet access is more suitable to be seen as a civil right or a citizen's right whose provision is guaranteed by local government. So, the emphasis lies in the government's obligation to expand internet access, build networks, and conduct digital literacy, especially for communities that have been neglected. Herein lies the importance of the inclusion aspect to overcome community inequalities that have been neglected. Therein lies the importance of inclusion in addressing the digital divide.

The digital economy does produce so much data because every time people are connected with the internet, there is always a "trace" of recorded data. These traces are big data (big data) which contains so much important information. Within this framework, it is necessary to distinguish between digitization and digitization that look similar, but are actually different. Digitization is the process of converting analog data into digital data. To address the challenges and harness the opportunities offered by digital technologies during this crisis, participants shared a concern to recognize and protect digital rights in particular around the areas of privacy and inclusion (Hariati, 2021). This can be interpreted as internet users in Indonesia belongs to the category of digital natives group (Gunawan, 2020). The use of digital technology worldwide is increasing, especially since the COVID- 19 pandemic in early 2020 (Yugo, 2021). In the ecosystem digital economy, track records or big data are already in digital form—that is, digitization already happened automatically. As for the whole process of its utilization, it is called digitization.

Specifically, Chapo-Wade (2018) citing the Gartner Information Technology Glossary said that digitization is the use of digital technology to change business models and provide new income and opportunities based on the added value produced by data. This definition emphasizes digitization as a process that involves people and large data broadly to convert conventional business models into digital business models. Digitization will have an impact

on the way work is done, the way businesses and consumers alike interact, and, most importantly, the way in which revenue streams are generated.

### Frame of Thinking



## III. Research Methods

### Sampling and Sampling Techniques

Study this conducted on para perpetrator effort MSME which are located in Depok (Musi Market) and Cibinong. Purposive technique sampling is technique sampling used in study this. This technique used with method spread questionnaire to the perpetrators MSME business in Depok and Cibinong. The criteria for MSME actors who will used in election sample are:

- MSME actors who use payment -based fintech gateway in transact.
- Para perpetrator MSME which use digital marketing in introduce its products.

#### Type and Data Source Study

Study this is study quantitative which will obtained through primary data with use questionnaire. Amount population from study this as big as 200 respondent perpetrators effort SMEs in Depok and Cibinong. Amount sample taken as much 200 Instrument study this arranged based on two variable independent that is based fintech digital marketing payment gateway, personal skills, academic skills and vocational skills with each variable consist from 5 question, one variable dependent that is performance MSME finance (income and profit) and one variable moderation that is literacy finance.

## IV. Discussion

From data on Table 1, could concluded that on column type gender, respondent in study this dominated by man in build a business MSME with 11 6 respondent, whereas for woman as big as 77 respondents. Column age respondent also variety there is there is dominating 25-40 years old open opportunity MSME business . Then, on average, MSME businesses open effort about 1-5 years.



**Table 1.** P profile Respondent

No	Information	Category	Frequency	Percentage
1	Type Sex	Man	116	60 %
		Woman	77	40 %
2	Long Operate Business	<1 Year	19	10 %
		1-5 Year	116	60 %
		>5 Year	58	30 %
3	Age	<25 Year	39	20 %
		25-40 Year	125	65 %
		>40 Year	29	15 %

Source : Data primary which processed , 2022

#### 4.1 Influence among *Fintech based Payment Gateway* to Performance MSME finance in Moderation with Literacy Finance

Adany Influence which significant Among variable *Fintech based Payment Gateway* to Performance Finance MSME in To do transaction. Thing this strengthened with existence results that score  $t$  count  $11,562 > t$ -table  $1,661$  and score sig.  $0.000 < 0.05$ . It means that  $H_0$  rejected and  $H_a$  accepted . This due to n ol e h para consumer which made easy in transact use financial technology especially in Century pandemic covid-19. This thing could proven with results study which state that *fintech payment gateway* give influence for performance finance SMEs, which means MSME which has use *payment gateway* as tool the transaction expect that efforts that have been they live will the more Up and develop follow era. Study this has prove existence influence *payment gateway* like Gopay, Ovo, tcash, Shopepay which very big in the field MSME because transaction which conducted will more easy and effective . They also feel that income sale juka Keep going increase. Thing this in line with results study which previously by (sustainable et al., 2020) and (Luckandi, 2018) which also state that *fintech payment gateway* give influence for performance finance SMEs.

#### 4.2 Influence among *Digital Marketing* to Performance Finance MSME

*Digital Marketing* also has a positive effect on Financial Performance SMEs. Thing this strengthened with existence results it was found that the  $t$ -count value was  $9.531 > t$ -table  $1.661$  and seen from sig value.  $0.000 > 0.05$  indicates that  $H_0$  is rejected and  $H_a$  is accepted. This because para consumer feel that they find method which is more useful in offer or promote effort they through social media or websites that are considered easier. From the results of the research that has been done, it can be stated that some Most MSME business people have used *digital marketing* to promote their business. In a pandemic situation or situation covid-19. One of the best ways to market or promote the business is to use *digital marketing* through the media social media or website, this is very helpful for business people to increase sale the product to consumer which active looking for a product or service, making it much more effective and efficient. In increase exposure effort SMEs, they could do it through *digital marketing* can attract the attention of consumers in look for needs they as long as easy in world digital. Thing this in line with research that has been done previously by (Rohmah, 2019) which states that *digital marketing* can make an impact positive to performance finance SMEs.

### 4.3 Literacy Financial Digital to Performance Finance MSME

Study this is also strengthened with existence variable moderation that is literacy finance which also give influence positive Among based *fintech payment gateway* against performance MSME finance. With existence literacy good finance, hope use based *fintech payment gateway* can increase performance finance para perpetrator business MSME so that income Keep going increase and growing. In study this, literacy finance proven help *fintech (payment gateway)* is growing more Up towards more good from time to time, and capable increase performance his business for stay in the middle moderate situation crisis and on finally could make business will Becomes success. This thing in line with study done by (Novi Yushita Amanita, 2017) and (Saputri, 2019) which state that literacy finance strengthen influence positive Among -based *fintech payment gateway* against performance finance SMEs.

With the backward method, it can be detected that all independent variables (personal abilities, academic skills, and vocational skills) have an influence on the dependent variable, namely the level of poverty (viewed from income).

Because there are no independent variables removed, all independent variables have an effect on the dependent variable. In the analysis results produce R (correlation coefficient) of 0.972. show connection which very strong. F count show results 57,043. With compare F count with F table 0.05 with degrees of freedom of the numerator 3, degrees of freedom of the denominator 10 obtained F table = 3.21. F count > F table means significant with words other that model which used in analyze problem it fits.

Results test t for test significance constant from every variable independent.known that:

- a. There is significant and positive influence of formal personal skills on poverty rates in Depok and Cibinong
- b. There is a significant and positive effect of academic skills to poverty levels.
- c. There is a significant and positive effect of vocational skills.

## V. Conclusion

This research was conducted to complement existing research on fintech (payment gateway) and digital marketing stating that there is a positive relationship between fintech (payment gateway) and digital marketing on the financial performance of MSMEs> in theory, the role of fintech (payment gateway) can assisting MSME business activities in transactions, digital marketing can help promote products in MSME business activities. In terms of financial literacy, this can help regulate financing and financial management arrangements (Wardani & Darmawan, 2020). The results of this study indicate that all hypotheses also have a significant positive effect so that this study can accommodate the two research gaps that have been carried out. Moreover, there are many business people whose sales revenue tends to increase through fintech (payment gateway) and can also attract the attention of consumers in promoting quality products through digital marketing.

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