Improving Financial Literacy On E-Payment Towards The Next Society 5.0

Nurlaili¹
Muhammad Faqih Abdul Aziz²
Muhammad Hasan Basri³
Kiki Dwi Larasati⁴

¹,²,³,⁴IAIN METRO
¹nurlailifadul@gmail.com

Abstract

Industrial era of 4.0 presents the development of digitalization that continues to grow, such as digitizing payment transactions, namely e-wallet. However, it results in shortcomings that force people into a more consumptive society and fraud. This paper aims to provide suggestions or recommendations for the Government and stakeholders to carry out policies to increase the level of financial literacy in Indonesia. This research method is library research by collecting related information and data from various valid sources.

The results of this paper provide suggestions for the Government to actively campaign for financial literacy in various public media, provide a mandatory policy to provide education to financial service providers, and as university academics or educators provide a curriculum on financial literacy. So that when Indonesia enters the era of society 5.0, it is ready in terms of digitizing payment transactions and literacy.

Keywords: Financial Literacy, E-wallet, and Society 5.0

A. Introduction

The development of technology is so fast, the era of the industrial revolution 4.0 and society 5.0 provides challenges and opportunities for the world community (Ellitan, 2020). In 2016, the Japanese Cabinet presented the vision to create a "Super Intelligent Society" (SIS) in its fifth Basic Science and Technology Plan. SIS is positioned as the fifth stage of the development of human society. After the hunting/gathering community, the agricultural community, the industrial society, and the information society. SIS represents a sustainable society connected with digital technology, presenting the various needs of society in detail (Deguchi et al., 2020). SIS provides the necessary goods or services to those in need in the required quantities so that citizens, regardless of age, gender, region, language, etc., can lead
active and comfortable lives through high-quality services (Fukuyama. Mayumi, 2018). But keep in mind that digitalization is only a means, and humans are still the main actors (Firdaus, 2020).

Empirically, many studies have examined society 5.0, the opportunities and challenges of technology, business, and Government (Pereira et al., 2020). As research by Fukuda (Fukuda, 2020) Examines the exploration of science, technology, and innovation activities in Society 5.0 from an ecosystem perspective. Research by Decky (Hendorsyah, 2019) E-commerce in the era of 4.0 and society 5.0, research results society 5.0 technology is a continuation of 4.0. There is harmony between e-commerce in the 4.0 and 5.0 eras. Era 4.0 has a practical impact on the progress and development of e-commerce. And there are many other studies, such as research by Zengin et al (Zengin et al., 2021), Prasetyo & Arman (Prasetyo & Arman, 2017), and Holyrood (Holroyd, 2020).

Innovation and digitalization in the era of society 5.0 include digitizing business, finance, government, and society from all angles that fill empty spaces and create changes for the better than the 4.0 era (Salgues, 2018). Like digital finance, it has been implemented today with the emergence of various types of cashless and cardless payments (Long Lu, 2018). In Indonesia, the development of payment digitization users is increasing, peaking in two years during the Covid-19 pandemic (Santoso, 2020). People prefer to digitize payments using cashless such as e-wallet. The following is data on the development of e-wallet users in Indonesia from 2015-2020.

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>number of users</td>
<td>34,314,795</td>
<td>51,204,580</td>
<td>90,003,848</td>
<td>167,205,578</td>
<td>292,299,320</td>
<td>432,281,380</td>
</tr>
</tbody>
</table>

Source: Bank Indonesia, www.bi.go.id

The increase in e-wallet users among the public is a concern for the Government. On the one hand, this is a positive effect of increasing company investment and actual national output (Octora, 2021). Nevertheless, on the other hand, this can be a negative effect. The majority of e-wallet users are young people (millenials and Gen Z) (Mahwadha, 2019) who are still vulnerable to fraud, psychologically they are still carried away by environmental influences (Salim et al., 2019). The following is data on e-wallet users in Indonesia, most of whom are millennials and gen Z.
That Indonesia is still in a low financial literacy index, although every year it has increased but is still in the category of low literacy (OJK, 2019). Low financial literacy will have an impact on a higher level of consumption (Wahyuni et al., 2019), the low saving ratio (Servon & Kaestner, 2008), low level of investment, people are prone to fraud, and high levels of corruption (Drew & Cross, 2016). Of course, this must be overcome to welcome the era of society 5.0 in Indonesia. E-wallet users who are increasingly developing must be aligned with an adequate literacy level among the Indonesian people. Based on the explanation above, the research question is, How to fix the problem of low financial literacy towards e-wallet in facing society 5.0 in Indonesia? Indeed this paper can be used as a suggestion, at least for two. In order to improve financial literacy towards a literate society, the Government and also stakeholders must work together.

B. Literature Review

1. Society 5.0

The era of society 5.0 is defined by the Japanese Government as a balance between economic progress and the resolution of social problems using a system that integrates virtual and physical worlds, with a focus on humans (Deguchi et al., 2020). Fukuyama argues that the Japanese Government has drawn up the fifth Science and Technology Basic Plan by the Science, Technology, and Innovation Council, which was approved by a Cabinet decision in 2016 (Fukuyama. Mayumi, 2018).

Fukuyama explains the stages of society (society) according to human history. Society 1.0 is defined as a group of people who gather and hunt, then coexist in harmony using nature, starting with the creation of humans. Society 2.0 creates groups based on agricultural cultivation, organizational improvement, and nation-building, starting from 13,000 BC. Society 3.0 is a citizen who promotes industrialization through the industrial revolution 1.0, starting from the end of the 18th century. Society 4.0 is an information society aware of increasing added value by connecting intangible assets as an information network, starting from the middle of the 20th century. At this stage, society 5.0 is an
"information society" built on society 4.0, which aims to create a more prosperous society (Fukuyama, Mayumi, 2018).

In digital transformation, several countries use different terms, such as in Europe using the term industry 4.0, North America using the term industrial internet, parts of Asia using the term smart city (Oztemel & Gursev, 2020), then China uses the term made in China 2025 (Li, 2018) And Japan uses society 5.0. With digital transformation using IoT, artificial intelligence, robotics, big data, and blockchain (Nakanishi & Kitano, 2018).

The history of the industrial revolution and the stages of society in the world was born through continuous industrial stages in society (Schwab, 2017). The industrial era 4.0 and society 5.0 came together in which industry 4.0 appeared first and was more focused on industry, especially in the manufacturing sector, such as; textile, automotive, food and beverage, electronics, biochemistry, and so on (Intarakumnerd & Liu, 2019). Meanwhile, the era of society 5.0 came after the era of 4.0, where society 5.0 was still in the form of a vision and focus on humans. To be clear, the comparison of the time of the start of the stages of society and the industrial revolution can be seen in table 1. Furthermore, for a comparison of technology utilization, see table 2.

<table>
<thead>
<tr>
<th>Time</th>
<th>Stage of Society</th>
<th>Industrial Revolution</th>
</tr>
</thead>
<tbody>
<tr>
<td>The beginning of human life</td>
<td>Society 1.0</td>
<td>~</td>
</tr>
<tr>
<td></td>
<td>Hunting</td>
<td></td>
</tr>
<tr>
<td>13,000 BC</td>
<td>Society 2.0</td>
<td>~</td>
</tr>
<tr>
<td></td>
<td>Farming</td>
<td></td>
</tr>
<tr>
<td>18th century</td>
<td>Society 3.0</td>
<td>Industry 1.0</td>
</tr>
<tr>
<td></td>
<td>Industry</td>
<td>1800's</td>
</tr>
<tr>
<td>19th century</td>
<td>Society 3.0</td>
<td>Industry 2.0</td>
</tr>
<tr>
<td></td>
<td>Industry</td>
<td>1900's</td>
</tr>
<tr>
<td>20th century</td>
<td>Society 4.0</td>
<td>Industry 3.0</td>
</tr>
<tr>
<td></td>
<td>Informative and Creative</td>
<td>1960s</td>
</tr>
<tr>
<td>21st century</td>
<td>Society 5.0</td>
<td>Industry 4.0 the Year</td>
</tr>
<tr>
<td></td>
<td>super bright (vision)</td>
<td>2011</td>
</tr>
</tbody>
</table>

Source: D, Herdiansyah, 2019 (Hendarsyah, 2019)

<table>
<thead>
<tr>
<th>Technology</th>
<th>Industry 4.0</th>
<th>Society 5.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Big Data</td>
<td>There is</td>
<td>There is</td>
</tr>
<tr>
<td>Internet of Thing</td>
<td>There is</td>
<td>There is</td>
</tr>
<tr>
<td>Artificial Intelligence</td>
<td>There is</td>
<td>There is</td>
</tr>
<tr>
<td>Robot</td>
<td>There is</td>
<td>There is</td>
</tr>
<tr>
<td>Drone</td>
<td>There is</td>
<td>There is</td>
</tr>
<tr>
<td>Sensor</td>
<td>There is</td>
<td>There is</td>
</tr>
<tr>
<td>3D Print</td>
<td>There is</td>
<td>There is</td>
</tr>
<tr>
<td>Public Key Infrastructure (PKI) / Cyber Security</td>
<td>There is</td>
<td>There is</td>
</tr>
<tr>
<td>Sharing</td>
<td>There is</td>
<td>There is</td>
</tr>
</tbody>
</table>
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losing a job, saving for retirement, or paying for a child's education (Cohen & Nelson, 2011).

According to Giuliani (Giriani & Susanti, 2021), Johan Financial literacy is a person's financial ability to solve problems obtained from wages or pocket money in an economic situation. A person's financial literacy can influence product selection in purchasing certain products. Meanwhile, according to Nirmala (Nirmala & Murtatik, 2015). Financial literacy is a person's ability to read, analyze, manage and make decisions regarding a person's financial condition that affects his level of well-being.

According to Chen & Volpe, the level of financial literacy is divided into several categories, according to Chen & Volpe. Namely, high literacy (> 80%) is a condition of knowing and understanding financial planning and management well. Medium literacy (60% - 80%) is sufficient to know to understand and have the ability to plan and manage finances. Low literacy (<60%) is a condition that does not know, understands, and does not have the ability to plan and manage finances (Chen, H., & Volpe, 1998).

C. Research Methodology

The research approach uses a qualitative descriptive approach with the library research method (Wildemuth, 2016). Secondary data collection techniques (Somantri, 2004) By exploring theories, scientific journals, textbooks, dictionaries, documents, the internet, and issues related to the theme. Analysis of research data focused on the meaning of financial literacy, e-wallet in facing society 5.0 to get more complete results. The following is the flow of the research method:

![Figure 3. Research Method Flow](image)

D. Result And Discussion

1. E-wallet in Indonesia

   The industrial era 4.0 in Indonesia brought significant changes to payment transactions, shifting to digital methods (Riantama et al., 2020). Previously, people used to make transactions using debit cards or ATMs and cash. Now people are being offered
electronic payment methods that are increasingly varied and varied. Includes e-wallet, Mobile or internet banking, QR Code, and other payment channels that can be used as online payments (Pardede, 2019). Either through a growing marketplace or an offline store.

The beginning of e-wallet in Indonesia stems from the increasing popularity of e-money among the wider community. Many startup companies are starting to build businesses in the financial sector (fintech) (Hendriadi & Primajaya, 2020). So, the e-wallet product came out. E-wallet was first recognized as a method for saving money in digital form (Chandra, 2017). However, it later became popular because it provided a convenient way for internet users to store and use online shopping information (Subaramaniam et al., 2020). Following Bank Indonesia regulations, an e-wallet is a digital service for storing payment instrument data, including payment instruments using cards and/or e-money, accommodating funds, and making payments (BI, n.d.). The development of e-wallet in Indonesia is increasing. At the beginning of the Covid-19 pandemic, the development of e-wallet was proliferating (Halim et al., 2021). Because at that time in Indonesia imposed large-scale Social Restrictions or PSBB (social distancing), which had an impact on the community to limit activities outside the home (Rantung et al., 2020). The following is data on e-wallet users during the covid-19 pandemic.

Table 4. E-Wallet Users During The Covid-19 Pandemic

<table>
<thead>
<tr>
<th>Tahun</th>
<th>Bulan</th>
<th>Jumlah pengguna e-wallet</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>September</td>
<td>393,904,001</td>
</tr>
<tr>
<td></td>
<td>Oktober</td>
<td>410,656,671</td>
</tr>
<tr>
<td></td>
<td>November</td>
<td>420,412,943</td>
</tr>
<tr>
<td></td>
<td>Desember</td>
<td>432,281,380</td>
</tr>
<tr>
<td>2021</td>
<td>Januari</td>
<td>442,612,567</td>
</tr>
<tr>
<td></td>
<td>Februari</td>
<td>456,736,473</td>
</tr>
<tr>
<td></td>
<td>Maret</td>
<td>470,811,351</td>
</tr>
<tr>
<td></td>
<td>April</td>
<td>483,354,224</td>
</tr>
<tr>
<td></td>
<td>Mei</td>
<td>498,202,416</td>
</tr>
<tr>
<td></td>
<td>Juni</td>
<td>511,254,523</td>
</tr>
<tr>
<td></td>
<td>Juli</td>
<td>493,280,424</td>
</tr>
<tr>
<td></td>
<td>Agustus</td>
<td>513,968,693</td>
</tr>
<tr>
<td></td>
<td>September</td>
<td>530,664,510</td>
</tr>
</tbody>
</table>

Source: Bank Indonesia, www.bi.go.id

The development of e-wallet in Indonesia cannot be separated from the use of e-wallet which the majority of e-wallet users are young people, namely; millennials and gen Z. The majority of users are 25-29 years old and 35-40 years old (Ipsos, 2020). (see figure 5). The first time users know e-wallet for digital payment transactions is through the information of friends, co-workers, relatives (Ipsos, 2020). E-wallet users choose to use e-wallet due to various factors; the dominating factor is the convenience, promo, and safety factor (can be seen in the graph in Figure 6).
Discussion. In Figure 6, it can be seen that users are more comfortable with e-wallet. Convenience has a percentage of 68% (more significant than others). This is because an e-wallet is very practical and easy to process payments. In line with the opinion of Nizam et al (Nizam et al., 2018), and Teoh Teng et al (Teoh Teng Tenk et al., 2020) That e-wallet makes efficient and has a positive impact on digital transaction processes. It is agreed by Karim et al. that e-wallet has a growing interest because there are three factors, namely; usability, convenience, and privacy, that have a positive impact on e-wallet users (Karim et al., 2020). However, based on Ipsos (2020), security on e-wallet currently has a low percentage of 9%. Today, it is a small gap, but in the future, when Indonesia enters society 5.0, there must be improvements to improve security for e-wallet users. According to Tracey (Caldwell, 2012), Vaz et al (Vaz et al., 2021), the level of e-wallet security that is lacking will impact cybercrime, misuse of cellphone numbers (there is an e-wallet that is accessed with a cellphone number). Maybe technically, the use can be overcome with a few tips, such as; create a secure password, keeping the OTP (One Time Password) secret, monitoring balances regularly, checking transaction history, using anti-virus or malware features on smartphones, and choosing a secure e-wallet. However, for the security system,
this is a future challenge that must be improved to be more adequate to welcome the era of society 5.0, where digitalization is a means to simplify human life.

2. Financial Literacy in Indonesia

Financial literacy is a basic need for everyone to avoid financial problems (Dwiastanti, 2015). Financial literacy is defined as financial knowledge that aims to achieve prosperity (Damayanti et al., 2018). Financial literacy is an essential task for governments and people in developing countries. According to Karakulum et al., developing countries with low levels of education will impact low literacy and low welfare (Karakurum-Ozdemir et al., 2019). In line with the opinion of Kafela et al (Kefela, 2011) In developing countries with low literacy rates, developing countries need to create community-based organizations, schools, or universities to expand the process and increase literacy levels. Indonesia is a developing country, and according to the "OCBC NISP Financial fitness index," Indonesia is known to have a literacy level of 37.72 out of a total score of 100. This is still far from Singapore, which is at level 61 (Endarwati, 2021). Based on the OJK survey conducted every three years, it is known that the results of financial literacy are as follows:

Figure 6. Financial Literacy Survey In Indonesia

Based on the survey results, in 2013, financial literacy was 21.84% and increased in 2016 with a percentage of 29.7%, then the survey in 2019 reached 38.03%. When referring to the category of financial literacy level, according to Chen & Volpe (Chen, H., & Volpe, 1998) Indonesia is still in the low literacy category because it is still lacking in <60%. Of course, this is the joint task of the Government, stakeholders, and the community to be aware of the importance of literacy.

Discussion. From the survey data, it is clear that Indonesia's percentage level of financial literacy is still in the low category. However, there is an increase every third of the year. Based on data of e-wallet users, most users are millennials and gen Z. It indicates that the future of Indonesia's literacy can be increased by playing an active role in educating family, friends, and the surrounding environment regarding digital financial products. However, it should be realized that the millennial generation and Gen Z can also negatively influence the environment if the millennial generation and gen Z are not equipped with the impact of low financial literacy. Based on the Ipsos (Ipsos, 2020) the survey, 2020 that most
e-wallet users (millennials and gen Z) can get information from friends and co-workers. So it is crucial to study further in the future, understanding the importance of financial literacy for people's financial knowledge.

E. Conclusion

Based on the survey results described above, in the industrial era 4.0, digitalization has been used for daily purposes such as digitizing transactions, namely the use of e-wallet. However, this is a note for improvements in the inadequate e-wallet security system. To welcome society 5.0 in Indonesia, this is a challenge so that the e-wallet security system is improved to be better and more accurate. Then, the growing number of e-wallet users, the majority of which are millennials and gen Z, is essential to provide an understanding of literacy so that it does not harm the environment such as friends, co-workers, family, and relatives.

This paper suggests a policy for the Government and stakeholders to synergize to harmonize the high number of e-wallet users and the low financial literacy to create a financially literate society and good at utilizing digitization in the future era of society 5.0 in Indonesia. The Government can carry out a campaign in the public media that highlights the "importance of financial literacy." This type of campaign can highlight the benefits and the ability to manage finances. This is one of the essential efforts to improve literacy in developing countries. Then make a policy requiring financial service providers to provide education related to financial literacy. For stakeholders, in this case, for university/school academics or educators to understand financial literacy for future prosperity.

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