

# E-Wallet Attractiveness among Generation Z during the COVID-19 Pandemic

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## Abstrak

*Pandemi COVID-19 membuat masyarakat mulai bergerak untuk bertransaksi secara non tunai. Penelitian ini bertujuan untuk mencari tahu daya tarik e-wallet bagi Gen Z pada masa pandemi ini. Kuesioner penelitian disusun sendiri berdasarkan tinjauan literatur dan penelitian sebelumnya serta hasil wawancara dengan beberapa orang dari Gen Z. Setelah uji validitas dan reliabilitas dilakukan, maka kuesioner akhir yang berisikan 34 item pertanyaan didistribusikan ke 328 responden secara daring menggunakan metode convenience dan snowball sampling. Analisis faktor dilakukan dan diperoleh lima faktor yang menjadi daya tarik dari e-wallet: fungsionalitas, reputasi, aksesibilitas, promosi, dan manajemen uang.*

**Kata kunci**— teknologi finansial, dompet digital, generasi Z, COVID-19.

## Abstract

*The COVID-19 pandemic has made people start to move to non-cash transactions. This study aimed to find out the attractiveness of e-wallets for Gen Z during this pandemic. The research questionnaire was constructed based on literature reviews, previous research as well as an in-depth interview with several people from Gen Z. After the validity and reliability tests were carried out, the final questionnaire containing 34 question items was distributed to 328 respondents online using convenience and snowball sampling methods. A factor analysis technique was carried out and obtained five factors that make e-wallets attractive according to Gen Z: functionality, reputation, accessibility, promotion, and money management.*

**Keywords**— financial technology, e-wallet, generation Z, COVID-19.

## 1. INTRODUCTION

The development of increasingly advanced science and technology covers all aspects and has a significant impact on human life. The existence of technology seems to make everything easier, including financial transactions. In the past, people transacted traditionally where most transactions used physical money and only a few transactions used banking services to send money, and now financial transactions can also be done online through financial technology (fintech).

In Indonesia, there are five main categories of fintech, namely: payment systems; market support; investment management and risk management; loans, financing, and provision of capital; and other financial services [1]. Of the five categories, the service that is commonly known and popularly used by the public is the payment system. Data from Bank Indonesia reported by Katadata found that electronic money transactions of the Indonesian people in 2019 were worth Rp. 145.2 trillion, while from 2020 until August it reached Rp. 127 trillion [2]. The digital payment system itself varies, namely mobile banking, internet banking, e-money, to e-wallet.

Regarding e-wallet, this is one of the popular fintech products and is widely used by people around the world, including in Indonesia. From the name, an e-wallet has a function like a conventional wallet where users can make payments, but digitally or electronically without the need to use cash. It is also easy to use where most users only need a smartphone then install an e-wallet application, top up the balance, then can use it for payments [3].

The development of e-commerce and people's shopping behavior that leads to online shopping and digital payments make e-wallet usage increase. A study from Wadhwani and Bhutani found the market size of e-wallets in 2019 was US\$100 billion and is projected will be worth US\$350 billion by 2026 [4]. This huge amount shows how e-wallets will play a very important role in the economy. In Indonesia, e-wallets grow rapidly so several e-wallet service providers are competing for attracting users, including GoPay, ShopeePay, OVO, Dana, LinkAja!, and DOKU, to name a few. This study focuses on the use of e-wallet because their significant development make people use them a lot for online shopping [2] and it is a popular fintech service in Indonesia as seen from the increase in transactions per January 2020 by 173% compared to the previous year [5]. Moreover, when the COVID-19 pandemic hit the world, the Indonesia government started to initiate Pembatasan Sosial Berskala Besar (PSBB) through Peraturan Pemerintah (PP) No. 21 tahun 2020 to suppress the contagion [6]. This situation makes online shopping trends increase, which is accompanied by the rapid growth of digital wallet usage in Indonesia. A survey conducted by Snapcart in the fourth quarter of 2020 found that online shopping transactions with payment methods using e-wallet increased with the five most popular e-wallet providers are ShopeePay, OVO, GoPay, DANA, and LinkAja [7].

The pandemic has shifted people's shopping behaviors from offline to online, especially e-commerce. Data from Bank DBS Indonesia reported by Katadata found that there was a shift in people's consumption patterns where pre-pandemic the majority of non-food product shopping was done in physical stores, but when the pandemic occurred people switched to e-commerce [8]. Aseng and Pandeiroto also found that during the pandemic people favor buying goods through the marketplace [9]. Likewise, the platforms used for payments which used to be cash and debit cards, are now using electronic money and e-wallet for payments. Bank Indonesia (BI) noted that e-commerce transactions rose from 80 million in 2019 to 140 million transactions until August 2020, while buying and selling transactions in e-commerce until September 2020 reached Rp. 180.74 trillion with electronic transactions in the same period reaching Rp. 144 trillion [10]. BI itself projects that e-commerce transactions can grow 33.2% in 2021 to Rp. 337 trillion, while the use of electronic money can reach Rp. 266 trillion [11]. This projection certainly strengthens the role of e-wallets as a platform used by the public for online shopping.

Nowadays, e-wallet users come from across generations. However, the two generations that are known as common users are millennials and Generation Z (Gen Z). A survey conducted by IPSOS Indonesia found that millennials are still the largest users of e-wallets in Indonesia [12]. Millennials are the generation that used e-wallets and are more established than Gen Z because they are already working and earning their income while Gen Z is mostly still studying. Yet, the potential of Gen Z in electronic payments deserves attention. This generation is a young generation that are born between 1995-2010 and their characteristics are very technologically savvy, accustomed to mobility, and love to interact [13]. This is what makes Gen Z very adaptable to the application of technology in finance, especially e-wallets. A study in Indonesia found that e-wallets are used by Gen Z primarily to pay for online transportation as well as for paying food and beverages [12]. In addition, the results of a study in the United States found that this generation's direct expenditure was \$143 billion and its indirect spending (expenditure influenced by others of this generation) reached \$127.5 billion [14]. This is because Gen Z relies on input from friends and social media regarding what they spend and how to pay for it [15]. Then, data from Bluefin shows 68% of Gen Z want fast and easy payments, which can be facilitated by e-wallet [16]. It is conceivable that in the next few years, Gen Z will play an important role in online shopping transactions using electronic payments, especially e-wallets. That is why, it is necessary to research the preferences of this generation in using e-wallets.

Research related to the factors that make people use e-wallets has been carried out in various countries. Two studies conducted in Vietnam and India found that perceptions of convenience and usefulness factors affect people's intentions to use e-wallets [17] [18]. Then, the same result was found in Thailand, although the effect was moderate [19]. Similarly, the study conducted in Malaysia on young adults [20] and in Indonesia on students in several locations [21] [22] [23] and on Generation Y [24] found that perceived convenience and perceived usefulness are factors that influence them in using e-wallets. All of them conclude that people are attracted to e-wallet applications that offer convenience and functionality in transactions. Another factor considered by people is security, which was shown by a study from Nag and Gilitwala [19] and later supported by two other studies [25] [20]. E-wallet applications that offer transaction security are urgently needed amid the threat of user data leakage that potentially occurs in an all-digital world. Likewise, the trust factor also covers the way e-wallet providers continue to improve e-wallet applications [18], making them problem-free as possible and responsive to consumer complaints. This was also found in Thailand [19] and in Malaysia [26]. Furthermore, another study concluded that the trust factor can be built by continuously improving the quality of information and services to consumers as well as prioritizing users' interests thus making them loyal to e-wallets [27] [28]. Remember, trust is expensive especially when it comes to money, even digital.

Furthermore, social influence is also a factor that determines people to use e-wallets [19] [23] [26]. Recommendations from family, friends, and others through advertisements and social media as well as advertisements on the website also play a role in convincing people to use e-wallets. On the other hand, there was a study that found social influence had no effect [28]. These different results may occur due to differences in user preferences and culture. Performance expectations as well as facilitating conditions can also influence people's intentions to use e-wallets [29]. The speed and convenience of transactions offered by e-wallets can make people interested in using this service.

There are two studies related to the use of e-wallets during the COVID-19 pandemic. One study found that government support for the use of e-wallets during the pandemic had different effects in Indonesia and Malaysia and it can be explained through the trust people hold in each government [30]. Another study done in the North Sulawesi province, Indonesia found that during the pandemic, digital wallet users prioritized trust and ease of use of the application while perceived usability had no effect [31]. For this reason, it was recommended that digital wallet service providers to continue in maintaining service quality, update the system and technology used, and continue to educate the public about using e-wallets.

Research on e-wallet that focus primarily on Gen Z has been carried out although it is still minimal so it is felt necessary to do it again because this generation have potential with their current and future purchasing power so that interested parties can obtain richer information regarding their interest in using e-wallet. Likewise, studies on the use of e-wallets during the COVID-19 pandemic are interesting. Further, there is a shift in the payment system that happened with electronic payment usage increasing in most countries, including Indonesia. In addition with Gen Z who according to some reports and studies hold big potential to become important users of fintech services, especially e-wallets. Interestingly, a study found that during the pandemic Gen Z that use the marketplace for shopping prefer a cash-on-delivery method (36.90%) to an e-wallet (13.10%) [9]. Therefore, it is necessary to conduct this study to find out what factors that make e-wallet applications attractive for Gen Z, especially during the COVID-19 pandemic. Moreover, to answer the following two questions:

1. Which factors attract Gen Z to use e-wallets during the COVID-19 pandemic?
2. How strongly do these factors contribute to e-wallet usage among Gen Z?

This research is expected to be useful in providing important information to e-wallet providers regarding the attractiveness of e-wallets among Gen Z so that they can focus on improving the attractiveness of services while at the same time is expected to provide a reference

for further research on the same topic. Furthermore, this research continues previous research regarding FinTech digital payment services [32], one of which is e-wallet.

## 2. RESEARCH METHODS

This research uses two approaches, qualitative and quantitative. A qualitative approach is used to find variables, while a quantitative approach is used to categorize these variables into several factors. The research instrument itself is based on the results of phone interviews with 11 people of Gen Z that were recorded and transcript as well as from some literature or previous studies. The number of people interviewed is based on information saturation. After that, 41 items of the questionnaire were constructed and then used in the pilot study of 59 respondents of Gen Z to check the reliability and validity of each item. The results found the Cronbach alpha value of 0.953 ( $> 0.70$ ) which is reliable. However, after testing the Pearson correlation, four items were found invalid and had to be deleted so that 37 items could be used for the real study. After reprocessing with 37 items, the Cronbach alpha increased to 0.964.

Further data processing using SPSS with factor analysis and descriptive techniques. The questionnaire containing 37 items was re-created in Google Forms and then distributed to Gen Z respondents using convenient sampling and snowball techniques through social media, chat applications, and e-learning applications. After approximately three months of data collection, 328 respondents participated, and their answers were used for data analysis using Exploratory Factor Analysis. Items that can be factored are those that meet the Kaiser-Meyer-Olkin (KMO) overall measure of sampling greater than 0.6 and Bartlett's test of sphericity must be significant [33]. Then, the determination of the number of factors will be seen from the Eigenvalue which must be greater than 1. Next, only factor loadings greater than 0.5 will be taken [34].

## 3. RESULTS AND DISCUSSION

The results of data processing from 328 respondents using descriptive statistics show that there were 111 male respondents while female respondents were 217 (see Table 1). The frequency of use of e-wallets after the pandemic outbreak showed an increase compared to pre-pandemic where more than half (55.5%) of respondents admitted using e-wallets frequently (“often” and “very often”). Furthermore, 41.77% of respondents answered that they had used e-wallets for more than a year, 21% had been around 6-12 months, and 37.2% had just used e-wallets in the last six months. Then, judging from the frequency of use, 38.1% each answered once a week and once a month using an e-wallet, 20.4% answered once a day, and 3.4% used only once a year. It implies that the majority of Gen Z have regularly used e-wallets for transactions in the past year, which was during the pandemic outbreak up to date.

Table 1 Descriptive Results of the Study

| Characteristics  | Category     | N = 328 | %     |
|--|--------------|---------|-------|
| Gender   | Boys         | 111     | 33.84 |
|  | Girls        | 217     | 66.16 |
| Usage frequency post-pandemic compared to pre-pandemic | Very rare    | 15      | 4.57  |
|  | Rare         | 55      | 16.77 |
|  | Similar use  | 76      | 23.17 |
|  | Often        | 105     | 32.01 |
|  | Very often   | 77      | 23.48 |
|  |              |         |       |
| Usage duration   | < 6 month    | 122     | 37.20 |
|  | 6 - 12 month | 69      | 21.04 |
|  | > 1 year     | 137     | 41.77 |

|                                 |                       |     |       |
|---------------------------------|-----------------------|-----|-------|
| Usage frequency during pandemic | At least once a day   | 67  | 20.43 |
|                                 | At least once a week  | 125 | 38.11 |
|                                 | At least once a month | 125 | 38.11 |
|                                 | At least once a year  | 11  | 3.35  |

Furthermore, the exploratory factor analysis technique with the principal factor extraction method was used in this study with the results showed the overall KMO MSA value indicated that 37 items could be factored ( $KMO = 0.959$ ) while Bartlett's test of sphericity was found to be significant ( $\chi^2 (328) = 666, p < 0.05$ ) and the Measure of Sampling Adequacy of Anti-image Correlation value of 37 items is greater than 0.50 which is eligible. The number of factors obtained was five. However, because the factor loading value that is considered quite feasible is the factor loading value  $\geq 0.50$ , then the four items whose factor loading value is below 0.50 were removed so that the number of items becomes 33 which are grouped into five factors. After that, the overall KMO MSA value then became 0.954 and Bartlett's test of sphericity was still significant ( $\chi^2 (328) = 528, p < 0.05$ ) and the five factors obtained had Cronbach alpha values above the minimum 0.70 as shown in Table 2.

Table 2 Cronbach's Alpha of Five Factor

|                                | Cronbach's alpha |
|--------------------------------|------------------|
| Factor 1 (F1) Functionality    | .910             |
| Factor 2 (F2) Reputation       | .932             |
| Factor 3 (F3) Accessibility    | .867             |
| Factor 4 (F4) Promotions       | .833             |
| Factor 5 (F5) Money Management | .815             |

Then, Table 3 below shows that these five factors explained 65% of the factors that make e-wallets attractive among Gen Z. Moreover, these five factors meet the criteria because they have an Eigenvalue above 1 [35]. Of the five factors, the first factor, namely functionality, has the highest value (15.26) compared to the other four factors.

Table 3 Eigenvalues and Variability Results

|                     | F1    | F2    | F3    | F4    | F5    |
|---------------------|-------|-------|-------|-------|-------|
| Initial Eigenvalues | 15.26 | 2.47  | 1.44  | 1.19  | 1.09  |
| Variability (%)     | 46.26 | 7.48  | 4.35  | 3.62  | 3.29  |
| Cumulative          | 46.26 | 53.74 | 58.09 | 61.71 | 65.00 |

Factors loading can be seen in Table 4. For factor 1, the highest factors loading is easy-to-pay bills (0.768) and effective transactions (0.761). The reputation of an e-wallet (0.635) and regular application updates (0.625) have the highest factors loading in factor 2. Then, factor 3 is represented by applications that can be accessed anytime and anywhere (0.726 and 0.626) which have the highest factor loading. For factor 4, offering free delivery promo (0.732) and cooperating with the marketplace (0.705) have the highest factor loading. Meanwhile, e-wallets help to save money (0.818) and help manage spending (0.808) have the highest factor loading value for factor 5.

Table 4 Factor Loadings of Research Instrument

|                   | Factor |      |      |      |      |
|-------------------|--------|------|------|------|------|
|                   | 1      | 2    | 3    | 4    | 5    |
| Easy to pay bills | .768   | .146 | .158 | .129 | .229 |

|  |             |             |             |             |             |
|--|-------------|-------------|-------------|-------------|-------------|
| Effective transaction during pandemic              | <b>.761</b> | .220        | .207        | .193        | .104        |
| Seamless transaction during pandemic               | <b>.724</b> | .267        | .288        | .187        | .011        |
| Practical  | <b>.699</b> | .327        | .264        | .162        | .104        |
| Easy to learn to use                               | <b>.665</b> | .269        | .245        | .216        | .051        |
| Support cashless transaction                       | <b>.598</b> | .153        | .473        | .172        | .037        |
| Using e-wallet help preventing virus contamination | <b>.521</b> | .155        | .390        | .316        | .009        |
| Good brand reputation                              | .247        | <b>.635</b> | .273        | .342        | .129        |
| Get updated regularly                              | .295        | <b>.625</b> | .264        | .385        | .082        |
| Reliable apps                                      | .117        | <b>.613</b> | .195        | .361        | .370        |
| Comfortable to use                                 | .513        | <b>.603</b> | .201        | .189        | .167        |
| Used by many people                                | .157        | <b>.603</b> | .283        | -.038       | .336        |
| Has money transfer feature to banks                | .381        | <b>.602</b> | .305        | .208        | .081        |
| Known by people                                    | .203        | <b>.577</b> | .350        | .054        | .320        |
| User friendly interface                            | .214        | <b>.564</b> | .485        | .185        | .196        |
| Protect users' privacy                             | .302        | <b>.558</b> | .036        | .166        | .355        |
| A medium to learn financial technology             | .210        | <b>.546</b> | .426        | .227        | .208        |
| More efficient than other payment method           | .520        | <b>.530</b> | .236        | .157        | .183        |
| Accessible anytime                                 | .322        | .251        | <b>.726</b> | .185        | .102        |
| Accessible everywhere                              | .381        | .055        | <b>.626</b> | .048        | .335        |
| 24 hours service                                   | .215        | .313        | <b>.604</b> | .357        | .053        |
| Cooperate with convenient store                    | .227        | .325        | <b>.569</b> | .370        | .042        |
| Cross platforms                                    | .260        | .281        | <b>.550</b> | .059        | .263        |
| Popular among youth                                | .344        | .357        | <b>.529</b> | .243        | -.001       |
| Offer free delivery promo                          | .083        | .026        | .136        | <b>.732</b> | .352        |
| Cooperate with marketplace                         | .246        | .173        | .309        | <b>.705</b> | .039        |
| Offer cashback promo                               | .333        | .314        | .154        | <b>.627</b> | .039        |
| Offer discounts                                    | .362        | .354        | .084        | <b>.524</b> | .156        |
| Cooperate with online transportation               | .265        | .267        | .499        | <b>.507</b> | -.005       |
| Help to saving                                     | -.006       | .207        | .134        | -.015       | <b>.818</b> |
| Help in managing spending                          | .067        | .206        | .160        | .097        | <b>.808</b> |
| No admin fee for money transfer                    | .115        | .132        | .020        | .266        | <b>.710</b> |
| Less risk  | .302        | .483        | .022        | .075        | <b>.533</b> |

Therefore, to answer Question 1, what are the factors that attract e-wallets among Gen Z during the COVID-19 pandemic? From the results obtained, the main attractions of e-wallets for them can be classified into five factors, namely: functionality, reputation, accessibility, promotion, and money management, as summarized in Table 5.

Table 5 Five Factors of the Attractiveness of E-wallet Considered by Gen Z

| <b>Factor 1</b>                       | <b>Factor 2</b>          | <b>Factor 3</b>             | <b>Factor 4</b>            | <b>Factor 5</b>                |
|---------------------------------------|--------------------------|-----------------------------|----------------------------|--------------------------------|
| <b><u>Functionality</u></b>           | <b><u>Reputation</u></b> | <b><u>Accessibility</u></b> | <b><u>Promotions</u></b>   | <b><u>Money Management</u></b> |
| Easy to pay bills                     | Good brand reputation    | Accessible anytime          | Offer free delivery promo  | Help to saving                 |
| Effective transaction during pandemic | Get updated regularly    | Accessible everywhere       | Cooperate with marketplace | Help in managing spending      |

|  |  |                                 |                                      |                                 |
|--|--|---------------------------------|--------------------------------------|---------------------------------|
| Seamless transaction during pandemic               | Reliable apps                            | 24 hours service                | Offer cashback promo                 | No admin fee for money transfer |
| Practical  | Comfortable to use                       | Cooperate with convenient store | Offer discounts                      | Less risk                       |
| Easy to learn to use                               | Used by many people                      | Cross platforms                 | Cooperate with online transportation |                                 |
| Support cashless transaction                       | Has money transfer feature to banks      | Popular among youth             |                                      |                                 |
| Using e-wallet help preventing virus contamination | Known by people                          |                                 |                                      |                                 |
|  | User friendly interface                  |                                 |                                      |                                 |
|  | Protect users' privacy                   |                                 |                                      |                                 |
|  | A medium to learn financial technology   |                                 |                                      |                                 |
|  | More efficient than other payment method |                                 |                                      |                                 |

In Table 5, it is found that functionality factors include ease of paying bills, effective transactions, seamless transactions during the pandemic, practicality, easy to learn to use, support of cashless transactions, and being able to help prevent virus contamination during the pandemic. Reputation, the second factor, can be translated into several things, namely a good brand reputation in the eyes of users, the e-wallet application gets regular updates so that it is reliable and comfortable to use, used by many people, has a money transfer feature to banks, known by many people, has friendly interface, protects user privacy, and can be an intermediary for learning financial technology and is more efficient than other payment methods.

Furthermore, the third factor, namely accessibility, describes how the e-wallet application can be accessed anytime and anywhere, has 24-hour service, cooperates with convenient stores, can be used across platforms, and is popular among youth. The fourth factor is promotion where one of the attractions of e-wallet is having various promotions, namely free delivery promos, collaborating with marketplaces, providing cashback promos, offering discounts, and collaborating with online transportation service providers. The last factor is money management, in the sense that it can help users manage finances whereas the e-wallet application can be a tool to help users save money, manage spending, have no admin fees for money transfers, and have low risk in transactions.

Meanwhile, to answer Question 2, which is how strong these factors are for Gen Z during the pandemic, it can be seen in Table 3 for the variability section. The most powerful factor is functionality (46.26%), followed by reputation (7.48%), accessibility (4.35%), promotion (3.62%), and the last one is money management (3.29%). Cumulatively, these five factors explain 65% of the variants that are the attractiveness of e-wallets among Gen Z during the pandemic.

The results of this study found that there are five factors that make e-wallets attractive for Gen Z during the COVID-19 pandemic, namely: functionality, reputation, accessibility, promotion, and money management. The first attraction of e-wallets according to the results of this study is their functionality, where it is easy to pay bills, effective and seamless in transactions, practical, as well as easy to learn to use which makes e-wallets attractive for young people. This is in line with the results of research from Liu and Tai which found users, especially young people are interested in using electronic payments such as e-wallet because it is easy to use [17]. Not only that, another study added that the perception that e-wallet is easy to use can increase user trust so that they continue to use e-wallet again in their transactions [23]. In addition, during a pandemic like this, they also want technology that makes it easier for them to transact and this can be found in e-wallet. With limited mobility in society due to the pandemic, using an e-wallet is very helpful in making payments for goods and services.

As it is also known in previous studies that the high risk of virus transmission has an impact on the intention to use e-wallets [30], then using e-wallets certainly supports non-cash transactions during the pandemic so that it helps in preventing COVID-19 transmission. This function is beneficial because it can reduce the number of virus transmission, which is in line with the government mission and expectation as well as being a medium for sellers and buyers to be able to continue transacting. Not only that, but people also feel that using an e-wallet is a protective measure against the risk of virus transmission [36] which of course is a solution for safer transactions. This is the attraction of e-wallets for Gen Z in terms of functionality that provides many conveniences and benefits for transacting during the pandemic that needs to be considered and continually improved by e-wallet companies so that users feel comfortable and satisfied.

Reputation becomes an attraction or a determining factor for Gen Z as well. An e-wallet application that has a good brand reputation is of course in line with many users. Moreover, an e-wallet is one of the transaction tools that need to be maintained its reputation because it is basically used for payment transactions using technology. It should be noted that reputation is related to trust, and trust leads to user loyalty. Trust is important because it will build loyalty from one party to another [31], which in this case are the users and the e-wallet service providers. To maintain this reputation, of course, the e-wallet application needs to be updated regularly. This periodic update is very important because it can improve the functionality, system quality, and security of the application which makes the application reliable. Of course, the reliability of the application is one of the points that attract Gen Z who want an e-wallet application that does not crash easily, so that payment transactions run smoothly without any problems, which is in line with previous research [18]. Moreover, a reliable e-wallet will certainly provide convenience in its use. Then, Gen Z is also interested in using an e-wallet that has been used by many people because they think that the e-wallet certainly has a good reputation. E-wallets that have a money transfer feature to the bank are also in demand by Gen Z because it makes easier for them to be able to send money to a bank account, especially if they have enough balance in their e-wallet and need to send it to someone's account.

Further, e-wallet, which is known to many people, has a user-friendly interface and protects user privacy are also part of this second factor. An attractive and easy-to-learn e-wallet application interface is an attraction for new users because they can learn quickly to use it. Likewise, an e-wallet that maintains user privacy is very attractive to Gen Z because it can guarantee the confidentiality of user's data, such as personal data, shopping transactions, and other important data. A study in 2020 emphasized that e-wallet applications need to maintain the confidentiality of information from any potential risks that may arise [37]. To maintain this, of course, it must be supported by periodic application maintenance and updates carried out by the company to maintain the security reputation of the e-wallet itself. In fact, full encryption is a must to ensure the security of sending and receiving messages when using an e-wallet [19]. E-wallet is also considered attractive if it can be a medium for learning financial technology, especially for early users, and is more efficient to use than other payment methods such as mobile banking, ATM, or bank transfers because it only requires a gadget and internet network to access the



applications. In addition, an e-wallet that is integrated with e-commerce provides convenience and speed of transactions for users, making it more efficient than other payment methods. E-wallet providers are expected to continue to maintain their good reputation by continuing to innovate on reliability, security, and other mainstay features to maintain users' trust and loyalty.

The third factor, accessibility, includes e-wallet services that can be accessed anytime and anywhere and has full 24-hour service, including customer service if users have difficulties or problems in doing transactions. Being accessible easily is important in attracting young people. For maximum accessibility, it is necessary to have great supporting facilities, both internally and externally from the e-wallet service provider. The state of the facilities includes the availability of electronic payment services, adequate devices (gadgets), internet networks, and customer services [23]. Of all these, what can be handled directly is e-wallet services, including the reliability of the technology used, databases, and excellent customer service so that users can feel comfortable and satisfied using e-wallets. Not only that, e-wallet providers need to collaborate with telecommunication network providers to improve internet connectivity in several areas to provide good service to users while at the same time attracting new users, especially Gen Z in those areas.

Then, e-wallets that work together with convenience stores are also in demand because users can shop at these stores using their e-wallet, making transactions easier. E-wallets that can be accessed across platforms such as mobile phones, tablets, computers, or other devices at the same time are also favored especially those that are popularly used by young people, making e-wallets attractive among this generation. Young people like e-wallets that they can install and use on several gadgets using one integrated account (cross-platform) making it easier for them to log on to their account and do transactions. Because if one gadget is being used for other matters, they can use other gadgets available. Meanwhile, the popular e-wallet application used by their peers is also the reason for their interest in using it because of recommendations from their colleagues or also because of peer pressure, where they use it because their friends also use it, so they don't want to miss the trend. For this reason, e-wallet providers are also advised to continue to pay attention to the consumption behavior of Gen Z and be sensitive to existing trends to capture the opportunities from this generation.

Furthermore, the next attraction of e-wallets for Gen Z is the promotion they provide. Free delivery promos for purchased items, collaboration with marketplaces, cashback promos, and discounts are the attractions of e-wallets. This result is in line with a study that found various promotions from e-wallets make people interested in using them [28]. It is also worth noting how e-wallets have become part of the marketplaces because some of them are integrated or even provided by the marketplace itself to facilitate shopping transactions. For example, the ShopeePay, an e-wallet from Shopee marketplace that can be used by the public for shopping or paying bills. The existence of such integration will certainly be followed by a variety of attractive promos given as previously mentioned. This is certainly an attraction for users, especially Gen Z in using e-wallets. Then, e-wallets that work with online transportation providers are also in demand by Gen Z because it can make it easier for them to make orders and pay for online transportation, food orders, and other services offered by online transportation providers such as Gojek, Grab, and others. For this reason, e-wallet providers must continue to offer users various attractive promotions that they can use to transact. Moreover, this pandemic situation can be used by e-wallets to attract new users who want to transact without leaving the house. The variety of promotions offered will certainly help in maintaining customer loyalty while adding new customers.

The fifth factor that attracts e-wallets is that e-wallets can help users in managing finances. E-wallet is not just an application for payments, but also as the name implies, a digital wallet acts as a wallet that stores users' money. To use the e-wallet, the user must put some money in the application or make a top-up. This can be used by e-wallet users to set the amount of money in the application so that users can learn to save money by controlling spending. Various promos offered by e-wallet also help users to save money. In addition, the feature in the e-wallet that displays the user's remaining balance in real-time can be a reminder for users to be wiser in

managing spending so that it is not excessive. For this reason, e-wallet users need to calculate the amount of money that will be put into the e-wallet as a balance and keep in mind the budget that was previously made [38]. Smart in choosing to need or want is also important so that users spend their money on things that they feel are important. That way, users can take advantage of e-wallet as a tool to help them manage their spending money wisely.

Then, e-wallets that do not have admin fees for money transfers are also in demand because users do not need to pay transfer fees so they can save unnecessary expenses. And the last of these factors is that e-wallet has a lower risk making it attractive. In a sense, e-wallet users can feel safe using an e-wallet when shopping because they do not have to carry more cash that has the potential to be lost or not enough. This factor certainly needs to be addressed by e-wallet providers so that it can provide an opportunity for customers to be able to use existing features to help them calculate and manage their spending more wisely.

#### 4. CONCLUSION

The results of the study provide some managerial implications for e-wallet companies. First, e-wallet companies should maintain good functionality of their applications. Ease of use during the pandemic is what Gen Z looking for e-wallet during this pandemic so they can still make transactions amid social restrictions or just want to do it quickly. Companies also should try to strengthen their brand reputation by providing e-wallet services starting with reliable and convenient applications that are regularly updated, committing to protect the privacy of users, as well as making advertisements or campaigns related to young people in gaining their recognition and awareness. In addition, e-wallet providers should pay into account e-wallet accessibility and provide various types of promotions to attract young people. Promotions such as free delivery, cashback, and even discounts can be done regularly such as on a certain day of the week, on special occasions like e-wallet anniversaries, or on holidays. Likewise, marketing strategies by cooperating with online transportation companies, marketplaces, restaurants, department stores, tourism destinations, amusement parks, and convenience stores are recommended. In doing so, users can use their e-wallets in such places to do transactions. At last, as young people are still learning to manage their money, it is suggested that e-wallets can provide features for money management, such as real-time updates for users' money balances, and provide in-app tips and tricks for managing money for them to learn. This can be beneficial not only for young people to learn but also a part of e-wallet companies' responsibilities to the community in helping people with financial literacy.

#### 5. FUTURE WORKS

The results of this study provide an understanding of the attractiveness of e-wallets in the eyes of Gen Z which will certainly be beneficial for all related parties. Knowing what makes Gen Z get attracted to using e-wallets can help e-wallet companies to plan strategies to capture the opportunity in acquiring users from this generation. Even so, further research needs to be done with respondents from other generations such as millennials so that intergenerational comparisons can be obtained on the attractiveness of e-wallets. As is known, in addition to Gen Z, the millennials also currently have an important role in the development of financial technology, especially e-wallets because most of this generation are in a productive age, making earnings, and have many needs that must be fulfilled, which are also using e-wallet for transactions. In addition, other statistical techniques should also be considered for use. It is also interesting to study the use of e-wallets after the pandemic is over and to analyze its trends in the future.

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