



## Analysis Of Perceived Value of Benefit Cash on Delivery Payment Method Customers When Using Digital Wallet Application

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### Abstract

The purpose of this study is to examine how secure and comfortable cash on delivery (COD) and e-wallet consumers feel about their payment options. Survey research is the method employed in this study. All students are the population in question. Purposive sampling was the method of sampling that was applied. 100 people made up the sample in this study. In order to collect data for this study, questionnaires, records, and interviews were used. Quantitative data analysis is the method employed. Two associated samples are compared in this study using a comparative analysis sample type. The study's conclusions revealed that consumers' comfort levels with cash-on-delivery and e-wallet payment options differ. Convenience with cash on delivery is valued at 48.5 on average, whereas e-wallet convenience is valued at 58.5. Consequently, it can be said that the e-wallet payment method offers more convenience than the cash on delivery payment option. Users of e-wallet payment options and cash on delivery have different levels of security. For COD security, the average value is 37.5, and for e-wallet security, it is 39.5. It is evident that there is little difference in the average value of cash on delivery security (2.5) between it and e-wallet security. Even so, the security level of e-wallets is higher than the security of cash on delivery (COD).

**Keywords:** Convenience, Security, Payment, Cash On Delivery, E-Wallet.

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### 1. Introduction

The era of digitalization has brought many changes to life, including buying and selling and business activities. If previously humans carried out transactions conventionally in markets, shops, or other places, then with the digitalization era, buying and selling activities have changed to digital, also known as online shopping. Demand for online buying is rising, particularly in light of the COVID-19 pandemic [1]. This is demonstrated by the increase in online buying during the epidemic, especially by women (45%). Food, health care items, and masks are often bought goods [2]. During the epidemic, expenses rose by 20% and online buying surged by 15%. Students spent the most during the epidemic, accounting for 15% of all consumer spending. In addition to external factors, a significant portion of the growth in online purchasing can be attributed to the proliferation of e-commerce companies [3]. The widespread development of e-commerce, which provides a number of advantages, has drawn people's attention to online shopping, particularly among women [4]. E-commerce is the process through which customers purchase and sell goods online from one firm to another, using computers to operate as middlemen. Indonesia is one of the countries that has begun to experience the influence of e-commerce [5].

In the last four years, Indonesia has witnessed significant growth in internet user penetration. In 2020, 50% of the population was connected to the internet, but in early 2022, this figure jumped sharply to 75%. This trend reflects the rapid growth in the adoption of internet technology across the country. According to data, Indonesia's internet user base increased dramatically by 55% between 2018 and 2022 [6]. The total number of internet users peaked in 2022 at 202 million. On the other hand, this trend continues, since Indonesia is expected to have 205 million internet users by 2022. This notable rise can be ascribed to a number of things, such as regional improvements in internet accessibility, smart device adoption, and economic growth [7]. This phenomenon not only reflects the digital transformation of Indonesian society but also opens up new opportunities in various sectors, including online business, distance education, and internet-based public services [8]. As a result, these positive developments can lay the foundation for further innovation and growth in the future [9].

Indonesia can become a wetland for the development of e-commerce [10]. Shopee is one e-commerce site that Indonesians frequently use. Shopee is an e-commerce site that offers a number of products ranging from clothes,

cosmetics, household items, baby equipment, and many more [11]. Shopee managed to rank first as the most popular e-commerce site in the App Store and Play Store. In the first quarter of 2022, Tokopedia is still in first place, with total visits of 155 million [12] [13]. Meanwhile, Shopee is in second place with 130 million visits. In third place is Lazada, which succeeded in shifting Bukalapak's position, namely with a total of 25 million visits. In fourth place is Bukalapak, which fell in rank with a total of 22 million visits. In 2022, e-commerce received 190 million visits from Indonesia [14]. This figure shows an increase of 10% compared to the previous month, which only reached 170 million visits. This achievement demonstrates that e-commerce is the first in Indonesia to receive a lot of traffic [15]. Meanwhile, Tokopedia is in second place with total visits of 145 million. Followed by Lazada with 60 million visits, Blibli with 22 million, and Bukalapak with 20 million. E-commerce is most popular with Indonesians [16]. This is because it continues to carry out various innovations to attract consumer interest. Innovations include free shipping, flash sales, twin date promotions, and collaborating with well-known artists to become brand ambassadors [17]. This is what then attracts people to continue using e-commerce applications when shopping online [18]. Online shopping is indeed in great demand by most people [19]. Apart from having lots of discounts, online shopping is considered more practical [20].

E-commerce not only innovates to attract public interest but also makes system improvements to make it easier and more comfortable to use. One of the innovations developed to make things easier and more comfortable for customers is the choice of payment methods. Payment method is one of the sub-factors that determine purchasing decisions [21]. For this reason, e-commerce provides various kinds of payment methods and innovations. Shopee provides various payment methods that can make things easier for its users, such as Cash on Delivery (COD), inter-bank transactions, and collaboration with various e-wallets [21]. In 2022, as many as 80% of Indonesians used the Cash on Delivery system as a payment method [22]. Then, as many as 20% of people used interbank transfers. Meanwhile, in 2021, ShopeePay became the most widely used digital wallet, namely 80%. Then followed GoPay, with a penetration rate of 60%. In third place is OVO, with a penetration rate of 55%. The fourth and fifth positions are filled by Dana and Link Aja, with penetration rates of 50% and 20%, respectively [23]. This data shows that Indonesian people have begun to adapt to the use of digital wallets, or e-wallets [24]. Apart from that, the Cash on Delivery and ShopeePay systems are the two most widely used payment methods. This payment method is often chosen because it is more practical and easier to use [25]. This is in line with the survey conducted; as many as 60% of respondents chose COD because it was simpler or more practical to use. Payment methods have their respective advantages [26]. However, apart from that, these two payment methods have shortcomings that often bother consumers and cause inconvenience [27].

There have been many cases that have occurred with these two payment methods. As in the case that occurred around early of 2022, where a customer suddenly received a COD package from e-commerce even though he had not ordered anything [28]. As a result, he was forced to pay for a package of IDR 42,000 because the name and address were addressed correctly to him. This incident not only happened to him but also to his campus friends. This problem does not only occur with the COD payment system but also with e-wallets. Top-up failure problems often occur in this payment system [29] [30]. This incident occurred in 2021, when one customer complained that his balance had not been topped up even though he had already topped up. He even topped it up five times, but it never got filled. It's not just a problem of failing to top up; one customer complained that the balance in his account suddenly disappeared [31]. One of the customers was shocked because e-wallet funds suddenly disappeared, even though he had not made any transactions [32]. Knowing this, the customer called Customer Service and was directed to wait for the email for around three days [33]. He received an email reply in which the e-commerce party stated that the funds had been used for the transaction [34]. Because the transaction was successful and the system read it, the e-commerce party stated that the transaction could not be cancelled [35].

There are 15 factors behind someone choosing a payment method, including comfort and security. This is in line with previous research, which found that security and convenience influence the use of mobile payments. Convenience is about time, space, and savings on consumer effort. The comfort measure commonly used in research studies is the SERVCOV scale [36]. This scale is used to measure the convenience of transactions in stores, not online shopping. In addition to the SERVCOV comfort measure, there are also other comfort measures to overcome the shortcomings of the SERVCOV comfort measure. Measures of convenience include convenience of access to the platform, product search, evaluation, transactions, ownership, and post-purchase. Apart from convenience, security is also a factor in choosing a payment method [37]. This is in line with research conducted previously, which found that security has a positive influence on the use of digital wallets. There are two indicators of a sense of security, namely security guarantees and data confidentiality [38]. A security guarantee is a feeling of security that can be provided to protect someone from criminal acts. Meanwhile, data confidentiality means that the data cannot be known or accessed by parties who are not authorized to know it [38].

Based on pre-research results, it was found that some respondents experienced losses when using Cash on Delivery (COD) and e-wallet payment methods. As many as 20% of respondents reported being disadvantaged

when using COD, while 10% felt disadvantaged when using an e-wallet [39]. Common complaints that arise are fees that are considered expensive, COD features that are not provided by the seller (35%), receiving goods that are not as ordered (15% on COD and 25% on e-wallet), as well as transaction failures (7% on COD and 5% on e-wallet). The importance of the COD feature in influencing e-commerce user satisfaction is highlighted, where perceptions of comfort and security play a significant role in the use of ShopeePay [40]. This research fills a knowledge gap by attempting to compare both payment methods simultaneously, which was previously unexplored in previous research. These results provide valuable insights for e-commerce and online payment service providers [41] [42]. They can use these findings to improve features and services, as well as increase security and convenience for users. In addition, this research can provide a more holistic view regarding user preferences when using payment methods, so as to improve the user experience and minimize potential losses or inconveniences in the future [43] [44].

## **2. Research Methods**

Survey research is the method employed in this study. Survey research involves using questionnaires as the primary means of data collecting while using samples drawn from the population. A population is a broad category made up of items or people with specific attributes that the author has chosen to be researched in order to draw conclusions from. All students were the population used in this study. Purposive sampling was the method of sampling that was applied. One method for selecting samples while taking specific factors into account is called purposeful sampling. 100 people made up the sample in this study. The key data used in this study were the answers to questionnaires that participants had completed and the findings of interviews. Documentation or a literature review from books, journals, news, or pertinent earlier research was used as secondary data in this study. In order to collect data for this study, questionnaires, records, and interviews were used. A set of pertinent questions was included in the questionnaire that was utilized as the research tool. A graded scale questionnaire is the one that is employed. The questionnaire was measured using a Likert scale. Data analysis is the processing of data to create a format that is easily understood by research readers. There are two types of data analysis: qualitative data analysis and quantitative data analysis. Quantitative data analysis is the method employed. Research data that is numerical in character serves as the foundation for quantitative data analysis. In this research, the type of sample used is a comparative analysis of two correlated samples.

## **3. Results and Discussion**

From the results of this research, it appears that the majority of respondents, who are active e-commerce users, tend to prefer e-wallets as the main payment method when carrying out the check-out process. Even though they have tried Cash on Delivery (COD), the frequency of use is not comparable to e-wallets. This is due to the positive perception of e-wallets, where they identified a number of significant advantages. E-wallet users state that using e-wallets makes transactions more effective and efficient. The transaction process is fast and easy to carry out, meaning they don't have to spend a long time and don't interfere with other activities. After the transaction is complete, they only need to wait for the goods to be delivered without having to worry about payment because it has been arranged via e-wallet. On the other hand, the use of COD is considered less practical. Respondents stated that they felt anxious about traveling outside the home because they had unpaid package bills. In addition, there are concerns about the clarity of money usage when using COD. They are worried that the money that should be used to pay for the package could be used for other sudden needs. From these findings, it can be concluded that user preferences for e-wallets in the e-commerce payment process are not only related to convenience but also to trust and transaction security. The success of e-wallets in providing a more positive transaction experience proves their added value in the e-commerce market.

Not only that, they feel that there are many benefits they can get when using e-wallets, such as lots of discounts, free shipping, shop vouchers, no handling fees, availability of payment methods, and easy returns. When using an e-wallet, you can get lots of discounts, especially free shipping, without a minimum spend. This is different when he uses COD, which requires spending a certain number of rupiah before you can experience free shipping and discounts. In addition, with e-wallets, there are no handling fees, so respondents feel they save more when using e-wallets. Likewise with an easy return mechanism. The respondent made a mistake when making a transaction, so he canceled the transaction. Within hours, the transaction was successfully canceled, and the money transferred was returned without deductions. They feel safe when using e-wallets because they trust the e-wallet's security system. This is because the account can only be accessed by the account owner, who knows the password. Based on the results of the interview, it was found that they were not too worried about the safety of the funds that had been transferred after ordering. If the ordered goods are not suitable, you can return them. Apart from that, they also believe that the funds that have been transferred will be deferred by the e-commerce party and not immediately transferred to the seller. The respondent also believes that the privacy data that has been entered will not be shared because, as far as using e-commerce, he has never felt disadvantaged.

Respondents adopted strategies to minimize risks and potential losses, especially losing balances on e-wallet accounts. They specifically use e-wallets only for transaction purposes when shopping online and do not intentionally save money in the account. This choice reflects the user's policy to maintain their financial security and comfort. In choosing a payment method, respondents gave significant preference to e-wallets, with 80% using e-wallets and only 20% choosing Cash on Delivery (COD). The main reason behind this decision is the perceived greater convenience and security when using e-wallets. These reasons include considerations of time efficiency, cost, energy, and security. E-wallet users feel that the transaction process with an e-wallet is more efficient, minimizes the time required to complete payments, and provides a sense of security regarding financial security. Apart from that, considering costs is also an important factor in choosing an e-wallet as a more economical payment method. It is important to note that these preferences reflect the changing behavior of consumers, who are increasingly adopting digital financial technologies to enhance their online shopping experience. An awareness of security and efficiency appears to be the main driver in guiding users' choice to use e-wallets as their primary payment method.

The data processing results indicate that there is a noteworthy distinction in the degree of comfort associated with using the Cash on Delivery (COD) and e-wallet payment methods. There is a true difference when the null hypothesis (H<sub>0</sub>) is rejected with a significance value (Sig.) of 0.000, which is less than 0.05. This demonstrates that consumers' preference for electronic payment methods is largely influenced by convenience. Electronic payment methods have been found to be successful when they are convenient, as this influences user interest. This result is consistent with earlier studies that highlight convenience as a critical component in the success of mobile payments. Consumer perception of benefits is the main driver of using e-wallets. By measuring perceived benefits and convenience, as well as calculating the risks and costs that may be incurred, consumers tend to choose e-wallets as a more convenient payment option. The higher average value of e-wallet convenience (56.5) compared to COD (46.5) shows a quite significant difference. Thus, it can be concluded that convenience plays a major role in motivating people to adopt digital payment methods, especially e-wallets. These findings support the concept that perceived convenience significantly influences users' interest in electronic payment services such as ShopeePay, in line with previous research. Therefore, creating a comfortable user experience will be a key factor in increasing the adoption of digital payment methods in society.

The findings of the interview demonstrate that a number of factors that reflect transactional convenience affect people's decision to use an e-wallet as a payment method. These reasons, such as transaction speed, convenience, time efficiency, affordable costs, availability of discounts, free shipping, and an easy return process, confirm that convenience is the main factor in user decisions. Speed and ease of transactions, which are the main reasons for e-wallet users, are in accordance with the concept of transaction convenience, which includes aspects of speed and ease in transactions. Transaction convenience can be defined as a fast and easy transaction experience for consumers. Apart from that, the aspects of time efficiency, costs, discounts, and free shipping expressed by respondents are included in the convenience benefits. This refers to the consumer's view of the cost, time, and effort required to experience the core benefits of the service. The importance of convenience after purchase is also reflected in the ease of returning goods, which is considered an important factor for e-wallet users. Post-purchase convenience focuses on the consumer experience after purchasing a product, including a return process that is uncomplicated and requires minimal effort. Overall, these findings support previous research results that show that transaction convenience, benefit convenience, and post-purchase convenience are key indicators in understanding consumer preferences for digital payment methods, especially e-wallets. By understanding these factors, payment service providers can focus more on improving the user experience and increasing the adoption of digital payment methods in society.

Based on the research results, it appears that there is a significant difference in the level of security between the use of Cash on Delivery (COD) and e-wallet payment methods. Rejection of the null hypothesis (H<sub>0</sub>) with a significance value (Sig.) of 0.03, which is smaller than 0.05, indicates that there is a real difference in perceived security between the two payment methods. User security is one of the key factors influencing the use of digital wallet products, and these findings are consistent with previous research showing that security has a significant influence on digital wallet use. In the context of digital payments, security is very important and has a big impact on the choice of payment method. Other research also highlights security constraints as the main factor influencing consumers to use applications from financial services, such as digital wallets. E-money issuers are expected to provide security for both customer data and funds stored in e-money. The difference in the average security values between COD (37.5) and e-wallet (39.5) demonstrates that respondents rate e-wallet security as being higher than COD. This has the implication that security factors are the main reason for users to choose e-wallets as a payment method. These findings support previous research, which shows that security has a positive effect on the use of the ShopeePay digital wallet. Thus, the results of this research can be used by digital payment service providers to improve security aspects of their services so as to increase user trust and promote the adoption of digital payment methods in society.

From the interview results, it can be concluded that the main reason users choose e-wallets as a payment method is because they feel safe, both in terms of data and funds contained in the account. This trust arises because users have never experienced losses, such as losing their balance or being exposed to fraudulent messages, while using e-wallets. Security in terms of data confidentiality and fund safety are the main factors that support user preferences for e-wallets. This factor is in line with comfort indicators, especially in the aspects of ensuring data security and confidentiality. To protect people from potential crimes or other security risks, the system must provide them with a sense of security. In contrast, data confidentiality refers to the characteristics of data that prevent unauthorized access. The importance of security in using e-wallets does not only cover financial inequality but also involves a sense of security regarding privacy and personal information. The success of e-wallets in providing protection for user data and stored funds is a key factor in building user trust in digital payment methods. Thus, e-wallet service providers can prioritize efforts to improve security systems, provide security education to users, and continue to monitor and improve the security of their systems. This will have a positive impact on trust and the adoption of e-wallets in society.

The features offered by the application have a significant impact on e-wallet acceptance, apart from convenience and security factors. This finding is in line with the results of previous research, which shows that application features have a positive influence on e-wallet acceptance. In this research, the four main features identified as influential are access to information, diversity of transaction services, diversity of service features, and product innovation. E-wallets that are integrated with e-commerce platforms have unique characteristics. Users can only use it when shopping online on e-commerce and cannot use it on other online shopping applications. This means that the choice of using an e-wallet is directly related to the use of the e-commerce platform. The limitations of e-wallets in their use outside the platform can influence users' decisions to adopt this e-wallet. Users will choose an e-wallet when shopping on Shopee, but for other e-commerce transactions, they may use other payment methods. Thus, it can be concluded that the existence of e-commerce plays an important role in influencing the use of e-wallets. Efforts to continuously improve the application's features and expand its usage possibilities can be an effective strategy to increase the acceptance of these e-wallets outside the e-commerce ecosystem. Further research needs to be conducted to evaluate how these factors can be managed more effectively to increase acceptance amidst increasingly fierce e-wallet industry competition.

Based on research results that show quite significant differences in comfort and security between Cash on Delivery (COD) and e-wallet payment methods, companies need to conduct an in-depth review and evaluation of these two systems. The focus of improvement can be on key aspects that influence users, such as the availability of payment methods, fees charged, related features, and a responsive return system when complaints occur. In terms of convenience, companies need to improve their services by ensuring the availability of diverse payment methods, transparent fees, and additional features that can enhance the user experience. Evaluation of the goods return system is also crucial so that users feel assured and receive quick treatment if a problem occurs. Meanwhile, at the security level, companies must focus on improving Cash on Delivery (COD) and e-wallet security systems. This includes improvements to the elements of goods safety and fund security, as well as maintaining the privacy and security of user data. Efforts to protect sensitive data and information are very important to build user trust in the payment method they choose. Continuous evaluation and improvement of comfort and safety systems will help companies not only meet the expectations of today's users but also increase their competitiveness in an increasingly competitive market. These steps can also build a positive image of the company in terms of customer service and transaction security, which can increase customer loyalty and increase long-term business growth.

#### **4. Conclusion**

Based on the research results, several main points can be drawn. First, there is a significant difference in the level of user comfort between Cash on Delivery (COD) and e-wallet payment methods, with the average value of e-wallet convenience being higher than COD convenience. This difference reflects that users tend to be more comfortable when using e-wallets compared to the COD payment method. Second, differences can also be seen in the level of security between COD and e-wallets. Although the difference in mean security values is not very large (37.5 for COD and 39.5 for e-wallets), the statistical significance results show that there is a significant difference. Therefore, it can be concluded that the level of e-wallet security tends to be higher than COD security. As a development recommendation, companies or payment service providers can focus on improving the convenience and security aspects of both payment methods. These improvements may involve improvements in the availability of payment methods, fees charged, features provided, and goods return systems, as well as increased security in terms of goods safety, fund security, and user data privacy. In addition, marketing and education efforts can also be focused on increasing user awareness regarding the benefits and safety of using e-wallets. By making continuous improvements to convenience and security, companies can strengthen their competitiveness in the growing digital payments market.

Based on the research results, there are several suggestions that can be given. First, students are advised to be wiser when using payment methods on e-commerce platforms. Using payment methods, both cash on delivery (COD) and e-wallets, has its own advantages. Therefore, it is recommended that students choose a payment method that suits their personal needs and preferences. This research can be a guide for them to make more informed decisions when transacting online. Furthermore, this research also provides suggestions for future researchers to develop other comparative research with a variety of payment methods and different variables. These studies can provide further insight into e-commerce user preferences and factors influencing payment method selection. Thus, the research can be a valuable reference for e-commerce users, companies, and researchers in this field. Finally, it is hoped that future researchers will be able to dig deeper into certain aspects that can expand understanding of user behavior in choosing payment methods. This research can be the basis for further studies involving additional variables, such as risk perception, transaction speed, and other psychological elements that can influence users' decisions about using payment methods in e-commerce. Thus, future research can make a greater contribution to our understanding of the dynamics of digital payments in the e-commerce era.

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