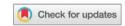
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The effect of cash on delivery (COD) payments on purchasing decisions of the Wamena Community: A case study of Shopee

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ABSTRAK

Introduction

Indonesians, especially when shopping online, increasingly use the cash on delivery (COD) system to pay for goods.

Objectives

This study aims to determine the effect of the cash on delivery (COD) payment method on the purchasing decisions of the Wamena community on the Shopee e-commerce platform.

Method

This research method uses an approach. The type of research used, namely the mixed method, is a research method that combines quantitative and qualitative data to produce more comprehensive data. The sample used amounted to 100 respondents who actively use Shopee in Wamena. Quantitative research measures the Cash on Delivery (COD) variable through Convenience, Privacy, and Trust. The purchasing decision variable is measured through indicators of Problem recognition, Information search, and Evaluation of alternatives. The data analysis techniques used in this study are validity tests, reliability tests, correlation tests, regression tests, t-tests, and determination coefficient tests.

Results

The results showed that the COD payment method positively and significantly affected the purchasing decisions of the Wamena city community at Shopee E-Commerce. The contribution given by the cod variable is 49% to purchasing decisions. Researchers conducted interviews to strengthen the results. The interview results show that the people of Wamena city choose cod payment because the average estimated delivery from Java to Papua is at least 7 days, so buyers find it easier to control expenses because they only pay when the goods are in hand. This payment system is also felt to be able to

JEL Classification: L21, L26, L84, Z12

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cash on delivery; COD payment; e-commerce; purchasing decision; Shopee

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avoid bills that come after transactions and can control excessive shopping desires.

Implications

With the increasing trend of COD usage, this study's results underscore the importance of buyers' and sellers' protection for this type of transaction.

Originality/Novelty

This study contributes to studies on online purchasing, especially in areas outside Java Island, where facilities and infrastructure are limited to support fast delivery.

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INTRODUCTION

E-commerce has transformed the global retail landscape, providing consumers with unprecedented access to a vast array of products and services (AbuAli et al., 2024; Wrigley & Currah, 2006). The rise of digital marketplaces has revolutionized purchasing behavior, reducing the reliance on traditional brick-and-mortar stores and expanding market reach beyond geographical limitations (Pratama et al., 2019; Şoavă et al., 2022). In developing regions, the adoption of e-commerce has been particularly significant, offering consumers the convenience of online shopping while addressing the limitations of physical retail infrastructure. However, despite the rapid growth of digital transactions, concerns regarding payment security, fraud, and trust continue to pose challenges to the widespread acceptance of online shopping. One solution that has gained traction, particularly in developing economies, is the Cash on Delivery (COD) payment method, which allows consumers to pay for goods only upon delivery, thereby mitigating perceived risks associated with digital payments (Tudor, 2022).

The COVID-19 pandemic further accelerated the adoption of e-commerce, as lockdowns and movement restrictions forced consumers to shift their purchasing behavior online (Ding, 2023; Heliyani et al., 2023; Jiang, 2023). In regions where digital payment infrastructures are underdeveloped or where consumers remain skeptical about online transactions, COD has emerged as a preferred payment method. Studies indicate that in countries such as Indonesia, up to 80% of online shoppers used COD in 2022, underscoring its role in facilitating e-commerce growth (Nazara et al., 2024). The preference for COD stems from multiple factors, including consumer trust issues, inadequate banking infrastructure, and concerns over product quality and nonfulfillment of orders (Tsary, 2023). Given the prominence of COD in developing markets, understanding its impact on consumer purchasing decisions is critical for businesses seeking to optimize payment strategies and enhance customer satisfaction.

Despite its advantages, COD presents unique challenges to e-commerce platforms and sellers. The method increases logistical complexities, requiring sellers to manage cash transactions and bear the risk of order cancellations or refusals at the point of delivery (Kirana & Yunanto, 2023). Furthermore, COD transactions often lead to higher return rates, which can negatively impact sellers' profitability and operational efficiency. The financial risks associated with COD necessitate a careful evaluation of its long-term viability as a dominant payment method in e-commerce. Therefore, this study seeks to analyze the influence of COD on consumer purchasing decisions, specifically within the context of Wamena, Indonesia, where e-commerce adoption is on the rise but where digital payment penetration remains limited.

Prior research has examined various determinants influencing consumers' preference for COD, including perceived risk, convenience, and trust (Anjum & Chai, 2020). Findings suggest that COD enhances consumer confidence by reducing the fear of financial fraud and ensuring that the product received aligns with expectations (Ariffin et al., 2018; Benamati & Serva, 2007; Brands & Van Wilsem, 2021; Hille et al., 2015; Srivastava et al., 2023). However, there remains limited empirical evidence on the extent to which COD directly influences consumer decision-making processes, particularly in emerging markets where economic and logistical factors play a significant role in shaping purchasing behavior. Understanding these dynamics is essential for policymakers and businesses aiming to foster a more robust digital economy.

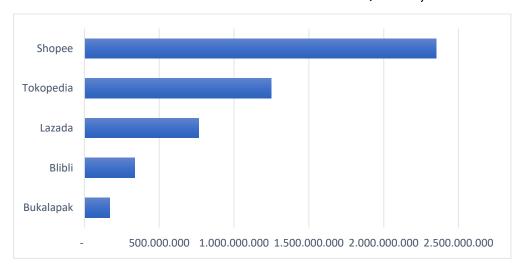
Existing studies highlight that COD is particularly popular among consumers with limited access to banking services or those who lack trust in electronic payment systems (Amofah & Chai, 2022; Armiani, 2022). In Indonesia, COD remains a prevalent payment option due to factors such as long shipping times, concerns over the reliability of sellers, and cultural preferences for cash transactions (Al-Adwan et al., 2022; Azali, 2016; Lakeman et al., 2021; Lalu, 2024; Nurcahyo & Putra, 2021). The psychological assurance that COD provides—by allowing consumers to inspect products before payment—serves as a significant driver of its adoption (Yu et al., 2020). Nevertheless, the long-term sustainability of COD as an e-commerce payment model remains a subject of debate, as businesses increasingly seek to encourage digital payment adoption for greater operational efficiency and reduced financial risk.

Several studies have explored the role of marketing strategies in promoting COD as a viable payment method (Anjum & Chai, 2020; Brinson et al., 2011; Hamed & El-Deeb, 2020; Khan et al., 2017). For instance, promotional campaigns that emphasize the security and convenience of COD have been found to positively influence consumer purchasing behavior (Anas, 2023). Additionally, trust-building mechanisms such as consumer reviews, return policies, and transparent seller ratings have been identified as crucial factors that can mitigate concerns associated with online transactions and potentially reduce reliance on COD (Rita & Ramos, 2022). These insights suggest that while COD remains a dominant payment method, alternative strategies could be employed to transition consumers toward digital payment solutions over time.

Despite the wealth of literature on e-commerce payment methods, a critical research gap exists in understanding the specific impact of COD on purchasing decisions in regions with unique socio-economic conditions, such as Wamena. While studies have established that COD enhances consumer trust and convenience (De Kerviler et al., 2016; Duarte et al., 2018; Gawor & Hoberg, 2019), few have quantified its influence on purchasing behavior in remote or developing areas where logistical and economic factors may further complicate consumer decision-making. This study seeks to bridge this gap by providing empirical evidence on the extent to which COD affects purchasing behavior in Wamena and identifying key factors that drive consumer preference for this payment method.

Figure 1

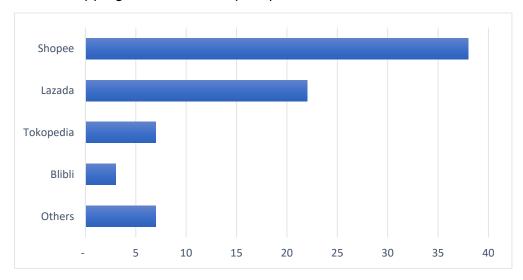
Five E-Commerce with the Most Visitors in Indonesia (January-December 2023)



Source: Ahdiat (2024)

Figure 2

Online Shopping Platform Used by Respondents in Wamena



Source: Author's preliminary survey.

The primary objective of this study is to examine the influence of COD on purchasing decisions among consumers in Wamena using Shopee as a case study. Shopee was most viewed online marketplace in Indonesia (Figure 1) and preliminary survey also indicated that it was used by most customers in Wamena (Figure 2). This research contributes to the existing literature by offering a contextualized analysis of COD adoption in an emerging market, highlighting both its benefits and challenges. The study also provides insights into the broader implications of COD for e-commerce development and payment strategies in regions where digital transaction adoption remains limited. By understanding the factors that influence COD preference, businesses can devise more effective strategies to enhance customer trust, improve payment systems, and ensure sustainable e-commerce growth.

LITERATURE REVIEW

Cash on Delivery (COD)

Cash on Delivery (COD) is a widely used payment method in e-commerce, allowing consumers to pay for their purchases only upon delivery. This system has gained prominence, especially in developing economies, where trust in online payment methods remains a concern. COD reduces perceived risks associated with online transactions, such as fraud, unauthorized payments, and product quality discrepancies (Anjum & Chai, 2020). By enabling consumers to inspect their purchases before payment, COD provides a level of security that digital payment methods may lack (Tsary, 2023).

Research indicates that the adoption of COD varies based on economic conditions, digital literacy, and banking infrastructure. In regions with limited access to banking services, COD becomes a preferred option as it does not require credit or debit cards (Amofah & Chai, 2022). Indonesia, for example, has a high COD usage rate due to trust issues with online payments and long delivery times that make upfront payments less attractive (Yu et al., 2020). Additionally, logistical inefficiencies and unreliable refund mechanisms contribute to consumer preference for COD as a more secure transaction method (Nazara et al., 2024).

However, while COD benefits consumers, it poses operational challenges for businesses. High return rates, increased handling costs, and delayed revenue collection are common drawbacks (Kirana & Yunanto, 2023). Businesses need to adopt efficient cash management and fraud prevention strategies to mitigate financial risks associated with COD transactions (Purwandari et al., 2022).

Purchasing Decision

Purchasing decisions in e-commerce are influenced by multiple factors, including convenience, trust, perceived risk, and product pricing. Kotler & Armstrong (2018) outline the five stages of the purchasing decision-making process: problem recognition, information search, evaluation of alternatives, purchase decision, and post-purchase behavior. These stages are particularly relevant in e-commerce, where

consumers often rely on product descriptions, reviews, and payment options before making a purchase.

Trust is one of the most significant determinants of online purchasing behavior. Consumers are more likely to buy from platforms that offer secure payment methods and reliable return policies (Isanawikrama et al., 2023). The presence of COD as a payment option increases trust, as consumers feel reassured that they can verify product quality before making a financial commitment (Rita & Ramos, 2022).

Another critical factor is convenience. Consumers prefer payment methods that require minimal effort and provide ease of transaction (Anas, 2023). COD eliminates the need for complex digital payment processes, making it particularly attractive for first-time online shoppers and those unfamiliar with digital banking (Bhatti & Rehman, 2020). Additionally, COD appeals to consumers who prefer cash transactions due to cultural and habitual factors, especially in regions where cash remains the dominant payment method.

The Impact of COD on Purchasing Decisions

Several studies highlight the significant impact of COD on consumer purchasing behavior. The primary reason for its influence is the reduction of perceived risks associated with online shopping. By allowing consumers to inspect products before payment, COD addresses concerns regarding fraud, product misrepresentation, and failed deliveries (Anjum & Chai, 2020). Consumers are more likely to purchase from ecommerce platforms that offer COD, particularly in markets where trust in online transactions is still developing (Purwandari et al., 2022).

A study by Yogatama et al. (2023) found that COD increases purchase intent by providing consumers with greater control over their financial transactions. The study also observed a higher rate of impulse buying among COD users, as the deferred payment option minimizes the psychological barrier associated with upfront payments (Yulianto et al., 2021). This indicates that COD not only influences rational purchasing decisions but also plays a role in triggering spontaneous purchases.

Nonetheless, COD has inherent challenges. Businesses experience higher return and cancellation rates with COD orders, resulting in increased logistical costs and revenue losses (Kirana & Yunanto, 2023). Moreover, COD transactions require efficient cash-handling procedures and additional resources for delivery personnel, further complicating e-commerce operations (Dong & Jia, 2022).

Research Gap and Hypothesis Development

While existing literature establishes the importance of COD in e-commerce, there is a limited understanding of its specific impact on purchasing decisions in localized contexts, such as Wamena. Prior studies primarily focus on general e-commerce trends, neglecting the socio-economic and logistical factors that influence COD adoption in remote areas. Additionally, while COD is widely recognized as a trust-enhancing mechanism, few studies quantify its exact effect on purchasing decisions in underdeveloped markets.



This study aims to address these gaps by examining the extent to which COD influences purchasing decisions in Wamena, Indonesia. By analyzing factors such as consumer trust, accessibility, and delivery logistics, this research seeks to provide empirical evidence on the role of COD in shaping purchasing behavior. The findings will contribute to the broader discourse on e-commerce payment strategies and offer practical insights for businesses and policymakers in emerging markets.

Based on the literature review, the study formulates the following hypotheses:

Ha: COD positively and significantly influences purchasing decisions.

Ho: COD does not have a significant impact on purchasing decisions.

METHOD

Research Design

This study employs a mixed-methods approach, integrating both quantitative and qualitative research methods to provide a comprehensive analysis of the impact of Cash on Delivery (COD) on purchasing decisions. The quantitative component involves statistical analysis of survey data, while the qualitative aspect includes indepth interviews with selected respondents to gain deeper insights into consumer motivations and perceptions. The mixed-methods approach ensures a robust and nuanced understanding of the research problem, addressing both numerical trends and behavioral rationales.

Population and Sampling Technique

The population for this study consists of e-commerce consumers in Wamena who have utilized COD as a payment method. A simple random sampling technique is used to ensure a representative sample, eliminating biases and allowing for generalizability of the findings. The sample size is determined using the Lemeshow formula, ensuring statistical validity. A total of 100 respondents are selected to participate in the study, providing an adequate dataset for meaningful analysis.

Data Collection Methods

Primary data is collected through a structured questionnaire distributed via Google Forms. The questionnaire consists of 18 statements measured using a Likert scale, capturing key aspects such as ease of use, trust, and perceived security of COD transactions. Additionally, unstructured interviews are conducted with three respondents to validate and enrich the quantitative findings. The combination of structured surveys and open-ended interviews allows for a triangulated approach, enhancing the reliability and validity of the research.

Measurement of Variables

The study examines two primary variables: COD as the independent variable and purchasing decision as the dependent variable. COD is measured using three key indicators: convenience, security, and trust. The purchasing decision is evaluated through the framework proposed by Kotler & Armstrong (2018), which includes

problem recognition, information search, evaluation of alternatives, purchase decision, and post-purchase behavior. The use of established measurement criteria ensures consistency and comparability with prior research.

Data Analysis Techniques

The collected data is analyzed using SPSS version 28.0. The analysis includes:

- Validity and Reliability Tests: To assess the accuracy and consistency of the measurement instruments, the study employs Cronbach's alpha for reliability and correlation coefficients for validity.
- Correlation Analysis: To examine the strength and direction of the relationship between COD and purchasing decisions.
- Regression Analysis: To determine the predictive power of COD on purchasing behavior, using a linear regression model.
- t-Test Analysis: To test the statistical significance of COD's impact on purchasing decisions.
- Coefficient of Determination (R²): To quantify the proportion of variance in purchasing decisions explained by COD.

Ethical Considerations

Ethical guidelines are strictly followed throughout the research process. Informed consent is obtained from all respondents before participation, ensuring their voluntary involvement. Data confidentiality is maintained, and participants have the right to withdraw at any stage. The study adheres to institutional ethical standards for research involving human participants.

RESULTS

Demographic Profile of Respondents

The study surveyed 100 respondents who use e-commerce platforms and prefer the Cash on Delivery (COD) payment method in Wamena. The demographic profile of respondents included key variables such as age, gender, income level, and occupation. The majority of respondents (56%) were between the ages of 21 and 25, indicating that younger consumers are more inclined to use e-commerce. Female respondents comprised 56% of the sample, while males accounted for 44%, suggesting a relatively balanced gender distribution in COD users. Income levels varied, with 33% earning below IDR 1,000,000 per month, while 29% fell within the IDR 2,100,000–3,000,000 range. The most common occupations were private-sector employees (36%) and university students (33%), reflecting the primary demographic of e-commerce users in the region.

Table 1Demographic Profile of Respondents

Demographic Variable	Category	Number of Respondents	Percentage
Age	< 20 years	12	12%
	21–25 years	56	56%
	26-30 years	17	17%
	31-35 years	8	8%
	36-40 years	6	6%
	> 40 years	1	1%
Gender	Male	44	44%
	Female	56	56%
Income Level	< IDR 1,000,000	33	33%
	IDR 1,000,000-2,000,000	10	10%
	IDR 2,100,000-3,000,000	29	29%
	IDR 3,100,000-4,000,000	19	19%
	IDR 4,100,000-5,000,000	1	1%
	> IDR 5,000,000	8	8%
Occupation	Private-sector employee	36	36%
	University student	33	33%
	Entrepreneur	12	12%
	Government employee	12	12%
	Lecturer	4	4%
	Unemployed	3	3%

Source: Primary data. Authors' estimation.

Descriptive Statistics

Descriptive analysis was conducted to summarize the key characteristics of COD adoption and purchasing decisions. The mean scores for COD-related variables (convenience, trust, and security) were relatively high, indicating that respondents perceive COD as a reliable payment method. Respondents rated trust as the most significant factor influencing their choice of COD (mean = 4.21, SD = 0.76), followed by convenience (mean = 4.05, SD = 0.81) and security (mean = 3.89, SD = 0.85).

For purchasing decisions, respondents demonstrated a high level of engagement in the e-commerce buying process. The average score for problem recognition (mean = 4.15, SD = 0.79) suggested that respondents actively identify their needs before purchasing. Information search scored a mean of 4.02 (SD = 0.82), highlighting the role of product research. The lowest-scoring aspect was post-purchase behavior (mean = 3.72, SD = 0.88), indicating that follow-up engagement such as reviews and repeat purchases were less frequent.

Correlation Analysis

To assess the relationship between COD and purchasing decisions, a Pearson correlation analysis was conducted. The results revealed a strong positive correlation (r = 0.701, p < 0.01) between COD and purchasing decisions, suggesting that as the perceived benefits of COD increase, so does the likelihood of making a purchase. Each sub-variable of COD (trust, convenience, and security) also demonstrated a positive

correlation with purchasing decisions. Trust exhibited the strongest correlation (r = 0.658, p < 0.01), followed by convenience (r = 0.603, p < 0.01) and security (r = 0.578, p < 0.01). These findings support the notion that COD fosters consumer confidence in online shopping, thereby enhancing purchasing behavior.

Regression Analysis

A linear regression analysis was conducted to evaluate the predictive power of COD on purchasing decisions. The model was statistically significant (F = 47.892, p < 0.001), explaining 49.2% of the variance in purchasing decisions ($R^2 = 0.492$). The regression equation can be expressed as follows:

Y = 10.328 + 0.644X

where Y represents purchasing decisions and X represents COD. The coefficient (0.644) indicates that a one-unit increase in COD perception leads to a 64.4% increase in purchasing decisions, confirming the positive influence of COD.

Each COD sub-variable was further analyzed:

- Trust (β = 0.489, p < 0.001): The most significant predictor, demonstrating the crucial role of consumer confidence in product and transaction security.
- Convenience (β = 0.403, p < 0.001): A key determinant, emphasizing the role of accessibility and ease of use.
- Security (β = 0.367, p < 0.01): While significant, it had the lowest impact among the three factors, indicating that while security matters, it is secondary to trust and convenience.

These results indicate that COD significantly influences purchasing decisions, primarily through trust and convenience, supporting the alternative hypothesis (Ha).

Hypothesis Testing

The results of hypothesis testing confirm that COD has a significant impact on purchasing decisions. The t-test results indicate that the relationship between COD and purchasing decisions is statistically significant (t = 9.735, p < 0.001). Given that the calculated t-value exceeds the critical t-value (1.984), the null hypothesis (Ho) is rejected, supporting the assertion that COD positively and significantly influences purchasing decisions.

Qualitative Insights from Interviews

To supplement quantitative findings, qualitative data from unstructured interviews were analyzed. Three respondents provided insights into why they prefer COD. The most commonly cited reason was the long shipping time from Java to Papua, which can take a minimum of seven days. COD allows consumers to delay payment until they physically receive the product, reducing the risk of financial loss due to failed deliveries. Respondents also noted that COD helps control spending, as they can evaluate the necessity of the product upon delivery rather than making impulsive prepaid purchases.

Additionally, respondents expressed concerns about fraudulent sellers and defective products, reinforcing the importance of trust in e-commerce transactions. While some acknowledged the drawbacks of COD, such as additional shipping fees and potential payment disputes with couriers, they still preferred it over digital payments due to its perceived reliability.

DISCUSSION

The Role of Cash on Delivery in E-Commerce

The findings of this study reinforce the crucial role that Cash on Delivery (COD) plays in influencing consumer purchasing decisions, particularly in regions with limited digital payment adoption. COD has emerged as a preferred payment method due to its ability to mitigate financial risk, enhance trust, and offer convenience to consumers. These findings align with previous research, which has established that COD adoption is largely driven by consumer confidence in product quality and transaction security (Anjum & Chai, 2020).

The high correlation between COD and purchasing decisions (r = 0.701, p < 0.01) suggests that COD significantly influences consumer behavior. This result is consistent with prior studies indicating that consumers tend to favor payment methods that allow them to inspect products before making financial commitments (Tsary, 2023). The preference for COD is especially pronounced in developing markets where consumers remain skeptical of online payment security and product authenticity (Amofah & Chai, 2022). The strong relationship between COD and purchasing behavior highlights the importance of maintaining flexible payment options in e-commerce business models.

Trust as the Primary Driver of COD Adoption

Among the key components of COD, trust emerged as the most significant predictor of purchasing decisions, exhibiting the highest correlation (r = 0.658, p < 0.01). The study's regression analysis further confirmed trust's substantial impact, with a beta coefficient of 0.489 (p < 0.001). These findings reinforce existing literature that emphasizes the pivotal role of trust in online transactions (Isanawikrama et al., 2023).

Consumers who lack confidence in online sellers are more likely to opt for COD as a means of ensuring that their purchases meet expectations before payment. This behavior is particularly relevant in markets where fraudulent activities, poor-quality goods, and unreliable refund policies are common concerns (Rita & Ramos, 2022). The qualitative data also supported this claim, as respondents frequently cited concerns about product authenticity and non-delivery as primary reasons for choosing COD. These insights suggest that businesses seeking to reduce their reliance on COD should focus on improving consumer trust through transparent policies, robust refund mechanisms, and reliable customer service.

Convenience and Consumer Preferences

The study also revealed that convenience is a major factor influencing COD adoption, with a significant correlation to purchasing decisions (r = 0.603, p < 0.01). The regression analysis confirmed convenience as a strong predictor ($\beta = 0.403$, p < 0.001), indicating that ease of transaction plays a crucial role in shaping consumer behavior. This aligns with research by Bhatti & Rehman (2020), who found that payment simplicity is a key determinant of online shopping preferences.

For many consumers, particularly those in remote areas or with limited access to digital banking, COD provides an accessible and user-friendly payment alternative. The study's qualitative findings highlight that consumers appreciate the ability to finalize transactions without engaging in complex online payment procedures. These results suggest that while digital payment adoption is increasing, COD remains an essential option for consumers who prioritize transactional ease over technological advancements.

Security Considerations in COD Transactions

Although security was found to be a significant factor influencing COD adoption (r = 0.578, p < 0.01), its impact was lower compared to trust and convenience. The regression results indicated a beta coefficient of 0.367 (p < 0.01), highlighting security's relative importance. These findings align with prior studies suggesting that while security concerns influence consumer behavior, they are often secondary to trust and convenience (Purwandari et al., 2022).

The qualitative insights further reinforced this point, as respondents expressed concerns about issues such as delayed deliveries, lost packages, and potential financial disputes with couriers. Despite these concerns, the ability to inspect products before payment generally outweighed apprehensions about security. Businesses can address security-related issues by strengthening logistics infrastructure, improving tracking mechanisms, and ensuring reliable delivery services to enhance consumer confidence in COD transactions.

Challenges Associated with COD for Businesses

While COD offers several advantages for consumers, it presents challenges for e-commerce businesses. The study's findings indicate that COD contributes to higher return rates, increased operational costs, and cash flow management difficulties. Research by Kirana & Yunanto (2023) supports these conclusions, noting that COD transactions often lead to logistical inefficiencies, delayed revenue collection, and added financial risk.

A major drawback of COD is the high rate of order cancellations, which negatively impacts sellers. Consumers who do not commit upfront to a purchase may reconsider their buying decisions before delivery, leading to financial losses for businesses. The study's qualitative interviews highlighted that some consumers use COD as a means of evaluating products without a firm commitment to purchasing, which can increase return rates. To mitigate this issue, businesses could implement stricter COD policies, such as requiring partial deposits or limiting COD availability for high-risk transactions.

Additionally, businesses must allocate additional resources for handling COD payments, including training delivery personnel to manage cash transactions and ensuring secure handling of funds. These logistical challenges necessitate operational adjustments, particularly for small and medium enterprises that may lack the infrastructure to efficiently process COD orders (Dong & Jia, 2022). As digital payment adoption grows, businesses may benefit from promoting alternative payment methods while maintaining COD as an option for hesitant consumers.

COD in the Context of Islamic Law

From an Islamic perspective, COD aligns with Sharia principles regarding transparency and fairness in trade. Islamic law emphasizes that transactions should be free from elements of uncertainty (gharar) and fraud, ensuring that both parties—buyers and sellers—engage in ethical and just trade practices. COD supports this principle by allowing consumers to inspect goods before making payments, reducing the risk of deceptive transactions (Nahlah et al., 2022).

Furthermore, COD aligns with the Islamic contract of bay' al-salam, in which payment is made upon the delivery of goods, provided there is mutual consent between the parties. This ensures that consumers receive what they have agreed to purchase before committing financially, which helps protect their rights (Tsary, 2023). However, challenges such as late payments and refusal to accept deliveries may lead to potential ethical concerns under Islamic law, necessitating the implementation of clear and fair return policies.

Businesses operating within an Islamic framework should ensure that COD transactions maintain transparency, adhere to contractual obligations, and minimize any unfair financial burdens on sellers. This can be achieved by establishing clear guidelines on product returns, enforcing fair pricing structures, and ensuring accountability in the delivery process. Future research could explore the role of Islamic financial regulations in further optimizing COD transactions for Muslim consumers.

CONCLUSION

This study confirms that COD significantly influences purchasing decisions, with trust and convenience emerging as the primary driving factors. Trust plays a crucial role in reducing consumer uncertainty, making COD an appealing option for buyers who prioritize security and reliability. Convenience also significantly affects purchasing decisions, as COD provides consumers with an accessible payment alternative, particularly in regions with limited access to digital banking. Although security concerns exist, they are secondary to trust and ease of transaction.

Despite its advantages, COD presents operational challenges for businesses, including high return rates, logistical inefficiencies, and revenue delays. Companies must adopt strategic policies to manage these challenges while maintaining COD as an option for consumers who depend on it. Hybrid payment strategies, improved seller transparency, and enhanced customer trust initiatives can help mitigate the

negative aspects of COD and encourage greater adoption of digital payment methods.

This research contributes to the broader discourse on e-commerce payment methods by offering empirical insights into COD's role in consumer decision-making. The findings provide valuable implications for businesses and policymakers aiming to optimize payment strategies while ensuring a seamless and secure shopping experience.

Limitations of the Study

While this study provides valuable insights into the impact of COD on purchasing decisions, it has several limitations. The sample size, though representative, is geographically limited to Wamena, which may not fully capture the purchasing behaviors of consumers in other regions. Future research should consider a broader geographic scope to enhance the generalizability of findings.

Additionally, the study relies on self-reported data, which may introduce biases such as social desirability bias or recall bias. Future research could incorporate observational methods or transaction data analysis to validate consumer responses. Moreover, this study primarily examines COD from the consumer perspective; further research should explore business-side challenges and strategies to balance COD with operational efficiency.

Recommendations for Future Research

Given the evolving landscape of digital payments, future research should explore the gradual transition from COD to digital payment alternatives. Studies examining consumer attitudes toward hybrid payment systems, such as partial COD with digital deposits, could provide valuable insights into payment model innovation.

Future research could also investigate the role of government policies and financial literacy programs in influencing payment preferences. Understanding how regulatory frameworks and financial education impact COD adoption could guide policymakers in promoting secure and inclusive e-commerce ecosystems.

Additionally, examining the impact of technological advancements, such as blockchain-based payment verification or Al-driven fraud prevention, could offer solutions to address the challenges associated with COD transactions. Exploring cultural and psychological factors that drive COD preferences in various regions would further enrich the understanding of consumer behavior in digital commerce. This study confirms that COD significantly influences purchasing decisions, with trust and convenience emerging as the primary driving factors. While security concerns also play a role, they are secondary to consumer confidence and transactional ease. The findings suggest that while COD remains a crucial payment option, businesses should seek to enhance consumer trust in digital payments to reduce dependency on COD.

The challenges associated with COD, including high return rates and operational inefficiencies, highlight the need for strategic policy implementation. Businesses can benefit from adopting hybrid payment strategies that maintain COD availability while

incentivizing digital payment usage. Policymakers and e-commerce platforms should focus on enhancing transaction security, improving logistics, and educating consumers to foster a more efficient and secure online shopping environment.

Overall, this research contributes to the understanding of COD's role in ecommerce and provides actionable insights for businesses and policymakers navigating the evolving digital marketplace.

Author Contributions

Conceptualization	F., S., & R.T.	Resources	F., S., & R.T.
Data curation	F., S., & R.T.	Software	F., S., & R.T.
Formal analysis	F., S., & R.T.	Supervision	F., S., & R.T.
Funding acquisition	F., S., & R.T.	Validation	F., S., & R.T.
Investigation	F., S., & R.T.	Visualization	F., S., & R.T.
Methodology	F., S., & R.T.	Writing – original draft	F., S., & R.T.
Project administration	F., S., & R.T.	Writing - review &	F., S., & R.T.
		editing	

All authors have read and agreed to the published version of the manuscript.

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Institutional Review Board Statement

The study was approved by Program Studi Manajemen Retail (S1), Universitas Amal Ilmiah Yapis Wamena, Wamena, Indonesia.

Informed Consent Statement

Informed consent was obtained before the respondents filled out the questionnaire.

Data Availability Statement

The data presented in this study are available upon request from the corresponding author.

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Conflicts of Interest

The authors declare no conflicts of interest.

REFERENCES

AbuAli, A. N., Alrefaei, A. A., Aljohani, S. A., Aloufi, I. N., Ghabban, F., Ameerbakhsh, O., Alfadli, I., Al-Shehri, A. H., Fallatah, N. A., & Younis, H. A. (2024). The impact of e-commerce on traditional businesses in Saudi Arabia. Journal of Service Science and Management, 17(04), 354-366. https://doi.org/10.4236/jssm.2024.174018

Ahdiat, A. (2024, January 10). 5 e-commerce dengan pengunjung terbanyak di Indonesia (Januari-Desember 2023) [5 e-commerce with the most visitors in Indonesia (January-December [HTML]. Databoks. https://databoks.katadata.co.id/teknologitelekomunikasi/statistik/3c9132bd3836eff/5-e-commerce-dengan-pengunjung-terbanyaksepanjang-2023

- Al-Adwan, A. S., Al-Debei, M. M., & Dwivedi, Y. K. (2022). E-commerce in high uncertainty avoidance cultures: The driving forces of repurchase and word-of-mouth intentions. *Technology in Society*, 71, 102083. https://doi.org/10.1016/j.techsoc.2022.102083
- Amofah, D. O., & Chai, J. (2022). Sustaining consumer e-commerce adoption in Sub-Saharan Africa:

 Do trust and payment method matter? Sustainability, 14(14), 8466.

 https://doi.org/10.3390/su14148466
- Anas, H. (2023). Determinant factor on the decision to use the COD payment method: Case of Millennial Generation—Indonesia. *East Asian Journal of Multidisciplinary Research*, 2(1), 281–290. https://doi.org/10.55927/eajmr.v2i1.2597
- Anjum, S., & Chai, J. (2020). Drivers of cash-on-delivery method of payment in e-commerce shopping: Evidence from pakistan. Sage Open, 10(3). https://doi.org/10.1177/2158244020917392
- Ariffin, S. K., Mohan, T., & Goh, Y.-N. (2018). Influence of consumers' perceived risk on consumers' online purchase intention. *Journal of Research in Interactive Marketing*, 12(3), 309–327. https://doi.org/10.1108/JRIM-11-2017-0100
- Armiani, A. (2022). E-commerce berbasis cash on delivery guna meningkatkan omset penjualan produk UMKM pada masa pandemi COVID-19 [E-commerce based on cash on delivery to increase sales turnover of MSME products during the COVID-19 pandemic]. *Owner*, 6(1), 668–676. https://doi.org/10.33395/owner.v6i1.639
- Azali, K. (2016). Cashless in Indonesia: Gelling mobile e-frictions? *Journal of Southeast Asian Economies*, 33(3), 364–386. https://www.jstor.org/stable/44132411
- Benamati, J. "Skip," & Serva, M. A. (2007). Trust and distrust in online banking: Their role in developing countries. *Information Technology for Development, 13*(2), 161–175. https://doi.org/10.1002/itdj.20059
- Bhatti, A., & Rehman, S. U. (2020). Perceived benefits and perceived risks effect on online shopping behavior with the mediating role of consumer purchase intention in Pakistan. *International Journal of Management Studies*, 26(1), 33–54. https://doi.org/10.32890/ijms.26.1.2019.10512
- Brands, J., & Van Wilsem, J. (2021). Connected and fearful? Exploring fear of online financial crime, Internet behaviour and their relationship. *European Journal of Criminology*, 18(2), 213–234. https://doi.org/10.1177/1477370819839619
- Brinson, A., Lee, M.-Y., & Rountree, B. (2011). Direct marketing strategies: The rise of community supported fishery programs. *Marine Policy*, 35(4), 542–548. https://doi.org/10.1016/j.marpol.2011.01.014
- De Kerviler, G., Demoulin, N. T. M., & Zidda, P. (2016). Adoption of in-store mobile payment: Are perceived risk and convenience the only drivers? *Journal of Retailing and Consumer Services*, 31, 334–344. https://doi.org/10.1016/j.jretconser.2016.04.011
- Ding, Y. (2023). Explore the development of new e-commerce models and their impact on consumer purchasing power. 19–24. https://doi.org/10.2991/978-2-38476-092-3_4
- Dong, J., & Jia, H. (2022). SWOT analysis: Growth of e-commerce within the context of digital economy. BCP Business & Management, 33, 508-518. https://doi.org/10.54691/bcpbm.v33i.2834
- Duarte, P., Costa E Silva, S., & Ferreira, M. B. (2018). How convenient is it? Delivering online shopping convenience to enhance customer satisfaction and encourage e-WOM. *Journal of Retailing and Consumer Services*, 44, 161–169. https://doi.org/10.1016/j.jretconser.2018.06.007

- Gawor, T., & Hoberg, K. (2019). Customers' valuation of time and convenience in e-fulfillment. International Journal of Physical Distribution & Logistics Management, 49(1), 75-98. https://doi.org/10.1108/IJPDLM-09-2017-0275
- Hamed, S., & El-Deeb, S. (2020). Cash on delivery as a determinant of e-commerce growth in emerging markets. Journal of Global Marketing, 33(4), 242-265. https://doi.org/10.1080/08911762.2020.1738002
- Heliyani, H., Tasri, E. S., Amelia, D., & Dwianda, Y. (2023). The contribution of e-commerce to economic growth in the COVID-19 era. Economics Development Analysis Journal, 12(1), 129-140. https://doi.org/10.15294/edaj.v12i1.58386
- Hille, P., Walsh, G., & Cleveland, M. (2015). Consumer fear of online identity theft: Scale development validation. Journal of Interactive Marketing, 30(1), 1-19. https://doi.org/10.1016/j.intmar.2014.10.001
- Isanawikrama, I., Hutomo, E. D., Irawan, I., & Aguzman, dan G. (2023). Effect of payment gateways towards online shopping behavior in SME in Indonesia. E3s Web of Conferences, 426, 02018. https://doi.org/10.1051/e3sconf/202342602018
- Jiang, Y. (2023). The marketing strategy of enterprises for China's sinking market under the trend of live e-commerce. International Journal of Global Economics and Management, 1(1), 35-40. https://doi.org/10.62051/ijgem.v1n1.06
- Khan, B. U. I., Olanrewaju, R. F., Baba, A. M., Langoo, A. A., & Assad, S. (2017). A compendious study of online payment systems: Past developments, present impact, and future considerations. International Journal of Advanced Computer Science and Applications, 8(5), 256–271. https://doi.org/10.14569/IJACSA.2017.080532
- Kirana, C., & Yunanto, Y. (2023). Perlindungan dan tanggung jawab hukum atas pembatalan transaksi jual beli melalui metode cash on delivery di e-commerce [Protection and legal responsibility for the cancellation of sale and purchase transactions through the cash on delivery method in e-commerce]. Al-Manhaj Jurnal Hukum Dan Pranata Sosial Islam, 5(2), 1977–1988. https://doi.org/10.37680/almanhaj.v5i2.3443
- Kotler, P., & Armstrong, G. (2018). Principles of marketing (17th edition). Pearson Higher Education.
- Lakeman, F. A., Walter, N., & Cleff, T. (2021). The impact of payment methods and payment-related marketing communications on e-commerce retailer trust—An empirical consumer analysis of Indonesian e-commerce start-ups. International Journal of Electronic Business, 16(4), 352-376. https://doi.org/10.1504/IJEB.2021.118492
- Lalu, S. (2024). Online shopping preferences and behaviors of Bajo fishermen in Popisi Village, Banggai Laut Regency, Indonesia. Egyptian Journal of Aquatic Biology and Fisheries, 28(6), 999-1012. https://doi.org/10.21608/ejabf.2024.395131
- Nahlah, N., Lutfi, M., & Sapa, N. B. (2022). Islamic figh views on e-commerce. Journal of Business and Management Studies, 4(4), 231-136. https://doi.org/10.32996/jbms.2022.4.4.22
- Nazara, D. S., Ratnawita, Ekasari, S., Sulistiarini, E. B., & Utami, E. Y. (2024). Analysis of perceived value of benefit cash on delivery payment method customers when using digital wallet application. Jurnal Informasi Dan Teknologi, 6(1), 21–28. https://doi.org/10.60083/jidt.v6i1.467
- Nurcahyo, R., & Putra, P. A. (2021). Critical factors in Indonesia's e-commerce collaboration. Journal of 16(6), Theoretical and **Applied** Electronic Commerce Research, 2458-2469. https://doi.org/10.3390/jtaer16060135

- Pratama, R. I., Megadini, D. D., & Kusriandini, T. (2019). Effect of perceived ease of use, word-of-mouth communication, and brand image on decision to use Lazada e-commerce services. International Journal of Multicultural and Multireligious Understanding, 6(1), 173. https://doi.org/10.18415/ijmmu.v6i1.533
- Purwandari, B., Suriazdin, S. A., Hidayanto, A. N., Setiawan, S., Phusavat, K., & Maulida, M. N. (2022). Factors affecting switching intention from cash on delivery to e-payment services in C2C e-commerce transactions: COVID-19, transaction, and technology perspectives. *Emerging Science Journal*, 6, 136–150. https://doi.org/10.28991/esj-2022-sper-010
- Rita, P., & Ramos, R. F. (2022). Global research trends in consumer behavior and sustainability in e-commerce: A bibliometric analysis of the knowledge structure. Sustainability, 14(15), 9455. https://doi.org/10.3390/su14159455
- Şoavă, G., Mehedinţu, A., & Sterpu, M. (2022). Analysis and forecast of the use of e-commerce in enterprises of the European Union states. *Sustainability*, 14(14), 8943. https://doi.org/10.3390/su14148943
- Srivastava, A., Mukherjee, S., Datta, B., & Shankar, A. (2023). Impact of perceived value on the online purchase intention of base of the pyramid consumers. *International Journal of Consumer Studies*, 47(4), 1291–1314. https://doi.org/10.1111/ijcs.12907
- Tsary, S. R. (2023). Application of the principle of good faith in electronic transactions (e-commerce) by consumers that use the cash on delivery (COD) method. *International Journal of Multicultural and Multireligious Understanding*, 10(10), 51–59. https://doi.org/10.18415/ijmmu.v10i10.5098
- Tudor, C. (2022). Integrated framework to assess the extent of the pandemic impact on the size and structure of the e-commerce retail sales sector and forecast retail trade e-commerce. *Electronics*, 11(19), 3194. https://doi.org/10.3390/electronics11193194
- Wrigley, N., & Currah, A. (2006). Globalizing retail and the 'new e-conomy': The organizational challenge of e-commerce for the retail TNCs. *Geoforum*, 37(3), 340–351. https://doi.org/10.1016/j.geoforum.2005.06.003
- Yogatama, A. G., Nurhadi, M., Sekarsari, L. A., & Irawan, I. C. (2023). Efektivitas sistem cash on delivery pada e-commerce Lazada selama masa pandemi COVID-19 [Effectiveness of the cash on delivery system in Lazada e-commerce during the COVID-19 pandemic]. *Publik Jurnal Manajemen Sumber Daya Manusia Administrasi Dan Pelayanan Publik*, 10(2), 689–703. https://doi.org/10.37606/publik.v10i2.608
- Yu, L., Liu, Q., Hua, R., & Fu, Y. (2020). Risk analysis of cash on delivery payment method by social network analysis and Fuzzy Petri Net. *IEEE Access*, 8, 174160–174168. https://doi.org/10.1109/access.2020.3024590
- Yulianto, Y., Sisko, A., & Hendriana, E. (2021). The stimulus of impulse buying behavior on e-commerce shopping festival: A moderated-mediated analysis. *Journal of Business Management Review*, 2(10), 692–714. https://doi.org/10.47153/jbmr210.2152021