# Unveiling the Drivers of Consumer Purchase Intention in Short-Form Video Marketing

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***Abstract*—Short-video features on e-commerce platforms have become a key driver of social commerce, enhancing user engagement and purchase intention. However, user reviews of Shopee Video reveal issues such as disruptive autoplay, limited content control, and unintuitive navigation. While prior studies have examined engagement and satisfaction in general e-commerce, limited research has explored how short-video features within social commerce influence purchase intention through user engagement. This study fills that gap by analysing the factors affecting consumer behaviour toward Shopee Video. Sentiment analysis of user reviews identified common dissatisfaction themes, followed by a quantitative survey of 300 Shopee Video users in Indonesia. Using Structural Equation Modeling with the Partial Least Squares (SEM-PLS) approach, the results show that user engagement significantly mediates the relationship between system quality, information quality, and technology adoption and usefulness on purchase intention. The study extends existing models to the social commerce context, providing insights for optimizing short-video features to strengthen engagement and conversion.**

***Keywords*—*E-commerce; purchase intention; Shopee Video; social commerce; SEM-PLS***

## I. Introduction

Digital technology occupies an increasingly important position in today's world and has undeniably become a strong social trend closely linked to the need for building a sustainable future [1]. Technological advances have also brought new changes, where most people now rely on internet-based digital technology in their daily lives [2]. According to the Indonesian Internet Service Providers Association (APJII), in 2024 around 221 million out of 278 million Indonesians were already connected to the internet, with 89.44% of the population accessing it through smartphones. The use of the internet for business has also continued to rise since the 1980s, reaching its peak in the 1990s with the emergence of online marketplace platforms, commonly known as electronic commerce (e-commerce), such as eBay and Amazon [3]. Since then, business activities involving interactions between companies and clients have become faster through the internet, which enables transactions to be conducted online. Moreover, access to e-commerce platforms has become increasingly easier anytime and anywhere through mobile devices [4]. E-commerce has also made a positive impact on Indonesia's economy by increasing entrepreneurs' income while providing convenience for consumers to shop without leaving their homes [5].

In Indonesia, several e-commerce platforms have grown rapidly, such as Shopee, Tokopedia, Bukalapak, Lazada, and Blibli. Among them, Shopee is the most popular platform [6]. Launched in Singapore in 2015 as a Consumer-to-Consumer (C2C) marketplace, Shopee has since evolved into a hybrid model combining C2C and Business-to-Consumer (B2C) through Shopee Mall, which hosts well-known brand stores. According to SimilarWeb data in early 2024, Shopee ranked first among e-commerce competitors in Indonesia with 235.9 million visits in February 2024, followed by Tokopedia (100.3 million), Lazada (45.03 million), and Blibli (24.15 million). The consistently high user interest has driven Shopee to continuously innovate with new features and strategies to maintain its competitive advantage, including discount programs, Shopee coins, diverse payment options, campaigns, livestreaming, and other interactive features [7][8]. In line with this innovation, Shopee introduced Shopee Video, a short-video feature that allows users to better understand products before purchasing. Based on a 2024 Ipsos study on online shopping experience and satisfaction, Shopee was rated as the e-commerce platform with the best short-video experience, outperforming TikTok Shop, Tokopedia, and Lazada. The survey involved 506 respondents across Indonesia aged 17–45, with an equal proportion of men and women. Shopee ranked first with a 61% satisfaction level in short-video experiences, followed by TikTok Shop (18%), Tokopedia (10%), and Lazada (9%) [9].

The short-video format on platforms like Shopee typically ranges from 10 to 30 seconds, allowing users to quickly understand product information, making the experience both efficient and engaging [10]. Such videos often cover diverse topics, from fashion trends and lifestyle entertainment to commercial advertisements and e-commerce promotions [11]. By adopting features like Shopee Video, Shopee has embraced the social commerce model, which integrates social interaction with online shopping [12]. This model allows users to actively engage through liking products, writing reviews, sharing experiences, and directly purchasing within the same platform [13]. Consequently, short-video formats with embedded purchase links and livestreaming functions have become integral to modern consumption behavior, enabling consumers to "socialize while shopping" more conveniently.

However, despite its popularity, user feedback reveals persistent challenges. Preliminary scraping of 33 Apple App Store reviews and 288 Google Play Store reviews identified complaints such as disruptive autoplay, lack of content control, and unintuitive navigation [14]. These usability and content-related issues highlight that, while short-video features may enhance engagement, they may not always lead to positive purchase intentions.

Previous studies on e-commerce and short-video use have primarily focused on user satisfaction, entertainment value, and technology adoption in general contexts [15][16]. Yet, few have examined how short-video features within social commerce ecosystems influence purchase intention through user engagement mechanisms. Moreover, existing research tends to overlook how system quality, information quality, and technology adoption interact with engagement behavior to shape consumer purchase decisions. This represents a critical research gap, as the short-video environment involves richer interaction, user-generated content, and algorithm-driven experiences that differ from conventional e-commerce.

Therefore, this study aims to fill that gap by extending the Delone and McLean Information System Success Model with constructs relevant to short-video and social commerce contexts, specifically integrating User Engagement as a mediating variable between System Quality, Information Quality, Technology Adoption and Usefulness, and Purchase Intention. This theoretical contribution provides empirical validation of established models in a new cultural and technological setting, Indonesia's social commerce landscape and offers practical insights for optimizing user-centered video-based features.

### A. Research Questions

Based on the above background, this study formulates the following research questions:

- What factors influence consumer purchase intention in using the short-video feature (Shopee Video) on the Shopee e-commerce platform?
- How does each of these factors affect consumer purchase intention toward using the short-video feature (Shopee Video) on the Shopee e-commerce platform?

### B. Research Objectives

The primary objective of this study is to identify and analyze the factors that influence consumer purchase intention in using the short-video feature, Shopee Video, within the Shopee e-commerce application. Specifically, the research aims to examine how system quality, information quality, and technology adoption and usefulness shape consumer behavior through the mediating role of user engagement. By understanding these relationships, the study seeks to provide empirical insights into how short-video features within social commerce platforms can effectively enhance user engagement and drive purchasing decisions. Furthermore, this research intends to contribute both theoretically and practically by enriching the literature on social commerce and offering recommendations for e-commerce practitioners and digital marketers to optimize short-video features that align with user expectations and behavioral patterns.

## II. Literature Review

### A. Previous Studies on Short-Video Features in E-Commerce and Social Commerce

Short videos have become a dominant form of digital content, shaping consumer behavior and purchase decisions across e-commerce and social commerce platforms. In e-commerce, short videos combine product information with engaging visual storytelling, facilitating consumers' transition from browsing to purchasing. Studies emphasize that product demonstration and visual aesthetics in short videos significantly influence viewing duration, suggesting that engaging content enhances user attention. However, this study primarily focused on content attributes, not on user satisfaction or behavioural outcomes such as purchase intention [17].

Similarly, explored persona perception and shared values in social commerce short videos, showing that perceived user identity positively affects purchase intention. Yet, their model emphasized social factors and emotional alignment, overlooking system and information quality aspects that may affect user experience. Other works, examined dual pathways of rationality and affection in livestream-based social commerce but focused more on social atmosphere than on short-video usability or engagement mechanisms [14].

In contrast, recent research analysed impulse buying and consumer satisfaction on platforms like Shopee Video and TikTok [18][19]. Their findings reinforced the role of emotional arousal and pleasure but were limited to Generation Z samples and focused on impulsive or affective responses rather than sustained engagement or cognitive evaluation. Hence, while prior studies have demonstrated the persuasive potential of short videos, most focus on content and emotional stimuli, leaving a gap in understanding how system, information, and technological aspects interact with user engagement to drive purchase intention especially within e-commerce-based short videos like Shopee Video rather than purely social platforms.

### B. System Quality

System quality, as conceptualized in the DeLone and McLean Information Systems Success Model, measures the reliability, stability, and responsiveness of an information system. Prior studies showed that platform performance and seamless navigation influence user stickiness and loyalty in video-based platforms like Douyin [20]. However, such works focused on overall experience rather than feature-specific performance. In the Shopee Video context, system quality directly affects how users interact with video features, such as playback stability, autoplay control, and navigation. This study extends the D&M model by validating system quality's effect within a video-based social commerce feature, emphasizing its indirect influence through user engagement.

### C. Information Quality

Information quality involves the relevance, clarity, and trustworthiness of product-related information conveyed through short videos. It was found that vivid and diagnostic content enhances trust and user commitment [20], whereas other research identified that well-demonstrated product information sustains user attention [17]. Despite these insights, few studies have analyzed how information quality in short-video formats shapes purchase intention through user engagement, particularly when users rely on short, rapidly consumed content for decision-making. This study contributes by examining how users perceived information quality from

Shopee Video influences engagement and subsequent purchasing behavior.

### D. Technology Adoption and Usefulness

Technology adoption and perceived usefulness reflect how users evaluate the benefits and ease of using a system. Past research widely applied the Technology Acceptance Model (TAM) to e-commerce contexts, linking perceived usefulness to satisfaction and purchase intention. However, few have tested it within the social commerce short-video environment, where users engage through both consumption and interaction. By integrating TAM into the D&M model, this study explores how perceived usefulness affects engagement behavior and purchase intention in short-video shopping experiences, expanding TAM's application into a more interactive and entertainment-driven context [16].

### E. User Engagement

User engagement represents users' cognitive, emotional, and behavioral involvement with digital platforms. It has been shown to mediate the relationship between technology-related factors and purchase behaviors [19]. Yet, many prior studies treated engagement as an outcome variable rather than a mediating mechanism. This study positions user engagement as a key mediator that links system quality, information quality, and technology adoption to purchase intention. By doing so, it extends the D&M model into the social commerce domain, offering a novel perspective on how interactive engagement behaviors transform functional experiences into purchase motivation.

### F. Purchase Intention

Purchase intention reflects consumers' willingness to buy after interacting with a product or feature. Prior works confirmed that emotional and social cues affect purchase intention in social commerce, but few have tested its determinants in video-based e-commerce platforms like Shopee [14], [21]. This study addresses that gap by combining both technical (system and information quality) and behavioral (engagement, usefulness) factors, presenting an integrated view of how short-video experiences influence purchase decisions.

## III. Methodology

### A. Research Design

This study employs a quantitative research design to examine the factors influencing purchase intention through user engagement in the context of Shopee Video, a short-video feature within a social commerce platform. The research process began with a preliminary study using scraping methods to identify user complaints and behavioral patterns from app store reviews. Insights from this stage were used to formulate the research problem and develop a conceptual model grounded in relevant theories and previous studies. Data were collected using an online survey distributed via social media to Shopee Video users in Indonesia aged 17 years and above see Table V and Table VI of Appendix A.

To visualize the research process, the overall study workflow is illustrated in Fig. 1, titled Overall Study Process. This diagram outlines the sequential steps: (1) preliminary research through sentiment analysis of app reviews, (2) literature review and model development, (3) hypothesis formulation, (4) data collection, (5) data analysis using SEM-PLS and (6) conclusion.

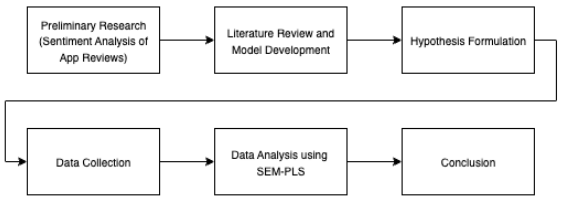


Fig. 1. Overall study process.

### B. Sampling

The population of this study comprises Shopee users in Indonesia who have used the Shopee Video feature. Because the exact number of active users of this feature is unknown, a simple random sampling technique was applied. Data were collected using a structured online questionnaire distributed through Google Forms. Following the recommendation of previous study for SEM-PLS, the minimum sample size was determined to be 300 respondents calculated as 100 times the number of independent variables [22] (system quality, information quality, and technology adoption & usefulness) to ensure adequate statistical power and model reliability.

$$n\ minimum = \text{Independent variables} \times 100$$

$$= 3 \times 100$$

$$= 300 \text{ respondents}$$

### C. Research Model

The conceptual model (Fig. 2) integrates constructs from the Information Systems Success Model (DeLone & McLean, 2016), the Technology Acceptance Model (TAM), and literature on social commerce engagement. The model posits that System Quality (SQ), Information Quality (IQ), and Technology Adoption & Usefulness (TAU) influence Purchase Intention (PI) both directly and indirectly through User Engagement (UE) as a mediating variable.

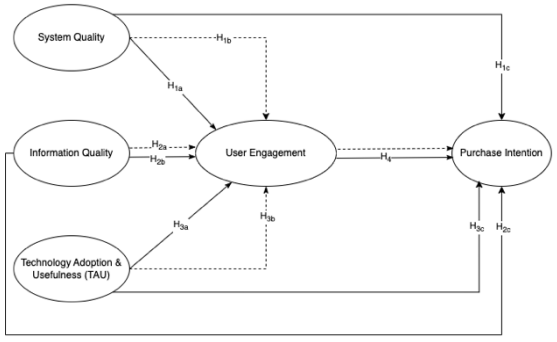


Fig. 2. Conceptual model.

This framework extends prior studies in social commerce by emphasizing the mediating role of engagement a dimension often underexplored in existing models. While prior research examined satisfaction or perceived usefulness, this study highlights engagement as a psychological bridge connecting quality perceptions and behavioral outcomes. Thus, the proposed model not only replicates but also advances previous

approaches by integrating user-centered insights from short-video platform behavior.

### D. Research Hypotheses

Based on the conceptual model, the following hypotheses were formulated:

H1a: System Quality significantly influences User Engagement.

H1b: System Quality significantly influences Purchase Intention through User Engagement.

H1c: System Quality significantly influences Purchase Intention.

H2a: Information Quality significantly influences User Engagement.

H2b: Information Quality significantly influences Purchase Intention through User Engagement.

H2c: Information Quality significantly influences Purchase Intention.

H3a: Technology Adoption & Usefulness significantly influences User Engagement.

H3b: Technology Adoption & Usefulness significantly influences Purchase Intention through User Engagement.

H3c: Technology Adoption & Usefulness significantly influences Purchase Intention.

H4a: User Engagement significantly influences Purchase Intention.

### E. Data Analysis

Data were analyzed using the Structural Equation Modeling-Partial Least Squares (SEM-PLS) approach with SmartPLS software. This method was chosen for its suitability in testing complex models with multiple constructs and mediating relationships. The analysis process included validity and reliability testing, evaluation of R-square values, and hypothesis testing to confirm the proposed relationships among variables.

### F. Study Limitations

This study is limited to the short-video feature, Shopee Video, within the Shopee e-commerce application. The research focuses on users in Indonesia who have experience using Shopee Video, specifically those aged 17 years and above and residing in the Jabodetabek area. The study adopts and modifies research models from previous studies related to system quality, information quality, technology adoption, user engagement, and purchase intention. As such, the findings may not be fully generalizable to users in other regions or to different e-commerce platforms. Future research could expand the sample coverage and explore comparative analyses across multiple social commerce platforms to strengthen external validity.

## IV. Data Analysis

A total of 310 questionnaires were collected. After data verification, 10 responses were excluded for not meeting the screening requirement of being Shopee Video users. Therefore, 300 valid responses were used for further analysis. This yields a usable response rate of 96.77 percent, confirming that the sample is adequate for the subsequent statistical analysis using the SEM-PLS method.

### A. Gender Distribution

Among the 300 respondents, 222 were female (74 percent) and 78 were male (26 percent). This finding indicates that Shopee Video's user base is predominantly female, consistent with broader trends in Indonesia's e-commerce and social commerce platforms, where women are generally more active in online shopping and product content interaction.

### B. Age Group Distribution

Respondents were categorized into four generational groups based on Indonesia's Internet Service Provider Association (APJII) classification. Generation Z (aged 17–27 years) constituted the largest group with 195 respondents (65 percent), followed by Millennials aged 28–43 years (69 respondents or 23 percent), Generation X aged 44–58 years (26 respondents or 8.6 percent), and Baby Boomers aged 59 years and above (10 respondents or 3.33 percent). The dominance of Generation Z and Millennials highlights the strong engagement of younger users with short-video content and their increasing role in shaping social commerce trends in Indonesia.

### C. Occupation

The largest occupational group consisted of private employees (121 respondents or 40.33 percent), followed by students (111 respondents or 37 percent), freelancers (25 respondents or 8.33 percent), homemakers (18 respondents or 6 percent), and entrepreneurs (13 respondents or 4.33 percent). A small proportion were government employees (8 respondents or 2.66 percent) and retirees (4 respondents or 1.33 percent). These results show that the Shopee Video audience includes a wide range of working adults and students, groups most familiar with digital shopping and short-form video consumption.

### D. Duration of Shopee App Usage

Most respondents had used the Shopee application for more than three years (222 respondents or 74 percent). Sixty respondents (20 percent) had used it for one to three years, while smaller groups reported six months to one year (11 respondents or 3.66 percent) and less than six months (7 respondents or 2.33 percent). This long-term usage pattern indicates that respondents have sufficient experience to assess the quality and usefulness of the Shopee Video feature.

### E. Primary Purpose of Using Shopee Video

When asked about their main purpose for using Shopee Video, 188 respondents (62.66 percent) indicated that they primarily watch product reviews or user testimonials. Seventy-one respondents (23.66 percent) use it to find special promotions, 28 respondents (9.33 percent) seek shopping inspiration, and 13 respondents (4.33 percent) use it mainly for entertainment. This suggests that Shopee Video is primarily perceived as an informational and promotional tool rather than an entertainment platform.

### F. Product Categories Frequently Purchased via Shopee Video

Fashion-related items, including apparel, footwear, and accessories, were the most frequently purchased products (176 respondents or 58.66 percent). The next categories were Beauty and Personal Care (62 respondents or 20.66 percent), Electronics and Gadgets (26 respondents or 8.66 percent), Home Goods and Furnishings (21 respondents or 7 percent), Food and Beverages (11 respondents or 3.66 percent), and Books and Magazines (4 respondents or 1.33 percent). The dominance of fashion products aligns with prior research showing that visual and aesthetic content in short videos strongly influences consumer purchase intention in lifestyle-related product categories.

### G. Familiarity with Shopee Video

Most respondents reported being familiar (170 respondents or 56.66 percent) or very familiar (110 respondents or 36.66 percent) with the Shopee Video feature, while only 20 respondents (6.66 percent) indicated limited familiarity. The high familiarity rate suggests that users have substantial exposure to the feature and can provide reliable feedback regarding system quality, content relevance, and engagement experience.

### H. Frequency of Shopee Video Usage Per Week

The highest frequency category was one to two times per week (135 respondents or 45 percent), followed by less than once a week (67 respondents or 22.33 percent), three to five times per week (67 respondents or 22.33 percent), and more than five times per week (31 respondents or 10.33 percent). These results indicate moderate engagement levels among users, suggesting that Shopee Video functions as a complementary browsing and product discovery tool rather than a daily-use feature.

### I. Average Viewing Duration Per Session

Most respondents (136 respondents or 45.33 percent) reported spending less than five minutes per session watching Shopee Videos. Another 129 respondents (43 percent) viewed content for five to fifteen minutes, while smaller groups watched for sixteen to thirty minutes (24 respondents or 8 percent) or more than thirty minutes (11 respondents or 3.66 percent). This short viewing duration aligns with the core purpose of short-video features in e-commerce: delivering concise, product-oriented content that facilitates rapid purchase decisions.

### J. Purchase Behavior via Shopee Video

A large majority of respondents (265 respondents or 88.33 percent) had made at least one purchase after watching Shopee Video, whereas 35 respondents (11.66 percent) had not. This finding underscores the feature's effectiveness in converting viewers into buyers, reinforcing its strategic importance in Shopee's social commerce ecosystem. The high purchase conversion rate also validates the relevance of this study's research model, which investigates how system quality, content quality, technology adoption, and user engagement jointly influence purchase intention.

### K. Outer Model Analysis

*1) Validity test:* Validity was assessed using the Average Variance Extracted (AVE) to confirm the degree to which each construct explains its corresponding indicators. An AVE value above 0.5 indicates that the construct captures more than half of the variance of its observed variables. The initial analysis showed all constructs exceeded the 0.5 threshold, although three indicators SQ2 (System Stability), IQ5 (Freedom from Tribe, Religion, Race, and Inter-group relations-related elements), and PI4 (Seeking Additional Product Information) had loading values below 0.7. These items were removed to improve the model's validity. After the refinement, the AVE values for all constructs improved and met the validity requirement as seen in Table I.

TABLE I. DISCRIMINANT VALIDITY

| Variable | Average Variance Extracted (AVE) | Conclusion |
|---|---|---|
| System Quality | 0.562 | Valid |
| Information Quality | 0.698 | Valid |
| Technology Adoption and Usefulness | 0.715 | Valid |
| User Engagement | 0.654 | Valid |
| Purchase Intention | 0.762 | Valid |

Following indicator elimination, the AVE values were System Quality (0.562), Information Quality (0.698), Technology Adoption and Usefulness (0.715), User Engagement (0.654), and Purchase Intention (0.762). As all values exceeded 0.5, the constructs demonstrated convergent validity.

*2) Reliability test:* Reliability measures the internal consistency of items within each construct. The Composite Reliability (CR) and Cronbach's Alpha coefficients were used for this purpose, with values above 0.7 considered acceptable. The results in Table II indicate that all constructs met or exceeded the reliability threshold. System Quality (CR=0.774; $\alpha$=0.748), Information Quality (CR=0.857; $\alpha$=0.855), Technology Adoption and Usefulness (CR=0.810; $\alpha$=0.802), User Engagement (CR=0.901; $\alpha$=0.894), and Purchase Intention (CR=0.850; $\alpha$=0.842). This confirms that each construct consistently measures its intended concept. Fig. 3 shows Cronbach's alpha representation.

TABLE II. RELIABILITY TEST RESULT

| Variable | Composite Reliability | Cronbach's Alpha | Conclusion |
|---|---|---|---|
| System Quality | 0.774 | 0.748 | Reliable |
| Information Quality | 0.857 | 0.855 | Reliable |
| Technology Adoption and Usefulness | 0.810 | 0.802 | Reliable |
| User Engagement | 0.901 | 0.894 | Reliable |
| Purchase Intention | 0.850 | 0.842 | Reliable |

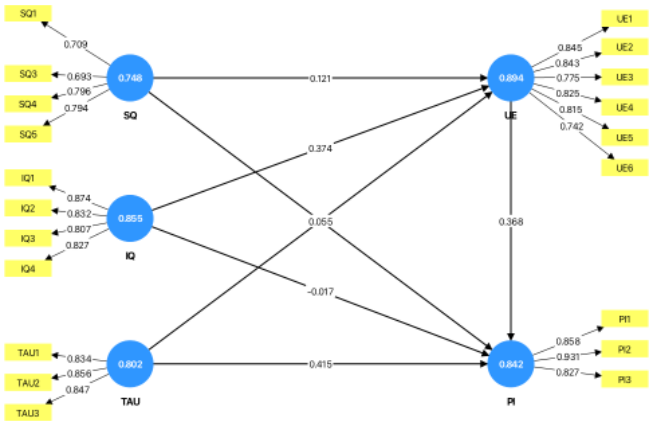


Fig. 3. Cronbach's alpha representation.

In summary, the measurement model fulfils all validity and reliability requirements (Fig. 4), supporting its use in further structural model testing.

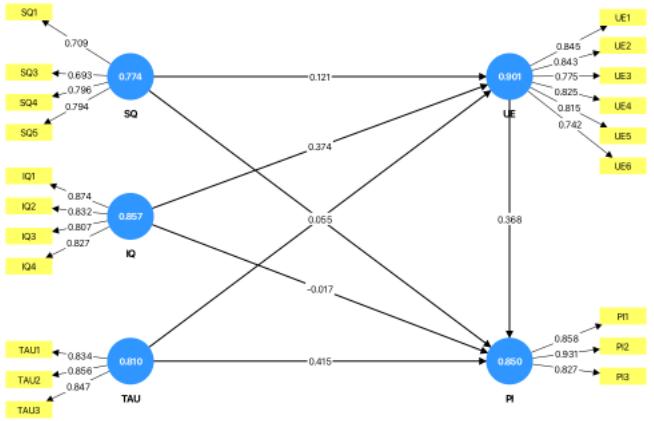


Fig. 4. Composite reliability representation.

## L. Inner Model Analysis

*1) The coefficient of determination or R-square (R²):* The R-square (R²) test measures how well independent variables explain the variance in dependent variables. R² values of 0.67, 0.33, and 0.19 indicate substantial, moderate, and weak levels of explanatory power, respectively. As shown in the results, the R² value for User Engagement was 0.514, indicating that 51.4 percent of its variance is explained by System Quality, Information Quality, and Technology Adoption and Usefulness. Meanwhile, the R² value for Purchase Intention was 0.409, meaning that 40.9 percent of the variance in purchase intention is explained by the independent variables and the mediating role of user engagement. As shown in Table III, R² values fall within the moderate category, suggesting that the model adequately captures the factors influencing user engagement and purchase intention toward Shopee Video.

TABLE III. R-SQUARE RESULTS FOR LATENT VARIABLES

| Variable | R² | R² Adjusted | Conclusion |
|---|---|---|---|
| User Engagement | 0.514 | 0.507 | Moderate |
| Purchase Intention | 0.409 | 0.403 | Moderate |

## M. Hypothesis Test

The hypothesis testing was conducted using the bootstrapping method in SmartPLS with a significance level of 0.05. The analysis shown in Table IV examined both direct and indirect effects among constructs based on the proposed hypotheses (H1a–H4a).

TABLE IV. HYPOTHESIS TESTING RESULT

| Correlation | O | T | P | Conclusion |
|---|---|---|---|---|
| SQ → UE | 0.121 | 1.550 | 0.121 | Not Significant |
| SQ → UE → PI | 0.045 | 1.552 | 0.128 | Not Significant |
| SQ → PI | 0.055 | 0.965 | 0.335 | Not Significant |
| IQ → UE | 0.374 | 5.326 | 0.000 | Significant |
| IQ → UE → PI | 0.138 | 4.028 | 0.000 | Significant |
| IQ → PI | -0.017 | 0.239 | 0.811 | Not Significant |
| TAU → UE | 0.218 | 2.624 | 0.009 | Significant |
| TAU → UE → PI | 0.080 | 2.335 | 0.020 | Significant |
| TAU → PI | 0.415 | 6.129 | 0.000 | Significant |
| UE → PI | 0.368 | 6.446 | 0.000 | Significant |

H1a: System Quality → User Engagement. The path from System Quality to User Engagement yielded a t-value of 1.550 (p=0.121), which is below the critical value of 1.97. Therefore, H1a is rejected, indicating that system quality does not significantly influence user engagement. This suggests that although users may expect stable and responsive performance, engagement is more strongly driven by other factors such as information relevance and perceived usefulness.

H1b: System Quality → Purchase Intention (Mediated by User Engagement). The indirect effect of System Quality on Purchase Intention through User Engagement produced a t-value of 1.552 (p=0.128), leading to the rejection of H1b. This result implies that system stability alone does not meaningfully enhance purchase intention, even when user engagement is considered as a mediator.

H1c: System Quality → Purchase Intention. The direct relationship between System Quality and Purchase Intention was not significant (t=0.965, p=0.335). Thus, H1c is rejected. These findings collectively indicate that while a technically sound system is necessary, it is insufficient on its own to drive purchasing behavior in short-video-based e-commerce environments.

H2a: Information Quality → User Engagement. Information Quality had a significant positive impact on User Engagement, with a t-value of 5.326 (p=0.000). Therefore, H2a is accepted. High-quality, accurate, and relevant information increases user trust and stimulates interaction, making it a key driver of engagement within Shopee Video.

H2b: Information Quality → Purchase Intention (Mediated by User Engagement). The indirect path from Information Quality to Purchase Intention via User Engagement was also significant (t=4.028, p=0.000), supporting H2b. This indicates that users who perceive the video content as informative and

trustworthy are more likely to form positive engagement experiences that enhance their purchase intentions.

H2c: Information Quality → Purchase Intention. The direct relationship between Information Quality and Purchase Intention was not significant (t=0.239, p=0.811). Thus, H2c is rejected. Although users value accurate information, it primarily affects purchase intention indirectly through engagement rather than as a standalone factor.

H3a: Technology Adoption and Usefulness → User Engagement. Technology Adoption and Usefulness had a significant positive effect on User Engagement (t=2.624, p=0.009). Therefore, H3a is accepted. This shows that users who perceive Shopee Video as easy to use and beneficial are more likely to engage with it actively.

H3b: Technology Adoption and Usefulness → Purchase Intention (Mediated by User Engagement). The mediating effect of User Engagement on the relationship between Technology Adoption and Usefulness and Purchase Intention was significant (t=2.335, p=0.020), leading to the acceptance of H3b. This indicates that user engagement acts as a crucial psychological mechanism that translates perceived usefulness into actual purchase intention.

H3c: Technology Adoption and Usefulness → Purchase Intention. A strong and significant direct relationship was found between Technology Adoption and Usefulness and Purchase Intention (t=6.129, p=0.000). Thus, H3c is accepted. This result reinforces the importance of technological ease and functional benefits in encouraging consumers to make purchases after watching short videos.

H4a: User Engagement → Purchase Intention. User Engagement significantly influenced Purchase Intention (t=6.446, p=0.000), confirming H4a. This highlights that engagement—through emotional connection, interaction, and trust—plays a pivotal role in shaping consumers' buying decisions within the Shopee Video ecosystem.

Overall, six hypotheses were supported while four were rejected. The significant pathways emphasize the mediating role of user engagement and the strong influence of technology adoption and information quality on consumers' purchasing decisions.

## V. Result and Discussion

### A. Result

The structural model analysis using SEM-PLS confirmed that not all hypothesized relationships among the five variables were statistically significant. Among the tested variables, Information Quality, Technology Adoption and Usefulness, and User Engagement demonstrated strong positive relationships, while System Quality showed no significant effect on engagement or purchase intention. Specifically, Information Quality had a significant positive influence on User Engagement ($\beta = 0.374$, $p < 0.001$), while Technology Adoption and Usefulness positively affected both User Engagement ($\beta = 0.218$, $p = 0.009$) and Purchase Intention ($\beta = 0.415$, $p < 0.001$). Furthermore, User Engagement itself exhibited a strong positive influence on Purchase Intention ($\beta = 0.368$, $p < 0.001$), confirming its mediating role within the model.

Conversely, System Quality showed no significant direct or indirect effect on either User Engagement or Purchase Intention ($p > 0.05$). This suggests that users' perceptions of system performance—such as loading speed or interface stability—do not substantially drive engagement or purchasing behavior in this context. Instead, informational value and perceived usefulness of technology play a more central role in motivating user behavior within Shopee Video.

The coefficient of determination ($R^2$) analysis revealed that 51.4% of the variance in User Engagement and 40.9% of the variance in Purchase Intention could be explained by the model. These values indicate a moderate explanatory power, suggesting that while the included variables capture key behavioral influences, other contextual or psychological factors may also contribute to purchase intentions in social commerce environments.

### B. Discussion

The findings reinforce the growing importance of social commerce mechanisms, where content-driven engagement mediates the relationship between technology and consumer behavior in shaping online purchase decisions.

The insignificant relationship between System Quality and both User Engagement and Purchase Intention contrasts with earlier studies which emphasized that system performance and stability enhance user experience [23] [24]. This discrepancy may be explained by contextual differences. In the Indonesian market, users of Shopee Video often access the platform via mobile networks with varying speeds, making system performance a baseline expectation rather than a differentiating factor. Hence, engagement depends less on system reliability and more on the perceived usefulness and emotional appeal of content.

In contrast, Information Quality significantly influenced User Engagement, who found that clear, vivid, and diagnostic product information builds consumer trust and stimulates emotional connection [21]. In the Shopee Video context, users engage more with videos that demonstrate authenticity and provide practical product insights rather than polished promotional material.

Technology Adoption and Usefulness emerged as a strong driver of both engagement and purchase intention. Where perceived usefulness directly enhances behavioral intention in video-based commerce [25]. This finding highlights that users engage with short-video features when they perceive them as convenient and beneficial tools for informed decision-making.

The mediating role of User Engagement confirms its theoretical significance as a psychological bridge between functional attributes and behavioral outcomes. Engagement amplifies the effects of both Information Quality and perceived usefulness, validating prior assertions that engagement is not merely a behavioral response but a motivational mechanism in social commerce [21].

Collectively, these findings reveal that purchase intention in short-video–based e-commerce is driven more by content

relevance and perceived value than by technical system attributes. This insight contributes to extending the Information Systems Success Model (DeLone & McLean) into a social commerce context by introducing user engagement as a central mediating construct that links technology-related and information-related factors to behavioral intention.

### C. Practical Implications

*1) Enhancing information quality:* Shopee should prioritize creating authentic, concise, and informative product videos to build user trust and engagement. Seller education and AI-based content moderation could improve diagnosticity and reduce misleading claims.

*2) Optimizing engagement features:* Interactive elements such as real-time comments, likes, or loyalty rewards can deepen emotional and behavioral engagement, which directly influences purchase decisions.

*3) Strengthening technology adoption:* Beyond improving system performance, Shopee can emphasize usability, convenience, and personalization in its short-video interface to reinforce the perceived usefulness of the feature.

*4) Cultural context adaptation:* Platform strategies should reflect Indonesian users' preference for social validation and relatable content, as engagement is shaped by social interaction rather than pure functionality.

## VI. Conclusion and Recommendation

### A. Conclusion

This study investigated the key factors influencing consumer purchase intention in using short-video features within e-commerce platforms, focusing on Shopee Video as a case study. The results demonstrate that Information Quality, Technology Adoption and Usefulness, and User Engagement significantly influence consumer purchase intention, while System Quality does not show a significant direct or mediated effect.

User Engagement plays a crucial mediating role, linking informational and technological attributes to purchase behavior. This highlights engagement as the primary psychological pathway through which users translate perceived value into actual purchase intentions. Overall, the study extends the Delone and McLean Information Systems Success Model by validating its applicability in a social commerce context, where interactive and emotionally engaging features redefine how consumers experience online shopping.

Beyond Shopee, this research establishes that short-video features in e-commerce platforms shape consumer behavior through engagement and perceived usefulness rather than purely through technical performance. It underscores that the success of video-based commerce depends on the balance between informational authenticity, emotional resonance, and social interactivity.

### B. Recommendation

*1) Cross-platform comparison:* Future research should examine similar short-video commerce features across different e-commerce platforms (e.g., TikTok Shop, Lazada) to compare user engagement patterns and validate model generalizability across markets.

*2) Extended variables:* Future models could incorporate constructs such as Perceived Ease of Use, Perceived Enjoyment, or Information Security to capture broader behavioral and psychological dimensions influencing purchase intention.

*3) Longitudinal analysis:* Conducting longitudinal studies would help track evolving user engagement and purchase behavior as short-video features mature, offering insights into retention and loyalty over time.

*4) Integration of social and emotional dimensions:* Further exploration into social influence, trust, and community identity could deepen understanding of emotional factors that drive engagement in video-based commerce.

*5) Practical innovation:* Shopee and similar platforms can leverage these insights to refine engagement algorithms, improve recommendation relevance, and create personalized video experiences that foster stronger purchase intentions and long-term user loyalty.

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Merisa Syafrina contributed to the conceptualization, methodology, data collection, analysis, and writing of the manuscript. Viany Utami Tjhin contributed to supervision, project coordination, and manuscript review. Both authors have read and approved the final version of this article and are accountable for all aspects of the work.

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## APPENDIX A

Table V presents the constructs used in the research model, along with their corresponding measurement codes, indicators, and reference sources. This table serves as a structured overview that links each latent variable with its specific measurement items, providing clarity and transparency regarding the operationalization of the constructs.

TABLE V. CONSTRUCT AND MEASUREMENT ITEMS

| Variable | Indicators | Code | References |
|---|---|---|---|
| System Quality | Short video loading speed | SQ1 | [21] |
| | System stability | SQ2 | [26] |
| | Minimal disruptions (glitch/lag) | SQ3 | |
| | Ease of navigation within the short video feature | SQ4 | [19] |
| | System responsiveness to user interactions | SQ5 | [26] |
| Information Quality | Clarity of product information in short videos | IQ1 | [19] |
| | Consistency of messages conveyed by video creators | IQ2 | [21] |
| | Trust in product claims made in short videos | IQ3 | [21] |
| | Completeness of the product information presented | IQ4 | [26] |
| Technology Adoption & Usefulness | Ease of using the short video feature | TAU1 | [19] |
| | Usefulness of product demonstrations in short videos | TAU2 | [19] |
| | Trust in the seller's credibility influencing purchase decisions | TAU3 | [21] |
| User Engagement | Emotional connection with the seller | UE1 | [26] |
| | Sense of direct interaction through the video | UE2 | [26] |

| | | | |
|---|---|---|---|
| | Level of trust built through engagement in short videos | UE3 | [21] |
| | Frequency of interactions in short videos (like) | UE4 | [21] |
| | Frequency of interactions in short videos (share) | UE5 | |
| | Frequency of interactions in short videos (comment) | UE6 | |
| Purchase Intention | Intention to purchase after watching short videos | PI1 | [19] |
| | Willingness to consider purchasing after watching short videos | PI2 | [21] |
| | Likelihood of seeking more product information after watching short videos | PI3 | [19] |

Table VI provides the complete set of questionnaire items used in the survey. Each construct item was measured using a 7-point Likert scale (1 = Strongly Disagree, 2 = Disagree, 3 = Somewhat Disagree, 4 = Neutral, 5 = Somewhat Agree, 6 = Agree, 7 = Strongly Agree) to capture respondents' level of agreement with each statement. In addition, demographic and experience-related questions were included to support descriptive analysis but were not incorporated into the structural model.

TABLE VI. SURVEY QUESTIONS

| Section | Survey Questions | Response Options / Scale |
|---|---|---|
| Profile Questions | Gender | Male, Female |
| | Age | 17-27 years, 28-43 years, 44-58 years, ≥59 years |
| | Occupation | Students, Private Employee, Government Employee, Freelancer, Entrepreneur, Homemaker, Informal Sector Worker (e.g. online driver, daily laborer, etc.), Retirees |
| | Duration of Shopee App Usage | <6 months, 6 months – 1 year, 1-3 years, >3 years |
| Information about User Experience of Shopee Video | Primary Purpose of Using Shopee Video | Product reviews or user testimonials, shopping inspiration, find special promotions, entertainment |
| | Product Categories Frequently Purchased via Shopee Video | Fashion, beauty and personal care, electronics and gadget, home and furnishings, food and beverages, books and magazines |
| | Familiarity with Shopee Video | Very familiar, familiar, less familiar |
| | Frequency of Shopee Video Usage per Week | <1 time, 1-2 times, 3-5 times, >5 times |
| | Average Viewing Duration per Session | <5 minutes, 5-15 minutes, 16-30 minutes, >30 minutes |
| | Purchase Behavior via Shopee Video | Yes, No |
| Construct Measurement Items | Shopee Video loads quickly without having to wait long. | 7-point Liket scale |
| | Shopee Video rarely experiences technical issues when I use it. Issues or errors include the app not opening, videos not playing smoothly, or features not responding. | |
| | Shopee Video runs smoothly without interruptions such as stuttering or lag. | |
| | I can easily find and watch the videos I want on Shopee. | |
| | When I like, comment on, or share a video link, the Shopee Video system responds quickly. | |
| | The content on Shopee Video clearly explains the product details. | |
| | The information presented in Shopee Video is consistent from beginning to end. | |
| | I believe that the product claims in Shopee Video are accurate and truthful. | |
| | Shopee Video provides complete information about the products being sold. | |
| | Shopee Video is free from elements of ethnicity, religion, race, and inter-group issues, violence, or inappropriate content. | |
| | I find the Shopee Video feature easy to use and understand. | |
| | Shopee Video helps me understand how a product works or how to use it. | |
| | I tend to trust sellers on Shopee Video when they recommend products. | |
| | I feel emotionally connected to the sellers on Shopee Video. | |
| | When watching Shopee Video, I feel as if I am directly interacting with the seller. | |

| | | |
|---|---|---|
| | I trust the products more after engaging in interactions on Shopee Video (for example, through comments or likes). | |
| | I often interact on Shopee Video by giving likes. | |
| | I often interact on Shopee Video by leaving comments. | |
| | I often interact on Shopee Video by sharing video links with others. | |
| | I immediately purchase a product after seeing the content on Shopee Video. | |
| | I feel motivated to buy a product after watching Shopee Video. | |