

The Moderating Role of POSM (Point of Sales Material) in the Relationship Between Application Quality and Familiarity on Trust and Purchase Intention

Badawi

Correspondence Author: badawi@umc.ac.id

Department of Management, Faculty of Economics and Business, Universitas Muhammadiyah Cirebon, Indonesia

INFO	ABSTRACT
Article History Received: 2024-07-12 Revised: 2024-09-01 Accepted: 2024-11-26	Currently, e-commerce is one of the shopping centers in Indonesia. The growth of online transactions indicates a broader market presence, yet it simultaneously highlights a highly competitive and dynamic business landscape. This study aims to analyze the direct effect of application quality and familiarity on trust and purchase intention in e-commerce consumers. This study also analyzes the moderating role of Point of Sales Materials (POSM) in strengthening the direct effect of application quality and familiarity on trust and purchase intention. This research was a quantitative study involving e-commerce consumers in West Java. The sample in this study was taken using a stratified random sampling method, resulting in a sample size of 230 participants. Data collection was obtained by distributing questionnaires, with subsequent analysis performed using a structural equation model with Smart-PLS4. The results showed that application quality affects trust but does not affect purchase intention. Furthermore, familiarity affects trust and purchase intention. Trust was also shown to affect purchase intention. Further tests indicate that POSM effectively moderates the effect of application quality and familiarity on purchase intention but does not moderate their effect on trust. Therefore, this study contributes to the development of e-commerce and fills the literature gap in online marketing research. The study recommends enhancing application quality and user familiarity, customer trust, and purchase intention in e-commerce. Additionally, discounts and promotional concepts should be strengthened to amplify the influence of application quality and familiarity on consumer purchase intention in e-commerce.



This work is licensed
under [Attribution-
NonCommercial-NoDerivatives
4.0 International](https://creativecommons.org/licenses/by-nc-nd/4.0/).

Keywords: Application quality; Familiarity; POSM; Purchase intention; Trust

INTRODUCTION

Rapid digital growth encourages changes in people's lifestyles, especially in buying and selling (Berglund, 2021; Dey et al., 2020). Currently, buying and selling done online is starting to be in demand by almost all levels of society, including from the lower, middle, and upper classes (Ma, 2023). According to the Central Bank of Indonesia, in Indonesia the value of e-commerce transactions always increases from year to year. Where in 2022, it reached IDR 489 trillion, increased in 2023 to IDR 572 trillion, and in 2024, it is predicted to reach IDR 689 trillion. This means that e-commerce has changed the way people shop and become an important part of everyday life.

From the side of e-commerce managers, the condition of increasing online transactions shows a wider market share, but on the other hand, it also shows very intense and dynamic business competition (Berglund, 2021; Dey et al., 2020). A large number of e-commerce

platforms compete in Indonesia, including Tokopedia, Shopee, Bukalapak, Lazada, Blibli, and JD.ID. Each platform has different advantages and marketing strategies to attract consumer attention. The competition is not only from local platforms but also from global Asian platforms such as Shopee, Lazada, and Blibli to American and European platforms such as Amazon and eBay.

E-commerce competition in Indonesia is driven by product and service innovation. Platforms strive to improve user experience, offer competitive prices, and provide fast and reliable delivery services (Berglund, 2021; Dey et al., 2020). Some previous literature emphasizes that from the e-commerce side as a platform for providing online buying and selling services, the aspect that needs to be considered to increase consumer interest is the quality of e-commerce applications (Albayrak et al., 2023; Alfarizi, 2022; Dapas et al., 2019; Olsina & Lew, 2018; Rizkika et al., 2023) and familiarity of the e-commerce platform (Hsiao et al., 2022; Lai & Patrick Rau, 2021; Mittendorf, 2018; Treiblmaier & Garaus, 2023; Wilson et al., 2018).

Application quality is the main factor that can increase consumer acceptance of e-commerce applications, and this acceptance can foster trust (Alfarizi, 2022). Furthermore, quality includes several aspects, namely information quality, system quality, and service quality (Chotigo & Kadono, 2021). Application quality is also an attraction for consumers, encouraging their intention to use the application. Rizkika et al. (2023) and Dapas et al. (2019) found that the quality of good e-commerce applications can increase consumer purchase interest.

On the other hand, consumers will trust and make transactions through certain e-commerce by first seeking confirmation from others. This confirmation will often be obtained more from e-commerce with high familiarity (Lai & Patrick Rau, 2021; Treiblmaier & Garaus, 2023). Therefore, several previous studies emphasize the role of familiarity on consumer trust (Lai & Patrick Rau, 2021; Mittendorf, 2018; Wilson et al., 2018) and consumer purchases (Hsiao et al., 2022; Treiblmaier & Garaus, 2023). Wilson et al. (2018) explain that familiarity with e-commerce platforms can reduce the perception of risk in making online purchases. Consumers who are already familiar with a particular platform may feel more confident about transaction security, product quality, and customer service, so they are more likely to make purchases without hesitation. Hsiao et al. (2022) also emphasized the important role of familiarity in encouraging the use of a technology-based platform.

In previous literature reviews, there is much empirical evidence that recommends increasing consumer trust and purchase intention through application quality (Albayrak et al., 2023; Alfarizi, 2022) and familiarity (Lai & Patrick Rau, 2021; Mittendorf, 2018; Wilson et al., 2018). Pinem and Kim (2022) found that in Generation Z, the quality of the website or application is not able to have a significant effect on consumer trust. Likewise, Khooshab et al. (2022) and Kristianto et al. (2023) also found that the role of application quality is not a major determinant in building consumer trust and increasing purchases.

Then, different findings from the familiarity aspect were also found by Hati et al. (2022), who found that even though a platform is well known, consumers do not necessarily trust the platform and still have concerns about the risks in online purchases. Rahayu & Handayati (2022) also found that familiarity does not have a significant relationship with

consumer trust. Therefore, it can be concluded that there is a gap in the differences in the results of the analysis in the previous literature regarding the effect of application quality and familiarity on consumer trust and purchase intention.

On the other hand, empirical studies prove that a marketing strategy that, over time, has been able to attract consumer purchasing interest with all aspects of development is point of sale materials (POSM) (Chan et al., 2021). The concept of POSM has been used since a long time ago with various terms ranging from point of purchase, point of sale, and point of marketing to the currently popular concept of point-of-sale materials (POSM) (Brečić et al., 2021). POSM is a promotional material that used to be attached to product displays. Currently, POSM is also developed for online sales on e-commerce, including promotional posters, product photos, discounts, and others (Seth et al., 2022).

In order to fill the analysis gap in the relationship between application quality and familiarity on consumer trust and purchase intention, this study proposes the moderating role of POSM. Previous literature has not yet analyzed the moderating role of POSM. POSM is still mostly used as a control variable and analyzes the direct effect between POSM aspects on trust and purchase intention (Brečić et al., 2021; Perera & Perera, 2017). Therefore, this study provides novelty by examining the effect of the moderating role of POSM in the influence of app quality and familiarity on consumer trust and purchase intention.

LITERATURE REVIEW

Application Quality and Trust

Some previous literature emphasizes that in terms of e-commerce as a platform for providing online buying and selling services, the aspect that needs to be considered to increase consumer interest is the quality of e-commerce applications (Albayrak et al., 2023; Alfarizi, 2022; Dapas et al., 2019; Olsina & Lew, 2018; Rizkika et al., 2023). Application quality is how well an application meets user needs and expectations (Dapas et al., 2019). An application of good quality can provide consumers with interest in using the application. In the context of e-commerce, the quality of e-commerce applications shows the ability of applications to provide good services and features according to consumer needs (Albayrak et al., 2023; Alfarizi, 2022).

Application quality is a major factor that can increase consumer acceptance of e-commerce applications, and this acceptance can foster trust (Alfarizi, 2022). Olsina and Lew (2018) also found that with good quality, e-commerce applications will be trusted by consumers. Trust includes several aspects of e-commerce, namely trust in the delivery system, trust in payment methods, trust in brands, and trust in the purchasing system (W. T. Seo, 2021).

However, several studies provide different findings. Pinem and Kim (2022) found that in Generation Z, the quality of the website or application is not able to have a significant effect on consumer trust. Likewise, Khooshab et al. (2022) and Kristianto et al. (2023) also found that the role of application quality is not a major determinant in building consumer trust and increasing purchases. The difference in findings indicates a research gap and must be further analyzed, so this study proposes the following hypothesis:

H1: Application quality has a positive effect on trust

Application Quality and Purchase Intention

Chandra and Wirapraja (2020) emphasize that application quality is a determinant of consumer satisfaction and purchase intention. Application quality in the context of e-commerce shows how good the applications' systems and services are. Furthermore, quality includes several aspects, namely information quality, system quality, and service quality (Chotigo & Kadono, 2021). The quality of e-commerce applications is widely seen by consumers from other user reviews. Consumers tend to trust brands that have a good reputation and get positive reviews from other users. Positive user reviews can give consumers additional confidence and encourage them to make purchases.

Application quality is also an attraction for consumers, encouraging their intention to use the application. Rizkika et al. (2023) Dapas et al. (2019) found that good quality e-commerce applications can increase consumer purchase interest. Consumer purchases through e-commerce applications require consumers to learn and understand the concepts or systems in the application, so the quality of the application plays a role in fostering interest in use and consumer purchase interest through e-commerce applications (Dapas et al., 2019).

However, different findings were expressed by Khooshab et al. (2022) and Kristianto et al. (2023) who found that the role of application quality is not the main determinant in building consumer trust and increasing purchases. This means that not all literature supports the effect of application quality on consumer purchase intention. These differences indicate a research gap in this topic. Therefore, to fill this gap, the following hypothesis is formulated: *H2: Application quality has a positive effect on purchase intention*

Familiarity and Trust

Familiarity is one aspect that can increase consumer trust in an e-commerce platform (Mittendorf, 2018; Wilson et al., 2018). Consumers will trust and make transactions through a certain e-commerce by first seeking confirmation from others. This confirmation will often be obtained more from e-commerce with high familiarity (Lai & Patrick Rau, 2021; Treiblmaier & Garaus, 2023). Therefore, several previous studies emphasize the role of familiarity on consumer trust (Lai & Patrick Rau, 2021; Mittendorf, 2018; Wilson et al., 2018).

Wilson et al. (2018) explain that familiarity with e-commerce platforms can reduce the perception of risk in making online purchases. Consumers who are familiar with a particular platform may feel more confident about transaction security, product quality, and customer service, so they are more likely to make purchases without hesitation. On the other hand, consumers will tend to trust a brand that is often heard, read, or more often talked about by people (Mittendorf, 2018).

Furthermore, familiarity also has a positive impact on brands, including the emergence of words of mouth (Acharya, 2020). Recommendations from friends or family can also affect familiarity and consumer trust in e-commerce platforms. Positive recommendations from people who are known or trusted can strengthen consumer trust in a platform (Rahman & Mannan, 2018). However, different findings were revealed by Hati et al. (2022) that even though a platform is well known, consumers do not necessarily trust the platform and still have concerns about the risks in online purchases. Rahayu and Handayati (2022) also found that familiarity does not have a significant relationship with consumer trust. These results

show a gap in the difference in analytical findings, so this study seeks to retest by formulating the following hypothesis:

H3: Familiarity has a positive effect on trust

Familiarity and Purchase Intention

Regarding the importance of familiarity in e-commerce marketing, Treiblmaier and Garaus (2023) and Hsiao et al. (2022) found that the more familiar an e-commerce brand is, the more it can increase consumer purchase intention. Familiarity with an e-commerce platform can strengthen the emotional connection between consumers and brands. Consumers tend to feel closer to brands that they already know and have used before. This can increase consumers' purchase intention because they feel more connected to the brand and more motivated to buy products from the brand (S. Seo et al., 2020; Song & Shin, 2024).

Hsiao et al. (2022) emphasized the important role of familiarity in encouraging the use of a technology-based platform. This is because products based on information technology tend to be accepted by the public if given validation by others, and the more people validate, the higher the buyer's interest. Familiarity with e-commerce platforms can also reduce the perceived risk felt by consumers (Augusta et al., 2019). Consumers who are already familiar with a platform tend to feel more confident that the products they buy will match their expectations, delivery will be done well, and customer service will be available if needed. This can make them more likely to make a purchase (Hsiao et al., 2022; Treiblmaier & Garaus, 2023).

The literature review shows that e-commerce familiarity can have a significant influence on consumer purchase intention (S. Seo et al., 2020; Song & Shin, 2024). Familiarity can strengthen emotional connections, increase self-confidence, reduce perceived risk, strengthen brand loyalty, and influence word-of-mouth. All of these factors contribute to increasing consumer purchase intention for a brand or e-commerce platform (Hsiao et al., 2022; Treiblmaier & Garaus, 2023). Therefore, this research formulates the following hypothesis:

H4: Familiarity has a positive effect on purchase intention

Trust and Purchase Intention

Trust is an important aspect of online business (Mittendorf, 2018; Wilson et al., 2018). Even trust is the biggest asset in selling products and services online (Lai & Patrick Rau, 2021). Trust reduces the perception of risk felt by consumers when shopping online. Consumers who trust e-commerce platforms feel more confident that their transactions will be safe and the products they buy will meet their expectations. This makes them more motivated to make purchases (Ventre & Kolbe, 2020). Trust is also often closely related to brand reputation in e-commerce. Consumers tend to be more inclined to buy from brands that have a good reputation and are considered reliable. A strong reputation builds consumer trust and increases their interest in shopping on the platform (Ventre & Kolbe, 2020).

Several previous studies have also found that trust is a factor that has a significant impact on increasing consumer purchase interest (Sullivan & Kim, 2018; Ventre & Kolbe, 2020; Zhao et al., 2020). Trust is the main capital for consumers when buying a product to promote it to others (Sullivan & Kim, 2018). With trust, purchases made can be repeated so

that consumers become loyal to the brand (Ventre & Kolbe, 2020). Zhao et al. (2020) also support the idea that the higher the consumer's trust in a brand, the more consumer purchasing interest. Therefore, this study formulates the following hypothesis:

H5: Trust has a positive effect on purchase intention

The Moderating Role of Point-of-Sale Materials (POSM)

Point of Sale materials in the context of e-commerce refers to various types of marketing or promotional materials that are strategically placed on web pages or applications during the online buying process. Although not physically placed in stores or sales locations, POS materials in e-commerce aim to influence consumers' purchasing decisions and enhance the online shopping experience. POS materials in e-commerce are designed to create an engaging shopping experience and positively influence consumers' purchasing decisions. By using the right digital marketing strategy, e-commerce platforms can increase sales conversions and strengthen relationships with their customers (Brečić et al., 2021; Perera & Perera, 2017).

Empirical studies prove that a marketing strategy that, over time, has been able to attract consumer purchasing interest with all aspects of development is point of sale materials (POSM) (Chan et al., 2021). The concept of POSM has been used since a long time ago with various terms ranging from point of purchase, point of sale, and point of marketing to the currently popular concept of point-of-sale materials (POSM) (Brečić et al., 2021). POSM is a promotional material that used to be attached to product displays. Currently, POSM is also developed for online sales on e-commerce, including promotional posters, product photos, discounts, and others (Seth et al., 2022).

In order to fill the analysis gap in the relationship between application quality and familiarity on consumer trust and purchase intention, this study proposes the moderating role of POSM. Previous literature has not analyzed the moderating role of POSM. POSM is still mostly used as a control variable and analyzes the direct effect between POSM aspects on trust and purchase intention (Brečić et al., 2021; Perera & Perera, 2017). Therefore, this study formulates the following hypothesis:

H6: POSM moderates the relationship between application quality and trust

H7: POSM moderates the relationship between application quality purchase intention

H8: POSM moderates the relationship between familiarity and trust

H9: POSM moderates the relationship between familiarity and purchase intention

RESEARCH METHOD

This quantitative study examined the direct effect of application quality and familiarity on trust and purchase intention. Quantitative analysis was also conducted to test the moderating role of POSM. The population in this study were e-commerce consumers in West Java (Cirebon & Bandung). The sample in this study was taken by stratified random sampling method and using a sample search approach as described by Hair et al. (2022) that the minimum sample in SEM analysis is 10 times the number of research indicators. In this research model, there were 21 indicators, so the minimum number of respondents in this study was 210. Furthermore, the researcher distributed questionnaires to 250 respondents online Google Forms and found that 230 respondents filled out the form properly and

completely, so the sample in this study totaled 230 respondents. Furthermore, the data in this study are primary data obtained through distributing questionnaires to research respondents and then analyzed using a structural equation model with Smart-PLS 4.

The variables in this study consist of two (2) exogenous variables, namely application quality and familiarity, and two (2) endogenous variables, namely trust and purchase intention. Furthermore, this study also tested 1 moderating variable, namely POSM. The following are indicators for measuring research variables. The application quality variable is measured by four (4) indicators, namely product quality, information quality, system quality, and service quality (Chotigo & Kadono, 2021). Then familiarity is also measured by four (4) indicators, namely knowing the brand for a long time, people around know the brand, understanding the web interface, and brand fame on social media (Mittendorf, 2018). The trust variable is measured by four (4) indicators, including trust in the delivery system, trust in the payment method, trust in the brand, and trust in the purchasing system (Seo, 2023). The purchase intention variable is measured by 4 indicators, namely compatibility with the brand, interest in making purchases, recommendation to others, and satisfaction with the brand (Hsiao et al., 2022). The POSM is measured by five (5) indicators, including platform design, product design and photos, purchase coupons, purchase discounts, and promotional concepts (Shamout, 2016; Smedema, 2016).

RESULTS AND DISCUSSION

Result

In this study, the analysis was conducted to examine the effect of application quality and familiarity on trust and purchase intention in e-commerce consumers. Furthermore, this study also analyzes the moderating role of point of sales materials (POSM). The analysis was carried out quantitatively using the structural equation model method with smart-PLS software. Several stages of analysis are broadly divided into two types, namely, outer model analysis and inner model analysis. Outer model analysis tests the validity, reliability, and accuracy of indicators in measuring their variables. Furthermore, the inner model analysis includes testing the influence between variables in the study, including the results of hypothesis testing.

The first stage in outer model analysis is convergent validity. Convergent validity tests the validity of indicators that measure each research variable. In this study, there were 5 research variables with 17 research indicators. Convergent validity measures the validity of indicators with outer loading measurement criteria > 0.7 . The results of convergent validity testing are shown in Table 1.

Table 1 shows the results of convergent validity testing. Two stages of testing were carried out during the convergent validity testing process. In the first stage, 2 invalid indicators were found because they had an outer loading value < 0.7 . Invalid indicators were then dropped from the analysis and re-analyzed. Stage two shows the results of the re-analysis after the invalid indicators were dropped. The results of stage two testing showed that all indicators have a loading factor value > 0.7 , so they were categorized as valid indicators.

Table 1. Convergent Validity

Variable	Outer loadings	Validity	Outer Loading	Validity
AQ1	0.844	Valid	0.844	Valid
AQ2	0.837	Valid	0.837	Valid
AQ3	0.744	Valid	0.745	Valid
AQ4	0.796	Valid	0.796	Valid
FAM1	0.829	Valid	0.855	Valid
FAM2	0.803	Valid	0.835	Valid
FAM3	0.800	Valid	0.795	Valid
FAM4	0.649	Invalid	Dropped	
PI1	0.810	Valid	0.810	Valid
PI2	0.815	Valid	0.815	Valid
PI3	0.782	Valid	0.783	Valid
PI4	0.819	Valid	0.816	Valid
POSM1	0.745	Valid	0.792	Valid
POSM2	0.804	Valid	0.811	Valid
POSM3	0.688	Invalid	Dropped	
POSM4	0.784	Valid	0.799	Valid
POSM5	0.721	Valid	0.756	Valid
TR1	0.855	Valid	0.856	Valid
TR2	0.893	Valid	0.894	Valid
TR3	0.817	Valid	0.818	Valid
TR4	0.763	Valid	0.761	Valid

The next analysis in the outer model was testing the validity and reliability of the variables. Variable validity or construct validity used the AVE (average variance extracted) > 0.5 criteria. The variable reliability used composite reliability testing criteria of > 0.7. The analysis results are shown in Table 2.

Table 2. Composite Reliability and AVE

Variable	Cronbach's alpha	Composite reliability	Average variance extracted (AVE)
Application_Quality	0.820	0.827	0.651
Familiarity	0.772	0.779	0.687
POSM	0.800	0.807	0.624
Purchase_Intention	0.821	0.822	0.650
Trust	0.852	0.854	0.695

Table 2 shows the results of construct validity and reliability testing. The analysis results show that all variables in this study have an AVE value > 0.5, so that they are proven to have valid values. Furthermore, in reliability testing, the analysis results show the composite reliability value on all variables > 0.7, so it can be concluded that all research variables met the reliability criteria. These results indicate that the data in this study are good and in accordance with smart-PLS testing standards.

Table 3. Heterotrait-monotrait Ratio of Correlations (HTMT)

Variable	Application_Quality	Familiarity	POSM	Purchase_Intention	Trust
Application_Quality					
Familiarity	0.618				
POSM	0.446	0.686			
Purchase_Intention	0.514	0.724	0.403		
Trust	0.684	0.838	0.611	0.685	

The next analysis is discriminant validity using Heterotrait-monotrait Ratio of Correlations (HTMT) (Table 3). HTMT is the ratio of between-trait correlation to within-trait correlation. HTMT is the average of all cross-construct indicator correlations measuring different constructs (i.e., heterotrait-heteromethod correlations) relative to the (geometric) mean of the average correlations of indicators measuring the same construct.

Technically, the HTMT approach is an estimate of what the true correlation between two constructs would be if they were measured perfectly (that is if they were truly reliable). This true correlation is also referred to as the disattenuated correlation. A disattenuated correlation between two constructs close to 1 indicates a lack of discriminant validity. Henseler et al. (2015) suggest a threshold value of 0.90 if the path model includes constructs that are conceptually very similar. In other words, HTMT values above 0.90 indicate a lack of discriminant validity. The results of the analysis show that the HTMT value in this study is nothing close to 1 and nothing greater than 0.90, so the data in this study meet discriminant validity with HTMT.

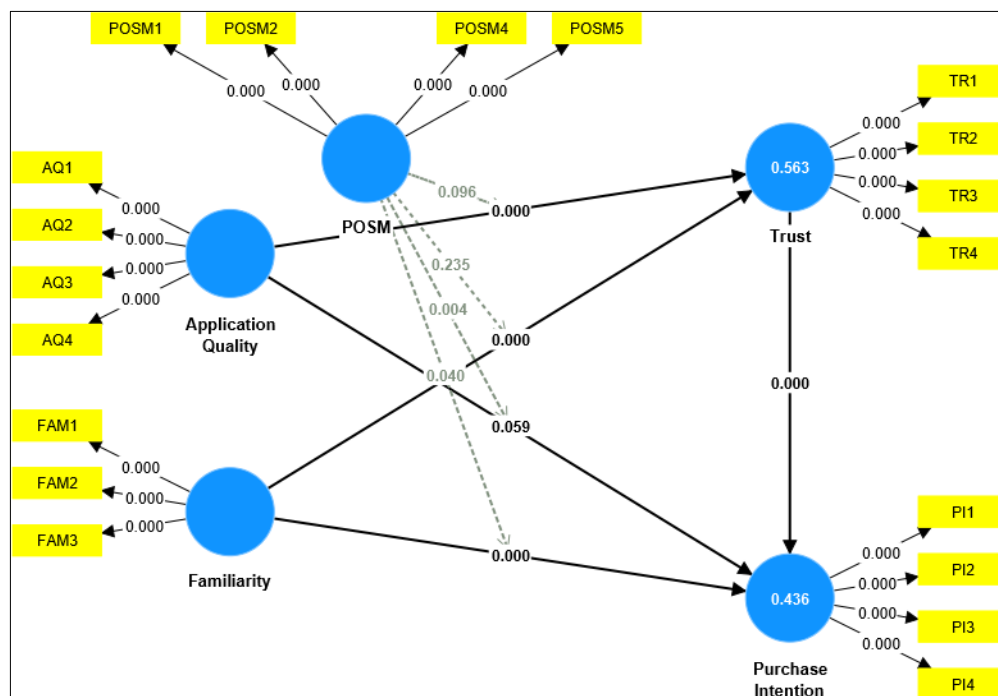


Figure 1. Path Analysis

The next test is inner model analysis, which tests the influence between variables in the study. In this study, 9 research hypotheses were formulated, which included 5 hypotheses testing direct effects and 4 hypotheses testing moderation. The results of the inner model analysis are shown in Figure 1, which illustrates the path analysis. The detailed results of hypothesis testing are shown in Table 4.

Table 4 shows the results of hypothesis testing in this study, where out of 9 hypotheses, 6 hypotheses are supported, and 3 hypotheses are not supported. It is empirically proven that application quality affects trust but has no effect on purchase intention, so H1 was supported, but H2 was not. Furthermore, familiarity affects trust and purchase intention, so H3 and H4 were supported. Then, trust affects purchase intention so that H5 is supported. Further testing results show that POSM was able to moderate the effect of application quality and familiarity on purchase intention, so H7 and H9 were supported. However, POSM was unable to

moderate the effect of application quality and familiarity on trust, so H6 and H8 were not supported. Furthermore, because two moderation analyses were not significant, they were removed from the research model and re-analyzed with the results in Table 5.

Table 4. Hypothesis Result before Dropping Insignificant Moderators

Variable	Original sample	T-statistics	P-values	Result
Application_Quality -> Trust	0.283	5.068	0.000	Supported
Application_Quality -> Purchase_Intention	0.110	1.565	0.059	Not Supported
Familiarity -> Trust	0.442	6.251	0.000	Supported
Familiarity -> Purchase_Intention	0.357	3.800	0.000	Supported
Trust -> Purchase_Intention	0.339	3.406	0.000	Supported
POSM x Application_Quality -> Trust	0.076	1.306	0.096	Not Supported
POSM x Application_Quality -> Purchase_Intention	0.206	2.650	0.004	Supported
POSM x familiarity -> Trust	0.035	0.722	0.235	Not Supported
POSM x Familiarity -> Purchase_Intention	0.099	1.747	0.040	Supported

Table 5 shows that after dropping the two moderation hypotheses that are not significant, the analysis results show that H1 is supported and H2 is not supported. Furthermore, familiarity affects trust and purchase intention, so H3 and H4 are supported. Then, trust affects purchase intention so that H5 is supported. Further testing results show that POSM is able to moderate the effect of application quality and familiarity on purchase intention, so H7 and H9 were supported.

Table 5. Hypothesis Result after Dropping Insignificant Moderators

Variable	Original Sample	T- Statistics	P- Values	Result
App Quality -> Trust	0.314	4.903	0.000	Supported
App Quality -> Purchase Intention	0.109	1.535	0.063	Not Supported
Familiarity -> Trust	0.528	9.088	0.000	Supported
Familiarity -> Purchase Intention	0.356	3.932	0.000	Supported
Trust -> Purchase Intention	0.338	3.360	0.000	Supported
POSM x App Quality -> Purchase_Intention	0.205	2.625	0.004	Supported
POSM x Familiarity -> Purchase_Intention	0.098	1.806	0.036	Supported

Discussion

This study analyzes the effect of application quality and familiarity on trust and purchase intention among e-commerce consumers in Indonesia. The analysis was also conducted to test the moderating role of POSM (Point of sales materials). The analysis was carried out using quantitative methods, such as structural equation models with smart-PLS4. In this study, two indicators, namely POSM3 and FAM4, were deleted because they did not pass the validity test. Validity indicates the extent to which an instrument or indicator actually measures the intended concept, and if an indicator is invalid, it can affect the overall quality of the research results.

Regarding the removal of POSM3 relating to the provision of coupons, the indicator was dropped because it did not meet the validity criteria. This is because coupon giving may not be consistently perceived by respondents as a relevant part of the Point of Sales Material (POSM) strategy. Coupons are often perceived as a stand-alone promotional tool rather than as part of point-of-sale promotional materials. This can lead to vagueness in respondents' perceptions, which in turn reduces the validity of the indicator.

Furthermore, indicator FAM4 related to 'brand fame' was removed as it was not valid. One logical explanation is that 'brand fame' may not fully represent the concept of familiarity. Familiarity generally refers to the extent to which consumers recognize or feel familiar with a brand or app, which focuses more on personal experience or exposure to the product. In contrast, 'brand fame' has more to do with the general popularity or reputation of the brand, which can differ from an individual's level of familiarity with the brand.

In this study, 9 hypotheses were formulated and resulted in 6 supported hypotheses and 3 unsupported hypotheses. First, this study found the effect of application quality on trust. These findings confirm that the better the quality of applications in e-commerce can increase consumer trust. These results are supported by Alfarizi (2022), Albayrak (2023), Olsina and Lew (2018), Rizkika et al. (2023), and Dapas et al. (2019).

Alfarizi (2022) emphasizes that application quality is the main factor that can increase consumer acceptance of using e-commerce applications. From this acceptance, it can foster trust. Olsina and Lew (2018) also found that with good quality, e-commerce applications will be trusted by consumers. Trust includes several aspects of e-commerce, namely trust in the delivery system, trust in payment methods, trust in brands, and trust in the purchasing system (W. T. Seo, 2021).

Furthermore, this study found that although application quality has a direct effect on consumer trust, it has no direct effect on consumer purchase intention. These findings emphasize that application quality can only increase trust but cannot increase sales. Similar findings were also revealed by Khooshab et al. (2022) and Kristianto et al. (2023), who found that the role of application quality is not the main determinant in building consumer trust and increasing purchases.

This study provides a solution to the absence of the influence of application quality in purchasing products in e-commerce by revealing the moderating role of POSM on the relationship between application quality and purchase intention. By implementing POSM, the effect of application quality is stronger in increasing sales. POSM includes promotional posters, product photos, discounts, and others (Seth et al., 2022). Empirical studies prove that a marketing strategy that, over time, has been able to attract consumer purchasing interest with all aspects of development is point of sale materials (POSM) (Chan et al., 2021).

Further findings reveal that familiarity with an e-commerce platform can increase consumer trust and consumer purchase interest. So this research proves that the more famous e-commerce is, the more it can increase consumer trust as well as purchase interest. Therefore, e-commerce managers are expected to be able to introduce e-commerce to a wider market through advertising, promotions, influencers, iconic jargon, and other marketing methods. Treiblmaier and Garaus (2023) and Hsiao et al. (2022) found that the more familiar an e-commerce brand is, the more it can increase consumer purchase interest. Familiarity with an e-commerce platform can strengthen the emotional connection between consumers and brands.

Wilson et al. (2018) explain that familiarity with e-commerce platforms can reduce the perception of risk in making online purchases. Furthermore, familiarity also has a positive impact on the brand, including the emergence of word of mouth (Acharya, 2020). Recommendations from friends or family can also affect familiarity and consumer trust in

e-commerce platforms. Positive recommendations from people who are known or trusted can strengthen consumer trust in a platform (2018).

Hsiao et al. (2022) emphasize the important role of familiarity in encouraging the use of a technology-based platform. This is because products based on information technology tend to be accepted by the public if given validation by others, and the more people who validate, the higher the buyer's interest is. Familiarity with e-commerce platforms can also reduce the perceived risk felt by consumers (Augusta et al., 2019). Familiarity can strengthen emotional connections, increase self-confidence, reduce perceived risk, strengthen brand loyalty, and influence word-of-mouth. All of these factors contribute to increasing consumer purchase interest in a brand or e-commerce platform (Hsiao et al., 2022; Treiblmaier & Garaus, 2023).

However, different findings were revealed by Hati et al. (2022) that even though a platform is well known, consumers do not necessarily trust the platform and still have concerns about the risks in online purchases. Rahayu and Handayati (2022) also found that familiarity does not have a significant relationship with consumer trust. This research provides a solution to improve and strengthen the role of familiarity in e-commerce by implementing POSM.

It is empirically proven that with POSM, the effect of familiarity is getting stronger on purchase intention. POSM is able to moderate the effect of familiarity on purchase intention cognitively. Point of Sale (POS) materials in the context of e-commerce refer to various types of marketing or promotional materials that are strategically placed on web pages or applications during the online purchasing process. POS materials in e-commerce are designed to create an attractive shopping experience and positively influence consumer purchasing decisions. By using the right digital marketing strategies, e-commerce platforms can increase sales conversions and strengthen relationships with their customers (Brečić et al., 2021; Perera & Perera, 2017).

This study found that consumer trust in e-commerce in Indonesia can be increased directly by improving e-commerce application quality and familiarity. Furthermore, consumer buying interest in e-commerce can be increased through familiarity. As for the moderating effect, it was found that POSM can moderate the effect of application quality and familiarity on purchase intention. So, it is answered that the solution to articulate the effect of application quality and familiarity on consumer purchase intention through e-commerce is to apply POSM.

CONCLUSION

This study examined the direct effect of application quality and familiarity on trust and purchase intention in e-commerce consumers. The analysis in this study also examines the moderating role of Point of Sales Materials (POSM) in strengthening the direct effect of application quality and familiarity on trust and purchase intention. The results of the analysis found that application quality significantly affects e-commerce consumer trust (supporting H1), but it does not directly influence purchase intention (leading to the rejection of H2). Familiarity with the application also has a positive impact on consumer trust (supporting H3) and directly affects purchase intention (supporting H4). Additionally, consumer trust is found to influence purchase intention significantly (supporting H5).

Regarding the moderating role of Point of Sales Material (POSM), the results indicated that POSM did not significantly moderate the effect of application quality on trust (leading to the rejection of H6). However, it significantly enhances the impact of application quality on purchase intention (supporting H7). Similarly, POSM was not able to significantly moderate the effect of familiarity on trust (leading to the rejection of H8), but it does play a significant role in moderating the effect of familiarity on purchase intention (supporting H9). Therefore, this study contributes to the development of e-commerce and fills the literature gap in online marketing research. The study recommends improving the quality of the application and familiarity with it in efforts to enhance customer trust and purchase intention in e-commerce. Additionally, discounts and promotional concepts should be strengthened to amplify the influence of application quality and familiarity on consumer purchase intention in e-commerce.

REFERENCES

- Acharya, A. (2020). The impact of brand familiarity, customer brand engagement and self-identification on word-of-mouth. *South Asian Journal of Business Studies*, 10(1), 29–48. <https://doi.org/10.1108/SAJBS-07-2019-0126>
- Albayrak, T., Rosario González-Rodríguez, M., Caber, M., & Karasakal, S. (2023). The Use of Mobile Applications for Travel Booking: Impacts of Application Quality and Brand Trust. *Journal of Vacation Marketing*, 29(1), 3–21. <https://doi.org/10.1177/13567667211066544>
- Alfarizi, M. (2022). Analysis of Consumer Technology Acceptance Model on Indonesian Telemedicine Applications. *Jurnal Manajemen Teknologi*, 21(1), 14–32. <https://doi.org/10.12695/jmt.2022.21.1.2>
- Augusta, E. D., Mardhiyah, D., & Widiastuti, T. (2019). Effect of country of origin image, product knowledge, brand familiarity to purchase intention Korean cosmetics with information seeking as a mediator variable: Indonesian women's perspective. *Dermatology Reports*, 11(S1). <https://doi.org/10.4081/dr.2019.8014>
- Berglund, K. (2021). Introducing the Beststreamer: Mapping Nuances in Digital Book Consumption at Scale. *Publishing Research Quarterly*, 37, 135–151. <https://doi.org/10.1007/s12109-021-09801-0>
- Brečić, R., Sinčić Ćorić, D., Lučić, A., Gorton, M., & Filipović, J. (2021). Local food sales and point of sale priming: evidence from a supermarket field experiment. *European Journal of Marketing*, 55(13), 41–62. <https://doi.org/10.1108/EJM-07-2019-0604>
- Chan, J., McMahon, E., & Brimblecombe, J. (2021). Point-of-sale nutrition information interventions in food retail stores to promote healthier food purchase and intake: A systematic review. *Obesity Reviews*, 22(10), e13311. <https://doi.org/10.1111/obr.13311>
- Chandra, W., & Wirapraja, A. (2020). The Effect of Application Usability, Service Quality, and E-Satisfaction on Influencing Purchase Intention of GO-FOOD Customers. *Indonesian Journal of Information Systems*, 3(1), 38–49. <https://doi.org/10.24002/ijis.v3i1.3563>
- Chotigo, J., & Kadono, Y. (2021). Comparative Analysis of Key Factors Encouraging Food Delivery App Adoption Before and During the COVID-19 Pandemic in Thailand. *Sustainability*, 13(8), 4088. <https://doi.org/10.3390/su13084088>

- Dapas, C. C., Sitorus, T., Purwanto, E., & Ihalaui, J. J. O. I. (2019). The Effect of Service Quality and Website Quality of Zalora.com on Purchase Decision as Mediated by Purchase Intention: Access to Success. *Calitatea*, 20(169), 87–92.
- Dey, B. L., Yen, D., & Samuel, L. (2020). Digital consumer culture and digital acculturation. *International Journal of Information Management*, 51, 102057. <https://doi.org/10.1016/j.ijinfomgt.2019.102057>
- Hair, J., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2022). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*. SAGE Publications, Inc.
- Hati, S. R. H., Putri, N. I. S., Daryanti, S., Wibowo, S. S., Safira, A., & Setyowardhani, H. (2022). Brand familiarity vs profit-sharing rate: which has a stronger impact on Muslim customers' intention to invest in an Islamic bank? *Journal of Islamic Marketing*, 13(8), 1703–1727. <https://doi.org/10.1108/JIMA-08-2020-0247>
- Hsiao, W. H., Lin, Y. H., & Wu, I. L. (2022). Advergame for Purchase Intention Via Game and Brand Attitudes From Antecedents of System Design, Psychological State, and Game Content: Interactive Role of Brand Familiarity. *Journal of Organizational Computing and Electronic Commerce*, 32(1), 45–68. <https://doi.org/10.1080/10919392.2022.2038526>
- Khooshab, S., Ghasemzade, A., Dadgar, M., & Fatemi, A. (2022). Impact of Conducting and Ordering on Customer quality and customer loyalty with customer satisfaction adjustment (Case Study: South Pars Fourth Gas Reserve Operation Unit). *Journal of Intelligent Marketing Management*, 2(6).
- Kristianto, P. A., & Valencio, V. (2023). The Influence of Website Quality and Sales Promotion on Purchase Decisions in Lazada. *Proceeding of The Borneo International Conference of Management, Accounting and Economic*, 1(1).
- Lai, X., & Patrick Rau, P.-L. (2021). Has facial recognition technology been misused? A public perception model of facial recognition scenarios. *Computers in Human Behavior*, 124, 106894. <https://doi.org/10.1016/j.chb.2021.106894>
- Ma, X. (2023). Motives for Digital Content Consumption. In *Social Influence on Digital Content Contribution and Consumption. Management for Professionals* (pp. 41–59). Springer. https://doi.org/10.1007/978-981-99-6737-7_3
- Mittendorf, C. (2018). Collaborative consumption: the role of familiarity and trust among Millennials. *Journal of Consumer Marketing*, 35(4), 377–391. <https://doi.org/10.1108/JCM-12-2016-2040>
- Olsina, L., & Lew, P. (2018). MobileApp Quality Features Perceived as Relevant for Trust: An Exploratory Study. *2018 11th International Conference on the Quality of Information and Communications Technology (QUATIC)*, 147–155. <https://doi.org/10.1109/QUATIC.2018.00030>
- Perera, L. S. M., & Perera, G. N. R. (2017). The Impact of Point of Sales Materials on Consumer Purchasing Behavior of Anlene Milk Powder. *2nd Student Research Conference on Marketing (SRCM)*.
- Pinem, R. J., & Kim, T.-I. (2022). The Effect of Trust on Repurchase Intention in E-Commerce: Focusing on Generation Z in Indonesia. *The E-Business Studies*, 23(7), 187–201. <https://doi.org/10.20462/tebs.2022.12.23.7.187>
- Rahayu, R., & Handayati, P. (2022). Political Marketing Factors Determining Advantages Intention to Vote (Study on Tubanregency Election December 2020). *International Journal of Environmental, Sustainability, and Social Science*, 3(1), 196–204.

<https://doi.org/10.38142/ijesss.v3i1.135>

- Rahman, M. S., & Mannan, M. (2018). Consumer online purchase behavior of local fashion clothing brands. *Journal of Fashion Marketing and Management: An International Journal*, 22(3), 404–419. <https://doi.org/10.1108/JFMM-11-2017-0118>
- Rizkika, I., Pangestuti, E., & Iqbal, M. (2023). The Effect of Trust, Performance Expectancy, and Mobile Application Quality on Purchase Intention and Purchase Decision: Evidence from Malang City. *Indonesian Journal of Social & Humanity Study / Wacana: Jurnal Sosial Dan Humaniora*, 26(1), 40.
- Seo, S., Kim, K., & Nurhidayati, V. A. (2020). Satisfaction and purchase intention of imported fresh fruits based on familiarity: a case of Korean pears in Taiwan. *British Food Journal*, 122(9), 2895–2910. <https://doi.org/10.1108/BFJ-08-2019-0639>
- Seo, W. T. (2021). Effect of Delivery Application Quality on Application Trust, Delivery Rider Trust, and Intention to Use: Focused on Trust Transfer in Online Platform Logistics. *Korean Journal of Franchise Management*, 12(1), 41–54.
- Seth, H., Kant, S., & Srivastava, M. (2022). Using Keypoint Matching and Interactive Self Attention Network to Verify Retail POSMs. *Proceedings of the 2nd International Conference on Image Processing and Vision Engineering*, 195–201. <https://doi.org/10.5220/0011087800003209>
- Shamout, M. D. (2016). The Impact of Promotional Tools on Consumer Buying Behavior in Retail Market. *International Journal of Business and Social Science*, 7(1), 75–85.
- Smedema, I. (2016). *Sales promotions and point of sales materials, does it work or not? : To what extent does advertising on the shopping floor influence the (negative) effects of sales promotions on customer brand equity?* University of Twente.
- Song, S. W., & Shin, M. (2024). Uncanny Valley Effects on Chatbot Trust, Purchase Intention, and Adoption Intention in the Context of E-Commerce: The Moderating Role of Avatar Familiarity. *International Journal of Human–Computer Interaction*, 40(2), 441–456. <https://doi.org/10.1080/10447318.2022.2121038>
- Sullivan, Y. W., & Kim, D. J. (2018). Assessing the effects of consumers’ product evaluations and trust on repurchase intention in e-commerce environments. *International Journal of Information Management*, 39, 199–219. <https://doi.org/10.1016/j.ijinfomgt.2017.12.008>
- Treiblmaier, H., & Garaus, M. (2023). Using blockchain to signal quality in the food supply chain: The impact on consumer purchase intentions and the moderating effect of brand familiarity. *International Journal of Information Management*, 68, 102514. <https://doi.org/10.1016/j.ijinfomgt.2022.102514>
- Ventre, I., & Kolbe, D. (2020). The Impact of Perceived Usefulness of Online Reviews, Trust and Perceived Risk on Online Purchase Intention in Emerging Markets: A Mexican Perspective. *Journal of International Consumer Marketing*, 32(4), 287–299. <https://doi.org/10.1080/08961530.2020.1712293>
- Wilson, A. B., McNellis, C., & Latham, C. K. (2018). Audit firm tenure, auditor familiarity, and trust: Effect on auditee whistleblowing reporting intentions. *International Journal of Auditing*, 22(2), 113–130. <https://doi.org/10.1111/ijau.12108>
- Zhao, Y., Wang, L., Tang, H., & Zhang, Y. (2020). Electronic word-of-mouth and consumer purchase intentions in social e-commerce. *Electronic Commerce Research and Applications*, 41, 100980. <https://doi.org/10.1016/j.elerap.2020.100980>