

The Effect of Social Presence and Virtual Store Experience on Consumer Trust in Cirebon E-Commerce Platforms

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ABSTRACT

This research aims to analyze how social presence and virtual store experience affect consumer trust in e-commerce platforms operating in Cirebon City. The study employs a quantitative method with a causal-associative research design. Primary data were gathered through questionnaires distributed to 385 respondents who had previously made purchases through e-commerce platforms. The collected data were processed and analyzed using Structural Equation Modeling with the Partial Least Squares approach (SEM-PLS) to evaluate the relationships among the studied variables. The findings reveal that social presence exerts a positive and statistically significant impact on consumer trust. Likewise, virtual store experience also demonstrates a positive and significant influence on consumer trust. Moreover, the analysis confirms that the combination of social presence and virtual store experience contributes positively to strengthening consumer trust in e-commerce platforms. These results highlight that interactive social elements as well as the quality of the virtual shopping environment are crucial factors in building and maintaining consumer trust in online marketplaces. From a practical perspective, the study offers valuable implications for e-commerce platform managers to improve consumer trust by enhancing social interaction features and optimizing the overall virtual shopping experience.

ABSTRAK

Penelitian ini bertujuan untuk menganalisis pengaruh social presence dan virtual store experience terhadap kepercayaan konsumen pada platform e-commerce di Kota Cirebon. Penelitian ini menggunakan pendekatan kuantitatif dengan desain penelitian kausal asosiatif. Pengumpulan data dilakukan melalui penyebaran kuesioner kepada 385 responden yang memiliki pengalaman melakukan pembelian melalui platform e-commerce. Analisis data dilakukan dengan menggunakan metode Structural Equation Modeling berbasis Partial Least Squares (SEM-PLS) untuk menguji hubungan antar variabel dalam penelitian. Hasil penelitian menunjukkan bahwa social presence berpengaruh positif dan signifikan terhadap kepercayaan konsumen. Selain itu, virtual store experience juga terbukti memberikan pengaruh positif dan signifikan terhadap kepercayaan konsumen. Temuan penelitian ini menunjukkan bahwa keberadaan interaksi sosial dalam platform digital serta kualitas pengalaman berbelanja secara virtual memiliki peran penting dalam membangun dan memperkuat kepercayaan konsumen pada platform e-commerce. Secara praktis, hasil penelitian ini memberikan implikasi bagi pengelola e-commerce untuk meningkatkan tingkat kepercayaan konsumen dengan memperkuat fitur interaksi sosial serta mengoptimalkan pengalaman berbelanja di lingkungan toko virtual.



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INTRODUCTION

The rapid development of digital technology has significantly transformed consumer behavior in searching for information, interacting with sellers, and completing purchase transactions in online environments (Flavián et al., 2019). The increasing accessibility of internet-based platforms has encouraged many consumers to shift from traditional brick-and-mortar stores to online marketplaces when purchasing products and services (Engelbrecht et al., 2021). This transformation has intensified competition among e-commerce platforms, prompting companies to develop more interactive and engaging virtual shopping environments that can replicate aspects of physical retail experiences. In recent years, many platforms have incorporated advanced digital features such as live streaming, virtual showrooms, and immersive product displays to enhance consumer engagement during the online shopping process (Guo et al., 2021; Li et al., 2022).

Within the context of digital interaction, the concept of social presence has received considerable attention in explaining how consumers perceive the quality of communication in online environments. Social presence refers to the extent to which individuals perceive the existence of real human interaction within mediated communication settings. In online commerce, social presence can be reflected through responsive communication, personalized messages, and interactive features that simulate human interaction between sellers and consumers. Previous studies indicate that the presence of social cues in online platforms can enhance emotional connections, create a sense of warmth, and reduce uncertainty during the purchasing process (Huang et al., 2024). When consumers feel that they are interacting with real individuals rather than impersonal digital systems, their perceptions of credibility and relational closeness with sellers tend to increase.

Beyond interpersonal interaction, the virtual store experience also plays a crucial role in shaping consumer perceptions within online retail environments. Virtual store experience refers to consumers' overall perceptions of the digital shopping environment, including visual design, navigation convenience, information quality, and interactive features offered by the platform (Han et al., 2022; Jin et al., 2021). In contrast to physical retail stores, where consumers can directly observe and evaluate products, online shopping environments rely heavily on digital interfaces to deliver product information and facilitate consumer interaction. Interactive visual elements, detailed product descriptions, and user-friendly navigation systems can improve consumers' perceptions of convenience and enjoyment while browsing online platforms (Ho et al., 2022).

Technological innovations have further expanded the concept of virtual store experience by integrating immersive technologies such as virtual reality (VR), augmented reality (AR), and three-dimensional product visualization. These technologies allow consumers to experience products in more realistic and engaging ways, thereby reducing the limitations traditionally associated with online shopping (Jacobsen et al., 2022). Through such immersive digital environments, online platforms attempt to replicate aspects of physical shopping experiences while providing additional convenience and flexibility.

Despite these technological advancements, online shopping environments still face inherent limitations compared to traditional retail settings. Consumers are unable to physically touch, test, or directly evaluate products before completing transactions. As a result, uncertainty and perceived risk remain important concerns in online purchasing behavior. In this context, consumer trust becomes a critical factor that determines whether individuals are willing to engage in online transactions. Trust can be defined as consumers' belief that sellers or digital platforms will behave honestly, fulfill their promises, and protect consumers' interests during the transaction process. Without sufficient trust, consumers may hesitate to provide personal information, delay purchase decisions, or even abandon transactions altogether.

Previous research has highlighted the importance of trust as a key determinant of successful online commerce. Trust reduces perceived risk, facilitates decision making, and strengthens long-term relationships between consumers and digital platforms. In online environments characterized by information asymmetry and limited physical interaction, trust functions as a mechanism that enables consumers to rely on digital platforms despite inherent uncertainties. Therefore, understanding the factors that contribute to trust formation remains an important research topic in digital marketing and e-commerce literature (Fatimah, Purdianto, et al., 2021).

Several studies have identified social presence as a significant antecedent of consumer trust in online environments. (Gefen & Straub, 2004) argue that social presence enhances perceptions of credibility and integrity in online interactions by creating a more personal communication environment. Similarly, (Lu et al., 2016) found that personalized communication and warm social interaction significantly increase consumers' trust in digital platforms. (Tuncer, 2021) also reports that social presence contributes to perceptions of transparency and reliability, which ultimately strengthen consumer trust in online transactions. *H1: Social presence has a positive effect on consumer trust in e-commerce platforms.*

In addition to social interaction, the virtual store experience has also been recognized as an important determinant of consumer trust. (Herrando et al., 2021) demonstrates that a positive virtual shopping experience can reduce information asymmetry and increase consumers' understanding of product attributes, thereby strengthening trust toward digital platforms. Furthermore, (Javornik, 2016) highlights the role of interactive technologies such as augmented reality and immersive product visualization in enhancing consumer engagement and perceived reliability of online platforms. When consumers perceive digital interfaces as informative, easy to use, and visually appealing, their confidence in the platform's credibility and professionalism tends to increase.

H2: Virtual store experience has a positive effect on consumer trust in e-commerce platforms.

Although previous studies have acknowledged the importance of both social presence and virtual store experience in shaping consumer perceptions, many of these studies have examined the two factors independently (Mäntymäki & Salo, 2010). As a result, limited research has explored how these variables jointly contribute to the development of consumer trust within online retail environments. The interaction between interpersonal communication factors and technological experience may provide a more comprehensive explanation of trust formation in digital contexts.

Furthermore, most prior studies have primarily focused on outcomes such as customer satisfaction, loyalty, or purchase intention rather than directly examining how the combination of social presence and virtual store experience contributes to trust formation. The increasing adoption of interactive technologies in e-commerce platforms such as live chat, live shopping, and immersive product displays suggests that both relational and technological factors should be considered simultaneously when analyzing consumer perceptions in digital marketplaces (Shih et al., 2024; Wu et al., 2018).

In addition, empirical studies examining these relationships within the context of developing countries remain relatively limited. Differences in technological infrastructure, consumer behavior, and cultural contexts may influence how digital interaction and virtual shopping experiences affect consumer trust. Therefore, investigating these relationships in emerging digital markets is important for expanding the generalizability of existing e-commerce theories.

Based on these considerations, this study aims to examine the influence of social presence and virtual store experience on consumer trust in e-commerce platforms in Cirebon City. By integrating interpersonal communication factors and technological experience within a single analytical framework, this research seeks to provide a more comprehensive understanding of how trust is developed in digital retail environments. The findings of this study are expected to contribute to the development of digital marketing literature while also providing practical

insights for e-commerce managers in designing more engaging, human-centered, and trustworthy online shopping environments (Fatimah, Herdinadiatin, et al., 2021).

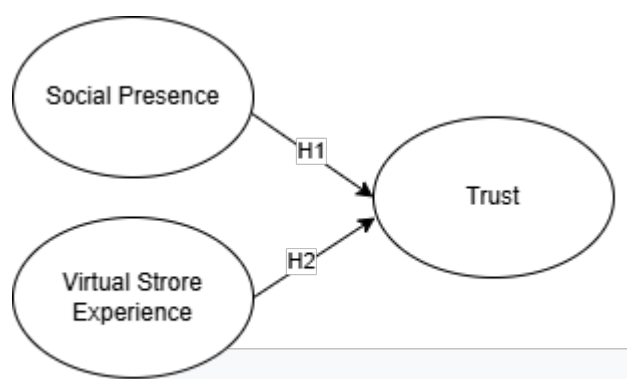


Figure 1. Conceptual Framework

Source: Developed by the authors (2026)

The conceptual framework of this study is based on the assumption that consumer trust in e-commerce platforms is influenced by both social interaction and technological experience. In online shopping environments, consumers evaluate not only the functionality of digital systems but also the quality of interactions that occur during the transaction process.

Social presence represents the affective dimension of online interaction, referring to the extent to which consumers perceive human warmth, responsiveness, and personal communication within digital platforms. A higher level of social presence can reduce uncertainty and strengthen consumers' emotional confidence in sellers or platforms.

Meanwhile, virtual store experience reflects the cognitive evaluation of the digital shopping environment, including visual appearance, ease of navigation, and the availability of interactive features. A well-designed virtual store can enhance consumers' understanding of products and improve the overall shopping experience, which may increase their confidence in the platform.

RESEARCH METHOD

This study employed a quantitative approach using a survey method to analyze the relationships between social presence, virtual store experience, and consumer trust in e-commerce platforms. Data were collected through an online questionnaire distributed to e-commerce users residing in Cirebon City. A total of 385 respondents participated in this research. Participants were selected based on specific criteria to ensure the relevance of their responses. Respondents were required to have made at least one purchase through an e-commerce platform within the last three months and to have a minimum of one year of online shopping experience. These criteria were applied to ensure that participants had sufficient familiarity with digital shopping environments.

This study applied a non-probability sampling method, specifically purposive sampling, where respondents were selected according to criteria that aligned with the objectives of the research. This technique was chosen because the exact number of e-commerce users in Cirebon City could not be accurately identified. Consequently, the required sample size was calculated using the Lemeshow formula, which is frequently utilized in research situations where the total

population is unknown. The calculation indicated that the minimum sample required for this study was 385 respondents (David W. Hosmer, Jr., Stanley Lemeshow & Sons, 2013).

In addition, the selected sample size is considered adequate for studies employing Partial Least Squares Structural Equation Modeling (PLS-SEM). According to Hair et al. (2021), PLS-SEM analysis requires a minimum sample size based on the rule of ten times the number of indicators or structural paths within the research model. Therefore, the sample size used in this study meets the recommended criteria for producing stable and reliable model estimation. The primary data were gathered through a structured questionnaire employing a five-point Likert scale, with response options ranging from 1 (strongly disagree) to 5 (strongly agree).

Measurement of Variables

The constructs in this study were measured using questionnaire items adapted from previously validated scales in the literature to ensure content validity and reliability. The Social Presence construct was measured using six items adapted from (Gefen & Straub, 2004), which capture consumers' perceptions of social interaction and the sense of human presence within digital environments.

The Virtual Store Experience construct was measured using six items adapted from (Bleier et al., 2019). These items reflect consumers' experiences when interacting with virtual store environments, including aspects such as visual design, ease of navigation, and interactive features available on the platform.

The Trust construct was measured using six items adapted from (McKnight et al., 2002). These items assess consumers' confidence in the reliability, integrity, and security of e-commerce platforms.

The collected data were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) with statistical analysis software. The analysis was conducted in two main stages: evaluation of the measurement model to assess construct validity and reliability, followed by evaluation of the structural model to examine the effects of social presence and virtual store experience on consumer trust in e-commerce platforms.

RESULTS AND DISCUSSION

Based on the data collection process, this study involved 385 respondents from Cirebon City, Indonesia. Respondent characteristics were analyzed based on gender, age, occupation, e-commerce platform used, and online shopping experience.

Table 1 Distribution of Respondent Profiles

| Respondent Attribute | Response Category | Frequency | Percent |
|----------------------|--------------------|-----------|---------|
| Gender | Male Respondents | 168 | 43,6 |
| | Female Respondents | 217 | 56,4 |
| Age | <17 | 1 | 0,3 |
| | 17-25 | 142 | 36,9 |
| | 25-35 | 137 | 35,6 |
| | 35-50 | 79 | 20,5 |

| | | | |
|------------|-----------------|-----|------|
| | >50 | 26 | 6,8 |
| Job Data | Teacher | 1 | 0,3 |
| | Housewife | 4 | 1 |
| | Driver ojek | 2 | 0,5 |
| | State officer | 61 | 15,8 |
| | Private Officer | 98 | 25,5 |
| | Student | 119 | 30,9 |
| | Businessman | 100 | 26 |
| Media | Amazon | 1 | 0,3 |
| | Shein | 2 | 0,5 |
| | Shopee | 166 | 43,1 |
| | Tiktokshop | 123 | 31,9 |
| | Tokopedia | 93 | 24,2 |
| Experience | 1 year | 385 | 100 |

Source: Processed Data (2026)

In terms of gender, the majority of respondents were female (217 respondents or 56.4%), while male respondents accounted for 168 individuals (43.6%). This finding indicates that female consumers in Cirebon tend to engage more actively in online shopping activities. Such behavior may influence their perception of the online shopping environment, particularly in relation to virtual store experience and consumer trust within e-commerce platforms.

Regarding age distribution, most respondents were within the 17–25 years (36.9%) and 25–35 years (35.6%) age groups. These findings suggest that the dominant users of e-commerce platforms in Cirebon belong to the productive and digitally literate generation. Individuals within this age range are generally more accustomed to interacting in digital environments, which may enhance their perception of social presence and virtual store experience, ultimately affecting consumer trust in the context of the SEM-PLS research model.

Based on occupation, the majority of respondents were students (30.9%), followed by entrepreneurs (26%) and private employees (25.5%). The dominance of student respondents indicates that younger consumers represent a significant segment of e-commerce users in Cirebon. This group tends to be more responsive to interactive features, digital communication, and immersive online shopping environments, which are closely related to the constructs of social presence and virtual store experience examined in this study.

In terms of e-commerce platforms, most respondents reported using Shopee (43.1%), followed by TikTok Shop (31.9%) and Tokopedia (24.2%). This distribution suggests that platforms offering stronger social interaction features and engaging virtual shopping environments are more widely adopted among consumers in Cirebon. This phenomenon further supports the relevance of the research variables, as social presence and virtual store experience are essential factors that may influence consumers' perceptions and trust in digital shopping platforms.

Furthermore, all respondents in this study reported having at least one year of online shopping experience, indicating that they possess sufficient familiarity with e-commerce platforms. This experience enables respondents to provide more reliable evaluations of the constructs examined in this study. Consequently, the respondents' profiles provide a strong empirical basis for analyzing the relationships between social presence, virtual store experience,

and consumer trust using the SEM-PLS approach in the context of e-commerce users in Cirebon City.

Table 2. Outer Loading (Convergent Validity Test)

| | Social Presence | Virtual Store Experience | Trust | Information |
|------|-----------------|--------------------------|-------|-------------|
| X1.1 | 0,846 | | | Valid |
| X1.2 | 0,893 | | | Valid |
| X1.3 | 0,887 | | | Valid |
| X1.4 | 0,859 | | | Valid |
| X1.5 | 0,861 | | | Valid |
| X1.6 | 0,858 | | | Valid |
| X2.1 | | 0,832 | | Valid |
| X2.2 | | 0,845 | | Valid |
| X2.3 | | 0,859 | | Valid |
| X2.4 | | 0,823 | | Valid |
| X2.5 | | 0,832 | | Valid |
| X2.6 | | 0,838 | | Valid |
| Y1 | | | 0,871 | Valid |
| Y2 | | | 0,846 | Valid |
| Y3 | | | 0,848 | Valid |
| Y4 | | | 0,881 | Valid |
| Y5 | | | 0,855 | Valid |
| Y6 | | | 0,826 | Valid |

Source: Processed Data (2026)

The convergent validity test aims to ensure that each indicator adequately represents the latent construct measured in the research model. In the Partial Least Squares Structural Equation Modeling (PLS-SEM) approach, convergent validity is commonly assessed using outer loading values of each indicator. Indicators are considered to have satisfactory convergent validity when the outer loading value exceeds 0.70, indicating a strong correlation between the indicator and its underlying construct (Hair Jr et al., 2021).

Based on the results presented in outer loading, all indicators of the Social Presence (X1) variable exhibit outer loading values ranging from 0.846 to 0.893. These values indicate that each indicator significantly contributes to representing the social presence construct. This finding suggests that consumers' perceptions of social interaction and the sense of human presence within the virtual store environment can be effectively captured through the indicators employed in this study. Therefore, the indicators measuring social presence satisfy the criteria for convergent validity.

Furthermore, the Virtual Store Experience (X2) variable demonstrates outer loading values ranging from 0.823 to 0.859, all of which exceed the recommended threshold. These results indicate that the indicators strongly reflect consumers' experiences when interacting with virtual stores. In other words, aspects such as exploration, navigation, and interaction within the virtual store environment can be consistently measured using the indicators included in this construct.

Regarding the Trust (Y) variable, the outer loading values range from 0.826 to 0.881, indicating that all indicators have strong correlations with the trust construct. These results confirm that the indicators effectively represent consumers' confidence in the reliability,

integrity, and security of the virtual store. Thus, the indicators used to measure trust are considered valid representations of the construct.

Overall, all indicators across the variables Social Presence, Virtual Store Experience, and Trust demonstrate outer loading values above 0.70, indicating that the measurement model meets the criteria for convergent validity. This finding confirms that the indicators adequately capture their respective latent constructs and are appropriate for further structural model analysis.

Table 3 Reliability and AVE

| | Cronbach's Alpha | Composite Reliability | Average Variance Extracted (AVE) | |
|--------------------------|------------------|-----------------------|----------------------------------|----------|
| Social Presence | 0,934 | 0,948 | 0,753 | Reliabel |
| Virtual Store Experience | 0,915 | 0,934 | 0,703 | Reliabel |
| Trust | 0,926 | 0,942 | 0,730 | Reliabel |

Source: Processed Data (2026)

Following the evaluation of convergent validity based on outer loading values, the subsequent step involves examining construct reliability to verify the internal consistency of the indicators representing each latent variable. Within the Partial Least Squares Structural Equation Modeling (PLS-SEM) framework, reliability is typically evaluated using Cronbach's Alpha and Composite Reliability, while convergent validity is additionally assessed through the Average Variance Extracted (AVE) value (Hair Jr et al., 2021).

Cronbach's Alpha serves as an indicator of the internal consistency among measurement items within a particular construct. A construct is regarded as reliable when its Cronbach's Alpha value is greater than 0.70, which indicates that the indicators consistently capture the same underlying concept (Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, 2022). Referring to the results displayed in the Reliability and AVE table, the Cronbach's Alpha values for Social Presence, Virtual Store Experience, and Trust are 0.934, 0.915, and 0.926, respectively. Since all of these values are above the recommended threshold, it can be concluded that each construct demonstrates a high level of internal consistency.

In addition, construct reliability is also assessed using Composite Reliability, which is considered more appropriate in the PLS-SEM approach because it accounts for the different loadings of each indicator on the latent construct. A construct is considered reliable if the Composite Reliability value exceeds 0.70 (Henseler, 2018). The results indicate that the Composite Reliability values for Social Presence, Virtual Store Experience, and Trust are 0.948, 0.934, and 0.942, respectively. These values demonstrate that the indicators used in this study consistently measure their respective constructs with a high level of reliability.

In addition, convergent validity can be assessed through the Average Variance Extracted (AVE). The AVE value reflects the extent to which a latent construct explains the variance of its associated indicators. A construct is regarded as having satisfactory convergent validity when the AVE value is greater than 0.50, meaning that the construct is capable of explaining more than half of the variance of its measurement indicators (Hair Jr et al., 2021). The analysis results reveal that the AVE values for Social Presence, Virtual Store Experience, and Trust are 0.753, 0.703, and 0.730, respectively. These values exceed the recommended threshold, indicating that each construct accounts for more than 50% of the variance in its indicators and therefore fulfills the requirement for convergent validity.

Overall, the findings demonstrate that all constructs examined in this study Social Presence, Virtual Store Experience, and Trust satisfy the criteria for both reliability and convergent validity. This indicates that the measurement indicators employed in this research are able to consistently and accurately represent their respective latent constructs, confirming that the measurement model is appropriate for subsequent structural model evaluation.

Furthermore, the relatively high reliability scores suggest that the constructs possess strong measurement consistency and stability. This strengthens the credibility of the research results in explaining the relationships between social presence, virtual store experience, and consumer trust within the context of online shopping behavior in virtual store environments.

Table 4. Discriminant Validity (Fornell-Larcker)

| Variable | Social Presence | Virtual Store Experience | Trust |
|--------------------------|-----------------|--------------------------|-------|
| Social Presence | 0,868 | | |
| Virtual Store Experience | 0,501 | 0,838 | |
| Trust | 0,771 | 0,746 | 0,855 |

Source: Processed Data (2026)

In addition to convergent validity, the measurement model must also be evaluated in terms of discriminant validity to ensure that each latent construct is empirically distinct from other constructs within the research model. Discriminant validity indicates the extent to which a construct captures phenomena that are not represented by other constructs in the model (Hair Jr et al., 2021).

Within the Partial Least Squares Structural Equation Modeling (PLS-SEM) framework, discriminant validity is commonly assessed using the Fornell-Larcker criterion. According to this criterion, discriminant validity is established when the square root of the Average Variance Extracted (AVE) for each construct exceeds the correlations between that construct and all other constructs in the model (Hair, 2016).

The results indicate that the square root of the AVE for Social Presence is 0.868, which is higher than its correlations with Virtual Store Experience (0.501) and Trust (0.771). This finding suggests that the Social Presence construct explains the variance of its indicators more strongly than its relationships with other constructs in the model, thereby supporting discriminant validity.

For the Virtual Store Experience construct, the square root of the AVE is 0.838, which exceeds its correlations with Social Presence (0.501) and Trust (0.746). This result indicates that the Virtual Store Experience construct captures a distinct concept related to consumers' experiential interactions within virtual store environments.

Similarly, the Trust construct demonstrates a square root of AVE value of 0.855, which is higher than its correlations with Social Presence (0.771) and Virtual Store Experience (0.746). This finding confirms that the Trust construct represents a unique dimension that is empirically distinguishable from the other constructs in the model.

Overall, these results demonstrate that all constructs in the study Social Presence, Virtual Store Experience, and Trust satisfy the discriminant validity requirement based on the Fornell-Larcker criterion. Therefore, each construct can be considered conceptually and empirically distinct, indicating that the measurement model possesses adequate discriminant validity and is appropriate for further structural model analysis.

Table 5. Heterotrait-Monotrait Ratio (HTMT) Values

| Variable | Social Presence | Virtual Store Experience | Trust |
|---------------------------------|-----------------|--------------------------|-------|
| Social Presence | | | |
| Virtual Store Experience | 0,538 | | |
| Trust | 0,827 | 0,807 | |

Source: Processed Data (2026)

In addition to using the Fornell-Larcker criterion, the discriminant validity in this study was also assessed using the Heterotrait-Monotrait Ratio (HTMT). The HTMT method is considered a more sensitive approach for detecting discriminant validity issues in measurement models.

Based on the results presented all HTMT values between constructs are below the recommended threshold of 0.90. The HTMT value between Social Presence and Virtual Store Experience is 0.538, between Social Presence and Trust is 0.827, and between Virtual Store Experience and Trust is 0.807.

These results indicate that the constructs in the research model demonstrate adequate discriminant validity, meaning that each variable is empirically distinct from the others in the model.

Table 6. Path Coefficient (Bootstrapping Direct Effect)

| | Original Sample (O) | Sample Mean (M) | Standard Deviation (STDEV) | T Statistics (O/STDEV) | P Values | Information |
|-------------------|---------------------|-----------------|----------------------------|--------------------------|--------------|-------------|
| X1 -> Y | 0,531 | 0,532 | 0,020 | 26,376 | 0,000 | Proven |
| X2 -> Y | 0,480 | 0,479 | 0,023 | 21,247 | 0,000 | Proven |

Source : Processed Data (2026)

The results of the structural model analysis show that Social Presence has a positive and statistically significant effect on Trust. The path coefficient of 0.531 indicates that an increased perception of social presence in a digital environment tends to enhance users' level of trust. This relationship is further supported by the t-statistic value of 26.376, which is considerably higher than the critical value of 1.96 at a 95% confidence level, as well as a p-value of 0.000 (<0.05), confirming that the effect is statistically significant. These findings emphasize the crucial role of social interaction within virtual environments. Features that foster a sense of real human communication, quick responsiveness, and interpersonal engagement are able to strengthen users' trust in digital platforms. Such elements help create a more interactive and trustworthy online experience for users.

In addition, Virtual Store Experience demonstrates a positive and statistically significant effect on Trust, with a path coefficient of 0.480. The t-statistic of 21.247, which is well above the statistical significance threshold, combined with a p-value of 0.000, indicates that the quality of users' experiences while interacting with the virtual store meaningfully contributes to the formation of trust. This finding suggests that aspects such as ease of navigation, visual design quality, and overall interaction comfort enhance users' perceptions of reliability and credibility toward the platform.

Comparatively, the magnitude of the path coefficients indicates that Social Presence has a slightly stronger effect on Trust than Virtual Store Experience. This implies that in digital interaction contexts, social elements that foster a sense of interpersonal presence and closeness

may play a more dominant role in building trust than purely experiential or technical aspects of the system. Consequently, user trust in digital platforms is shaped not only by functional system performance but also by the extent to which the platform can facilitate meaningful and socially engaging interactions.

Table 7. R Square and F Square Test Result

| | R Square | R Square Adjusted | Variable | F Square |
|----------|-----------------|--------------------------|-----------------|-----------------|
| Y | 0,767 | 0,766 | X1 -> Y | 0,905 |
| | | | X2 -> Y | 0,740 |

Source : Processed Data (2026)

The assessment of the structural model's predictive performance shows that the R-Square value for the Trust construct is 0.767. This indicates that Social Presence and Virtual Store Experience jointly account for 76.7% of the variation in user trust. In addition, the Adjusted R-Square value of 0.766 demonstrates that the model maintains a high level of consistency even after considering the number of predictor variables and overall model complexity. The very small gap between the R-Square and Adjusted R-Square values suggests that the model is not affected by estimation bias resulting from the inclusion of multiple independent variables. This condition indicates that the model's explanatory strength remains stable and dependable in explaining the determinants of user trust.

Within the context of SEM-PLS structural model evaluation, an R-Square value of 0.767 can be categorized as substantial, indicating that the constructs of Social Presence and Virtual Store Experience demonstrate a strong ability to explain the variability of Trust. This finding highlights that the proposed structural model possesses strong predictive power and conceptual relevance in explaining the formation of trust within digital interaction environments.

Further assessment through effect size (F-Square) reveals that Social Presence demonstrates an effect size of 0.905, while Virtual Store Experience shows an effect size of 0.740 on Trust. In the interpretation of effect size within SEM-PLS analysis, F-Square values significantly exceeding the 0.35 threshold indicate a large effect size, suggesting that both independent variables contribute substantially to improving the predictive capability of the model toward the endogenous construct.

Comparatively, the larger effect size associated with Social Presence indicates that social interaction elements within digital environments play a more dominant role in shaping user trust than experiential aspects of the virtual store. Nevertheless, Virtual Store Experience also demonstrates a strong effect, emphasizing that the quality of user interaction with the digital platform remains an important determinant in establishing trust perceptions.

Overall, the R-Square, Adjusted R-Square, and F-Square values collectively indicate that the structural model exhibits strong explanatory power, large effect sizes, and high predictive relevance. These results confirm that the relationships among constructs in the model are statistically supported and consistent with the SEM-PLS analytical framework, thereby validating the robustness and appropriateness of the proposed model for explaining the formation of Trust in virtual store environments.

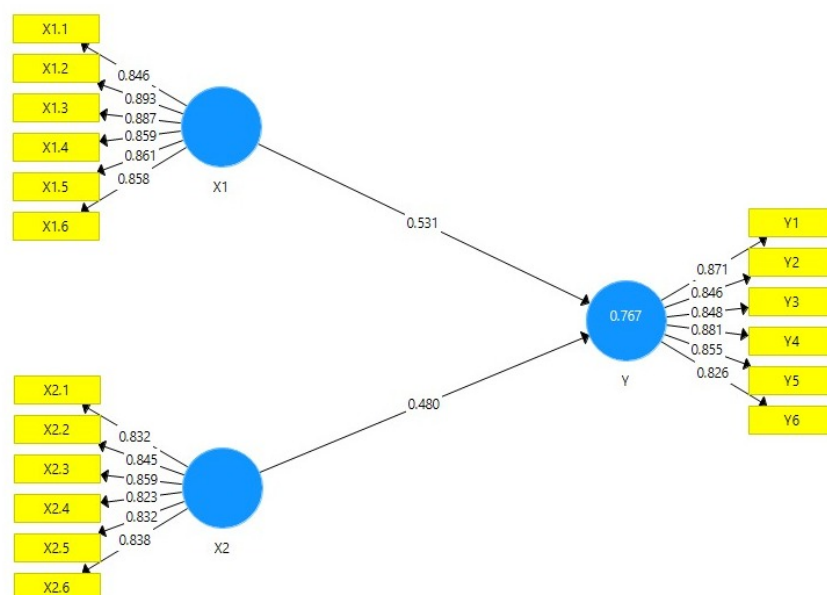


Figure 2. Estimate Research Model Using SmartPLS

Source: Developed by the authors (2026)

As presented in the figure, each indicator employed in this research exhibits an outer loading value greater than the recommended cut-off of 0.70. This result confirms that all measurement indicators satisfy the requirements of convergent validity, meaning that the indicators are capable of adequately representing their corresponding latent constructs. Consequently, the measurement items utilized in this study can be regarded as valid and suitable for inclusion in the structural model evaluation.

The structural model assessment further reveals that variable Social Presence (X1) positively influences variable Trust (Y), as reflected by a path coefficient of 0.531. This outcome indicates that improvements in Social Presence (X1) tend to be accompanied by an increase in Trust (Y). Similarly, variable Virtual Store Experience (X2) also demonstrates a positive relationship with variable Trust (Y), with a path coefficient value of 0.480. These findings suggest that both independent variables play a role in explaining changes in the dependent variable, although the contribution of Social Presence (X1) appears to be slightly stronger compared with that of Virtual Store Experience (X2).

In addition, the coefficient of determination (R-square) for variable Trust (Y) is reported at 0.767. This value indicates that Social Presence (X1) and Virtual Store Experience (X2) together account for 76.7% of the variability observed in Trust (Y), while the remaining 23.3% can be attributed to other factors that were not incorporated into the current research framework. This outcome implies that the proposed research model possesses a relatively strong explanatory capability in describing the relationships among the variables analyzed.

Following the evaluation of the structural model, the discussion proceeds to the examination of the research hypotheses in order to interpret the relationships among the variables proposed in the conceptual framework.

The findings demonstrate that Social Presence (X1) has a positive association with Trust (Y), indicated by a path coefficient of 0.531. This result implies that an increase in Social Presence (X1) is likely to lead to a higher level of Trust (Y). Accordingly, Hypothesis 1, which states that Social Presence (X1) significantly affects Trust (Y), is supported by the empirical evidence. This

suggests that Social Presence (X1) represents an important factor influencing Trust (Y), meaning that improvements in elements related to Social Presence (X1) may contribute to strengthening Trust (Y).

Similarly, the analysis indicates that Virtual Store Experience (X2) also exerts a positive influence on Trust (Y), with a path coefficient of 0.480. This finding shows that higher levels of Virtual Store Experience (X2) correspond with higher levels of Trust (Y). Therefore, Hypothesis 2, which proposes that Virtual Store Experience (X2) has a significant effect on Trust (Y), is also supported. Although Virtual Store Experience (X2) contributes to explaining variations in Trust (Y), its impact is slightly lower when compared to the effect generated by Social Presence (X1).

CONCLUSIONS

This study aimed to analyze the effects of Social Presence and Virtual Store Experience on consumer Trust in e-commerce platforms operating in Cirebon City. The research applied a quantitative approach and utilized the Structural Equation Modeling–Partial Least Squares (SEM-PLS) technique for data analysis. The empirical results reveal that Social Presence has a positive and statistically significant impact on consumer Trust. These findings indicate that elements such as responsive communication, interactive engagement, and the sense of real human interaction within digital environments play an important role in enhancing users confidence in e-commerce platforms.

Virtual Store Experience also demonstrates a positive and significant influence on consumer Trust. Elements such as attractive visual design, ease of navigation, comprehensive product information, and interactive features contribute to improving users' perceptions of platform credibility and reliability. However, the magnitude of the effect is slightly lower than that of Social Presence, indicating that social interaction elements play a more dominant role in shaping trust within digital commerce environments.

Furthermore, the structural model shows that Social Presence and Virtual Store Experience collectively explain a substantial proportion of the variance in consumer Trust, indicating strong explanatory power within the proposed model. These findings confirm that the formation of trust in e-commerce platforms is influenced by the interaction between social factors that foster emotional engagement and experiential factors derived from users' interaction with digital platforms.

From a practical perspective, the results highlight that e-commerce platform managers should not only focus on technological development and interface design but also prioritize enhancing social interaction features, responsiveness, and perceived human presence to strengthen consumer trust, particularly in regional markets such as Cirebon City. Future studies are encouraged to test this model in different geographical contexts, incorporate additional variables such as customer satisfaction or loyalty, and consider demographic and cultural factors to improve the generalizability of the findings.

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