

Digital Marketing Activities and Purchase Intention in Livestream Commerce: The Mediating Roles of Trust, Engagement, and Perceived Value

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ABSTRACT

This study examines how digital marketing activities (DMA) are associated with purchase intention through parallel and sequential consumer-response mechanisms involving trust, perceived value (PV), and customer livestream engagement (CLSE) in livestream commerce. A quantitative cross-sectional survey was conducted with 254 owner-managers of MSMEs in Central Java that had operated for at least one year and used livestreaming to market or sell products. Because the respondents were owner-managers, the consumer-response constructs are interpreted as owner-reported assessments of customer reactions to livestream marketing. The model was analyzed using covariance-based structural equation modeling in IBM SPSS AMOS, with confirmatory factor analysis, goodness-of-fit assessment, structural paths, and 2,000-sample bias-corrected bootstrap tests of indirect effects. DMA was positively associated with trust, CLSE, and PV. Trust, CLSE, and PV were positively associated with purchase intention, whereas PV was not significantly associated with CLSE. After estimating the direct DMA → purchase intention path, the mediation analysis indicated whether these indirect mechanisms represented full or partial mediation; the separate trust and CLSE indirect paths and the PV → CLSE sequential path were not. The original fitted output did not report the direct DMA → purchase intention path; this path must therefore be re-estimated before definitive mediation classification. Originality/Value – The contribution lies in comparing multiple and sequential response mechanisms within an established S-O-R framework, while the Central Java MSME livestream setting provides contextual rather than theory-creating novelty.

Keywords: Customer Livestream Engagement; Digital Marketing Activities; Perceived Value; Purchase Intention; Trust

1. INTRODUCTION

Digital commerce has expanded the role of livestreaming as an interactive marketing channel in which sellers can present products, answer questions in real time, and reduce information asymmetry. In livestream commerce, digital marketing activities can shape consumer evaluations and participation by combining informative, interactive, and entertaining content (Jamil et al., 2022; Lu & Chen, 2021). Prior research also shows that social-media marketing can strengthen brand trust and perceived value, both of which are relevant to purchase-related responses (Haudi et al., 2022; Nguyen et al., 2024).

Livestream commerce differs from conventional one-way promotion because viewers can communicate with sellers and other viewers while evaluating product information. Trust is particularly important when consumers cannot physically inspect products, whereas perceived value reflects the balance between expected benefits and sacrifices. Engagement captures consumers' cognitive, emotional, and behavioral involvement during the livestream and can provide a pathway from marketing stimuli to purchase intention (Guo et al., 2021; Wongkitrungrueng & Assarut, 2020; Zheng et al., 2022).

Existing studies frequently report positive associations between digital marketing activities and purchase-related outcomes, but the mechanisms are not necessarily uniform. Digital

marketing may be related to purchase intention directly and indirectly through trust, perceived value, engagement, or sequential combinations of these responses (Dua, 2024; Habib et al., 2022; Moslehpour et al., 2021). Accordingly, a model that discusses the DMA–purchase-intention relationship must estimate the direct alternative alongside indirect pathways; otherwise, formal mediation cannot be classified adequately.

This study therefore examines parallel and sequential consumer-response mechanisms linking digital marketing activities to purchase intention in livestream commerce. The theoretical contribution is not a new version of Stimulus-Organism-Response (S-O-R) theory; rather, the study applies S-O-R to compare differentiated pathways involving trust, perceived value, and customer livestream engagement. The empirical setting livestream-using MSMEs in Central Java provides contextual evidence about how these mechanisms may operate in a specific emerging-market setting.

2. LITERATURE REVIEW

2.1 Stimulus-Organism-Response Theory

This study applies Stimulus-Organism-Response (S-O-R) theory (Mehrabian & Russell, 1974) as an organizing framework rather than proposing a new S-O-R theory. Digital marketing activities represent the external stimulus. Trust and perceived value capture internal evaluative states, while customer livestream engagement represents an intermediate response that can itself transmit those evaluations toward the final behavioral response of purchase intention. This structure permits both parallel routes (for example, DMA → perceived value → purchase intention) and sequential routes (for example, DMA → trust → CLSE → purchase intention). The study's theoretical value therefore lies in comparing these alternative response mechanisms within one model.

2.2 Digital Marketing Activities in Livestream Commerce

Digital marketing activities in livestream commerce enable companies to provide more comprehensive product information and establish real-time interactions with consumers (Zhang & Xu, 2024). Various marketing activities conducted through digital platforms, particularly through livestream commerce, aim to convey information, establish communication and interaction, provide engaging experiences, and encourage consumer engagement with brands or products (Jamil et al., 2022). Through digital and social media platforms, companies can establish more intensive communication with consumers, thereby increasing their understanding of the brand and strengthening relationships with customers (Haudi et al., 2022; Ibrahim et al., 2021). In addition, information delivered accurately, completely, credibly, and in real time can enhance consumers' perceptions of a company's reliability, ultimately strengthening trust in the brand. In the context of livestream commerce, digital marketing activities not only facilitate the delivery of information but also create direct interactions that can lessen the psychological distance between consumers and streamers as representatives of the company (Alzaidi & Agag, 2022; Liu & Zhang, 2024; Sohaib & Han, 2023). On the other hand, interactive features in livestreams enable consumers to discuss and exchange experiences regarding product quality and performance, thereby helping to reduce uncertainty and strengthen trust in the brand.

Consumers' psychological states can be shaped by stimuli arising from digital marketing activities and encourage responses in the form of customer engagement (Lee & Breckon, 2025). Marketing activities that are able to provide more personalized experiences, two-way communication, and opportunities for consumers to interact will encourage active participation in content and marketing activities (Kamyabi et al., 2025; Vinerean & Opreana, 2021). In addition, social and technical features in livestream commerce also enhance customer engagement by

providing more enjoyable experiences and increasing perceived control during livestream sessions (Hao et al., 2025).

Within the context of livestream commerce, digital marketing activities not only function to promote products but also create experiences that provide benefits to consumers throughout the marketing process (Nguyen et al., 2024). When digital marketing activities are able to establish more personalized communication and make consumers feel valued, consumers will perceive the products or services as having higher value (Bushara et al., 2023). In addition, the presentation of entertaining content during livestream sessions can increase consumers' comfort in receiving product information. This condition facilitates consumers' understanding of the benefits of the products while simultaneously increasing their perceived value (Hanaysha & Alhyasat, 2025; Moslehpour et al., 2021). Taken together, these considerations lead to the formulation of the following hypothesis:

H1: Digital Marketing Activities are positively associated with Trust.

H2: Digital Marketing Activities are positively associated with Customer Livestream Engagement.

H3: Digital Marketing Activities are positively associated with Perceived Value.

2.3 Trust in Livestream Commerce

Trust denotes consumers' belief that sellers are reliable, honest, and committed to acting in the consumers' best interests throughout the transaction process (Wongkitrungrueng & Assarut, 2020). Within the scope of livestream commerce, trust is an important determinant because it makes consumers feel valued and confident that both the platform and the community can fulfill their needs (Fan et al., 2022). When consumers possess a strong degree of trust, they are willing to devote greater time and attention to, as well as actively participate in, the brands they trust (Shammout et al., 2025). Such trust can develop toward various aspects of the livestream commerce ecosystem, including the platform, products, hosts, and communities, each of which contributes to encouraging consumers to continue watching, engaging in discussions, and interacting throughout livestream sessions (Chen et al., 2022; Guo et al., 2021; Zhai & Chen, 2023).

Within the scope of livestream commerce, one of the limitations of social commerce is that consumers cannot directly see or evaluate product quality prior to purchasing (Wang et al., 2022). This condition increases uncertainty during the decision making process, making the presence of a trusted company, host, or retailer important for reducing consumers' concerns about perceived risk (Yu et al., 2021). When consumers place their trust in the broadcaster, the feelings of vulnerability and social complexity that arise during the transaction are reduced, making them more confident and comfortable in making a purchase (Lu & Chen, 2021). In addition, parasocial relationships that develop between viewers and streamers can build trust, which ultimately increases purchase intention toward the promoted products (Xu et al., 2022). Thus, the stronger consumer trust in livestream commerce, the stronger the intention to buy. Therefore, the hypothesis is formulated:

H4: Trust is positively associated with Customer Livestream Engagement.

H6: Trust is positively associated with Purchase Intention.

2.4 Perceived Value in Livestream Commerce

High perceived value encourages consumers to participate more actively when consumers perceive the benefits of a product as outweighing the sacrifices involved (Yu & Zheng, 2022). Within the scope of livestream commerce, perceived value can enhance customer engagement

through various dimensions, such as social value, utilitarian value, and hedonic value, each of which provides benefits in the form of social interaction, useful information, and a pleasant shopping experiences (Chen et al., 2025). In addition, symbolic value also plays a role in enhancing engagement because it makes consumers feel recognized and perceive a sense of compatibility with the seller (Dua, 2024). Nevertheless, Dua, (2024) also explains that hedonic value alone is not sufficient to optimally encourage engagement when it only generates enjoyment without providing other benefits perceived by consumers. Therefore, a combination of various forms of perceived value will create a more meaningful experience, thereby encouraging consumers to participate more actively during livestream sessions (Ramadhoni & Prassida, 2025).

Perceived value encourages purchase intention when consumers believe that the benefits gained from a product or shopping experience are greater than the sacrifices required (Syamsuar & Witarsyah, 2025). In the context of livestream commerce, consumers do not merely search for product information but also engaging and enjoyable shopping experiences that provide greater value compared with other alternatives (Park et al., 2023; Yin & Qiu, 2021). Immersive shopping experiences and professional services can enhance consumers' positive evaluations of products, thereby increasing intention to buy (Guo et al., 2021). Nevertheless, Li et al., (2026) shows that the contribution of perceived value on intention to buy can be affected by other factors, including perceived risk and trust. However, perceived value remains one of the main considerations shaping consumers' purchase decisions in livestream commerce.

H5: Perceived Value is positively associated with Customer Livestream Engagement.

H8: Perceived Value is positively associated with Purchase Intention.

2.5 Customer Livestream Engagement

Customer livestream engagement reflects consumers' active involvement through interaction, responses, and participation during livestream sessions, rather than merely viewing the promoted products (Zheng et al., 2022). When consumers feel enthusiastic, enjoy the interaction, and pay high attention to the brand, this psychological attachment encourages their readiness to make a purchase (Chatterjee et al., 2022). Active engagement also enhances consumers' cognitive and emotional experiences, thereby creating emotional resonance that further strengthens purchase intention (Kleilat et al., 2026; Yu & Zheng, 2022). In addition, consumers who feel entertained, obtain adequate product information, and gain access to services or promotions during livestream sessions tend to have a greater tendency toward purchasing (Habib et al., 2022).

H7: Customer Livestream Engagement is positively associated with Purchase Intention.

H9: Digital Marketing Activities are positively associated with Purchase Intention.

H10: Trust mediates the association between Digital Marketing Activities and Purchase Intention.

H11: Customer Livestream Engagement mediates the association between Digital Marketing Activities and Purchase Intention.

H12: Perceived Value mediates the association between Digital Marketing Activities and Purchase Intention.

H13: Trust and Customer Livestream Engagement sequentially mediate the association between Digital Marketing Activities and Purchase Intention.

H14: Perceived Value and Customer Livestream Engagement sequentially mediate the association between Digital Marketing Activities and Purchase Intention.

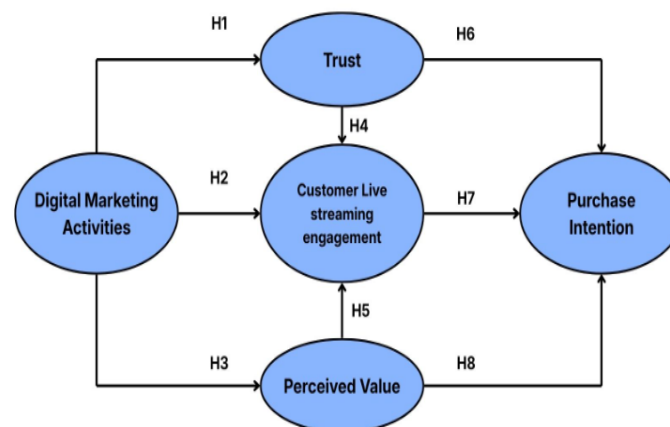


Figure 1. Research framework showing direct (H1–H9), indirect (H10–H12), and sequential (H13–H14) hypotheses

3. METHOD

3.1 Population and Sample

This study used a quantitative cross-sectional survey with purposive sampling. The questionnaire was completed by 254 owner-managers of MSMEs domiciled in Central Java Province. Eligible respondents had operated their business for at least one year and had used livestreaming to market or sell products through platforms such as Shopee Live, TikTok Shop Live, Instagram Live, or Facebook Live. The unit of observation is therefore the MSME owner-manager rather than the individual consumer. Accordingly, Trust, Customer Livestream Engagement, Perceived Value, and Purchase Intention are interpreted in this study as owner-reported proxy assessments of typical customer responses to the firm's livestream activities. This distinction is essential when interpreting and generalizing the consumer-response results.

3.2 Data Collection and Instruments

Primary data were collected using a structured questionnaire with a 10-point Likert-type response format (1 = strongly disagree; 10 = strongly agree). Digital Marketing Activities were measured with three items adapted from Jamil et al., (2022); Trust with three items adapted from Wongkitrungrueng & Assarut, (2020); Customer Livestream Engagement with three items adapted from Zhang & Xu, (2024); Perceived Value with three items adapted from Wongkitrungrueng & Assarut, (2020); and Purchase Intention with four items adapted from Zhang & Xu, (2024). Because the respondents were MSME owner-managers, the consumer-oriented measures are treated as proxy assessments of customer responses rather than direct self-reports from consumers.

3.3 Validity and Reliability Testing

The measurement model was evaluated using confirmatory factor analysis (CFA). Standardized factor loadings ranged from 0.580 to 0.888. Composite Reliability (CR) values ranged from 0.806 to 0.884 and Average Variance Extracted (AVE) values ranged from 0.557 to 0.718, supporting internal-consistency reliability and convergent validity. Discriminant validity requires a construct-correlation matrix and either the Fornell–Larcker criterion, preferably supplemented by the Heterotrait–Monotrait (HTMT) ratio; these diagnostics cannot be reconstructed from loadings, CR, and AVE alone and must be exported from the original measurement-model output before final resubmission.

3.4 Data Analysis Technique

Data were analyzed using covariance-based Structural Equation Modeling (SEM) in IBM SPSS AMOS. Analysis proceeded in two stages: evaluation of the measurement model through CFA and evaluation of the structural model. Model fit was assessed using chi-square, CMIN/DF, RMSEA, GFI, CFI, TLI, NFI, and AGFI. Structural hypotheses were evaluated using the estimated coefficient, standard error, critical ratio, and p-value. Indirect effects were tested using 2,000 bootstrap samples and 95% bias-corrected confidence intervals. The respecified model also requires estimation of the direct DMA → Purchase Intention path (H9) so that indirect effects can be interpreted against the corresponding direct alternative.

4. RESULTS AND DISCUSSION

4.1 Respondent Characteristics

The analytical sample comprised 254 MSME owner-managers in Central Java who met the livestream-use eligibility criteria. Most operated in the culinary sector (37.01%), followed by fashion and textiles (20.08%) and crafts and furniture (12.20%). Regarding business age, 55.51% had operated for 6–10 years, 28.74% for more than ten years, and 15.75% for 1–5 years. Semarang contributed the largest geographic share (18.50%), with the remainder distributed across cities and regencies in Central Java. These characteristics describe the business respondents; the consumer-response constructs in the SEM are owner-reported proxy assessments rather than responses collected directly from consumers.

4.2 Standardized Regression Weights

The standardized factor loading value for each indicator should preferably have a minimum value of 0.50 and ideally reach 0.70 (Hair et al., 2019b).

Table 1. Standardized Regression Weights

Indicator	Loading Factor
Entertainment	0,780
Interaction	0,707
Trendiness	0,798
Reliability	0,795
Honesty	0,784
Competence	0,779
Interaction Effort	0,752
Interactive Value	0,791
Customer Participation	0,772
Monetary Value	0,888
Hedonic Value	0,881
Utilitarian Value	0,768
Willingness to Buy	0,769
Consideration to Buy	0,799
Recommendation	0,813
Intention	
Future Purchase	0,580
Likelihood	

Source: IBM SPSS AMOS Output (2026)

The standardized factor loading values for all indicators ranged from 0.580–0.888. Thus, all study indicators fulfilled the recommended minimum threshold, and most indicators had

loading values above 0.70, indicating a strong contribution to representing the constructs being measured.

4.3 Construct Reliability & Convergent Validity

The standardized loading coefficients obtained across the measurement items fell within the range of 0.580 to 0.888. Thus, the indicators included in this study fulfilled the recommended minimum threshold, and most indicators had loading values above 0.70, indicating a strong contribution to representing the constructs being measured

Table 2. Construct Reliability & Convergent Validity

Construct	Standardized Loading Factor	CR	AVE
Digital Marketing Activities	0.707–0.798	0.806	0.582
Trust	0.779–0.795	0.829	0.618
Perceived Value	0.768–0.888	0.884	0.718
Customer Livestreaming Engagement	0.752–0.791	0.815	0.596
Purchase Intention	0.580–0.813	0.832	0.557

Source: IBM SPSS AMOS Output (2026)

As reported in table 2, all constructs included in the current research exhibit an adequate level of construct reliability. The CR values range from 0.806–0.884, all of which exceed the recommended cutoff value of 0.70. The empirical findings demonstrate that the indicators used for each construct show good consistency. AVE values range from 0.557–0.718, which also exceed the minimum value of 0.50. Thus, all individual constructs account for more than 50% of the indicator variance, thereby fulfilling convergent validity.

4.4 Goodness of Fit of the Model

Goodness of fit of the structural equation model was tested through multiple fit indices, including chi square, normed chi square (CMIN/DF), RMSEA, GFI, CFI, TLI, NFI, and AGFI. Model fit should not be evaluated based on a single goodness-of-fit index or a single universal cut-off value. Instead, multiple fit indices should be regarded as providing a more thorough evaluation of model fit (Hair et al., 2019a). A CMIN/DF ratio of approximately 3 or less is associated with better-fitting models, while GFI values greater than 0.90 have typically been considered indicative of good fit. For RMSEA, smaller values indicate better fit, although Hair et al., (2019a) caution against applying an absolute cut-off value. Similarly, higher values of incremental fit indices such as NFI, TLI, and CFI indicate better fit, with values approaching 1 representing better-fitting models.

Table 3. Goodness of Fit

Goodness of Fit Indices	Result	Criteria	Description
Chi-square	160,569		
CMIN/DF	1,673	$\leq 3,00$	Good Fit
Probability	0,000	$\geq 0,05$	
RMSEA	0,052	$\leq 0,08$	Good Fit
GFI	0,928	$\geq 0,90$	Good Fit
CFI	0,971	$\geq 0,90$	Good Fit
TLI	0,964	$\geq 0,90$	Good Fit
NFI	0,932	$\geq 0,90$	Good Fit

Goodness of Fit Indices	Result	Criteria	Description
AGFI	0,899	$\geq 0,90$	

Source:IBM SPSS AMOS Output (2026)

Goodness of fit test result indicate that the research model as a whole has a good level of fit with the empirical data. This is indicated by the CMIN/DF value of 1.673 and the RMSEA value of 0.052, both of which meet the good fit criteria. In addition, the GFI (0.928), CFI (0.971), TLI (0.964), and NFI (0.932) values also meet the established criteria. Since most of the main indices meet the established criteria, the overall model can be viewed as a good fit and are suitable for subsequent analysis.

4.5 Hypothesis Testing and Structural Model Assessment

Table 4. Path coefficients and hypothesis testing results

Hypothesis	PATH	Estimate	S.E	C.R	P
H1	DMA→ Trust	.745	.074	10.011	***
H2	DMA→ CLSE	.265	.125	2.116	.034
H3	DMA→ PV	.654	.077	8.507	***
H4	Trust→ CLSE	.634	.130	4.871	***
H5	PV→ CLSE	.072	.069	1.034	.301
H6	Trust → PI	.294	.137	2.144	.032
H7	CLSE → PI	.274	.129	2.135	.033
H8	PV → PI	.324	.067	4.860	***

Source:IBM SPSS AMOS Output (2026)

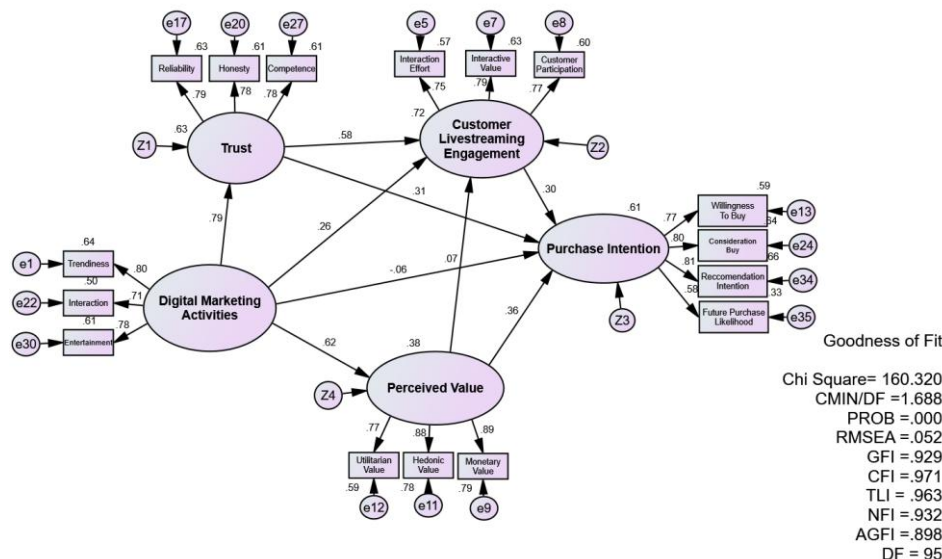


Figure 2. SEM Structural model

Source:IBM SPSS AMOS Output (2026)

The results reveal that most relationships within variables are positive and statistically significant. digital marketing activities positively and significantly influenced Trust ($\beta = 0.745$; C.R. = 10.011; $p < 0.001$), thus H1 is accepted. Digital marketing activities also positively and significantly influenced customer livestream engagement ($\beta = 0.265$; C.R. = 2.116; $p = 0.034$), thus H2 is accepted. Furthermore, digital marketing activities was positively and significantly influenced perceived value ($\beta = 0.654$; C.R. = 8.507; $p < 0.001$), thus H3 is accepted. Trust was found to have a positive and significant effect on customer livestream engagement ($\beta = 0.634$; C.R.

= 4.871; $p < 0.001$), thus H4 is accepted. However, perceived value did not show a significant effect on customer livestream engagement ($\beta = 0.072$; C.R. = 1.034; $p = 0.301$), thus H5 is rejected. For the purchase intention, trust was found to have a positive and significant effect ($\beta = 0.294$; C.R. = 2.144; $p = 0.032$), thus H6 is accepted. Customer livestream engagement also positively and significantly influenced purchase intention ($\beta = 0.274$; C.R. = 2.135; $p = 0.033$), thus H7 is accepted. Meanwhile, perceived value was found to positively and significantly influenced Purchase Intention ($\beta = 0.324$; C.R. = 4.860; $p < 0.001$), thus H8 is accepted. Therefore, of the eight hypotheses tested, seven hypotheses, namely H1, H2, H3, H4, H6, H7, and H8, are accepted, while H5 is rejected.

4.6 Mediation Analysis

Table 5. Mediation Analysis

Indirect Path	Estimate	Lower	Upper	P
DMA → Trust → PI	0.244	-0.095	0.639	0.114
DMA → CLSE → PI	0.078	-0.007	0.349	0.070
DMA → PV → PI	0.220	0.123	0.371	0.000
DMA → Trust → CLSE → PI	0.137	0.003	0.450	0.046
DMA → PV → CLSE → PI	0.013	-0.010	0.074	0.254

Source: IBM SPSS AMOS Output (2026)

The testing of indirect effects in this research was conducted with the bootstrapping method to examine the significance of mediation effects. Hair et al., (2019a) explain that indirect effects can be calculated and tested through the bootstrapping procedure, which is recommended as a more accurate approach than the Sobel test. the significance effect was evaluated using the confidence interval. In this study, the analysis was conducted using 2,000 bootstrap samples with a 95% bias corrected confidence interval. According to Table 5, the results of the mediation effect testing show that Digital Marketing Activities (DMA) has an insignificant indirect relationship with purchase intention through trust, with an estimate value of 0.244, a 95% BC confidence interval ranging from -0.095 to 0.639, and $p = 0.114$. Since the confidence interval includes zero and $p > 0.05$, Trust failed to serve as a mediator in the relationship between digital marketing activities and purchase intention.

Furthermore, digital marketing activities also does not show a significant mediation effect on purchase intention through customer livestream engagement (CLSE), with an estimate value of 0.078, a 95% BC confidence interval ranging from -0.007 to 0.349, and $p = 0.070$. Although the indirect effect is positive, the confidence interval still includes zero and $p > 0.05$, indicating that CLSE was not found to act as a mediator between DMA and purchase intention. In contrast, perceived value acted as a mediator between DMA and purchase intention, with an estimate value of 0.220, a 95% BC. CI ranging from 0.123 to 0.371, and $p < 0.001$. The CI excludes zero and $p < 0.05$, indicating a positive and significant indirect effect. In addition, the sequential mediation effect testing shows that DMA → Trust → CLSE → PI shows positive and significant indirect effect, with an estimate value of 0.137, a 95% BC. Ranging CI from 0.003 to 0.450, and $p = 0.046$. Thus, Trust and CLSE sequentially form a significant mediation mechanism. Meanwhile, the DMA → PV → CLSE → PI pathway does not show a significant mediation effect, with an estimate value of 0.013, a 95% BC CI ranging from -0.010 to 0.074, and $p = 0.254$. Overall, total indirect effect of DMA on Purchase Intention shows a positive and significant result, with an estimate value of 0.693, a 95% BC confidence interval ranging from 0.444 to 1.126, and $p = 0.001$. These findings indicate that, overall, DMA indirectly and significantly affects Purchase Intention through the mediation pathways in the model.

4.7 Discussion

Digital Marketing Activities were positively associated with Trust, Perceived Value, and Customer Livestream Engagement. These findings are consistent with research showing that informative, interactive, and entertaining digital marketing can strengthen brand trust, perceived value, and customer engagement (Haudi et al., 2022; Jamil et al., 2022; Nguyen et al., 2024). In livestream commerce, real-time interaction may reduce uncertainty and make marketing content more useful and credible, which is particularly relevant when consumers cannot inspect products directly (Lu & Chen, 2021; Sohaib & Han, 2023).

Trust was positively associated with CLSE and Purchase Intention, while Perceived Value was positively associated with Purchase Intention but not with CLSE. The trust findings align with evidence that trusted livestream sellers encourage greater participation and purchase-related responses (Guo et al., 2021; Wongkitrungrueng & Assarut, 2020). The non-significant PV → CLSE path suggests that consumers may recognize value without actively interacting during a livestream. This interpretation is compatible with evidence that livestream audiences include both active participants and more passive viewers (Chu & Chu, 2025).

Customer Livestream Engagement was positively associated with Purchase Intention, supporting the view that participation, attention, and interaction can strengthen readiness to purchase (Dua, 2024; Zheng et al., 2022). Perceived Value also showed a positive association with Purchase Intention, consistent with evidence that consumers are more inclined to buy when expected benefits exceed monetary, time, and effort costs (Park et al., 2023; Yu & Zheng, 2022). These relationships position engagement and value as distinct but complementary response routes within the S-O-R process.

The indirect-effect results provide the study's main contribution. The DMA → PV → PI pathway and the sequential DMA → Trust → CLSE → PI pathway were significant, whereas Trust and CLSE did not individually transmit the DMA-PI association and the PV → CLSE sequential route was not significant. This pattern indicates that digital marketing can be related to purchase intention through multiple mechanisms rather than through one uniform mediation process. However, because the originally estimated model omitted the direct DMA → PI path, the current evidence supports significant indirect effects but does not yet justify definitive full-versus-partial mediation terminology. Re-estimating H9 is therefore necessary for the final mediation interpretation.

5. CONCLUSIONS

Digital marketing activities were positively associated with purchase intention in the context of livestream commerce among MSMEs in Indonesia. The findings demonstrate that digital marketing activities positively influence trust, customer livestream engagement, and perceived value. Trust showed positive associations with customer livestream engagement and purchase intention, while customer livestream engagement and perceived value positively influence purchase intention. However, perceived value does not significantly influence customer livestream engagement, indicating that perceived benefits from livestream commerce do not necessarily lead consumers to actively participate in livestream activities. The mediation analysis demonstrates that perceived value significantly mediates the relationship between digital marketing activities and purchase intention. In addition, trust and customer livestream engagement sequentially mediate the relationship between digital marketing activities and purchase intention. In contrast, trust and customer livestream engagement do not individually mediate this relationship, while the sequential pathway through perceived value and customer livestream engagement is also not significant. Overall, the results reveal that digital marketing activities contribute to purchase intention through different consumer mechanisms, particularly

by increasing perceived value and by building trust that subsequently encourages customer engagement during livestream sessions.

A number of limitations need to be acknowledged when interpreting the findings. First, the study focused on MSMEs located in Central Java and employed purposive sampling. Therefore, the findings may not completely reflect MSMEs in other regions of Indonesia or MSMEs with different business and consumer characteristics. Second, the study specifically targeted MSMEs that had experience using livestreaming to market or sell their products. During the data collection process, many MSMEs had not yet conducted livestream activities, which limited the pool of eligible respondents. Consequently, the findings are more applicable to MSMEs that have already adopted livestream commerce and may not fully reflect the perceptions or conditions of MSMEs that have not yet adopted this form of digital marketing.

Lastly, future research may extend the geographic coverage of the research by examining MSMEs from other regions of Indonesia to provide broader evidence regarding the relationships among digital marketing activities, trust, customer livestream engagement, perceived value, and purchase intention. Future studies may also compare MSMEs that have adopted livestream commerce with those that have not yet adopted it to deliver a broader insight into the factors that encourage livestream adoption and its subsequent effects on consumer responses. In addition, future research could employ broader sampling approaches and consider differences in business characteristics to improve the generalizability of the findings. Further studies may also explore additional factors that could explain why perceived value does not significantly increase customer livestream engagement, particularly by distinguishing between consumers who actively interact during livestream sessions and those who primarily watch without actively participating

REFERENCES

- Alzaidi, M. S., & Agag, G. (2022). The role of trust and privacy concerns in using social media for e-retail services: The moderating role of COVID-19. *Journal of Retailing and Consumer Services*, 68. <https://doi.org/10.1016/j.jretconser.2022.103042>
- Bushara, M. A., Abdou, A. H., Hassan, T. H., Sobaih, A. E. E., Albohnayh, A. S. M., Alshammari, W. G., Aldoreeb, M., Elsaed, A. A., & Elsaied, M. A. (2023). Power of Social Media Marketing: How Perceived Value Mediates the Impact on Restaurant Followers' Purchase Intention, Willingness to Pay a Premium Price, and E-WoM? *Sustainability (Switzerland)*, 15(6). <https://doi.org/10.3390/su15065331>
- Chatterjee, S., Chaudhuri, R., & Vrontis, D. (2022). Examining the role of cross-cultural factors in the international market on customer engagement and purchase intention. *Journal of International Management*, 28(3). <https://doi.org/10.1016/j.intman.2022.100966>
- Chen, Y., Prentice, C., Weaven, S., & Hisao, A. (2022). The influence of customer trust and artificial intelligence on customer engagement and loyalty – The case of the home-sharing industry. *Frontiers in Psychology*, 13. <https://doi.org/10.3389/fpsyg.2022.912339>
- Chen, Y., Tao, L., Zheng, S., Yang, S., & Li, F. (2025). What drives viewers' engagement in travel live streaming: a mixed-methods study from perceived value perspective. *International Journal of Contemporary Hospitality Management*, 37(2), 418–443. <https://doi.org/10.1108/IJCHM-01-2024-0115>
- Chu, T. H., & Chu, W. H. (2025). Why do some watch while others donate? An S-O-R Perspective of live streaming engagement. *Information and Management*, 62(8). <https://doi.org/10.1016/j.im.2025.104235>
- Dua, P. (2024). Building Purchase Intention through Live Streaming Platforms: Mediating Role of Customer Engagement. *Journal of Promotion Management*, 30(4), 657–680. <https://doi.org/10.1080/10496491.2023.2289900>
- Fan, W., Shao, B., & Dong, X. (2022). Effect of e-service quality on customer engagement behavior in community e-commerce. *Frontiers in Psychology*, 13. <https://doi.org/10.3389/fpsyg.2022.965998>

- Guo, L., Hu, X., Lu, J., & Ma, L. (2021). Effects of customer trust on engagement in live streaming commerce: mediating role of swift guanxi. *Internet Research*, 31(5), 1718–1744. <https://doi.org/10.1108/INTR-02-2020-0078>
- Habib, S., Hamadneh, N. N., & Hassan, A. (2022). The Relationship between Digital Marketing, Customer Engagement, and Purchase Intention via OTT Platforms. *Journal of Mathematics*, 2022. <https://doi.org/10.1155/2022/5327626>
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2019a). *Multivariate Data Analysis* (8th ed.). Cengage Learning. www.cengage.com/highered
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2019b). *MULTIVARIATE DATA ANALYSIS EIGHTH EDITION* (8th ed.). Cengage Learning. www.cengage.com/highered
- Hanaysha, J. R., & Alhyasat, K. M. K. (2025). Examining the Effect of Social Media Advertising Features on Customer Perceived Value and Brand Love in the Retail Industry. *Telematics and Informatics Reports*, 18. <https://doi.org/10.1016/j.teler.2025.100208>
- Hao, R., Jiang, J., & Na, R. (2025). Customer brand engagement in brands' self-built live streaming e-commerce: a mixed-methods study. *Asia Pacific Journal of Marketing and Logistics*. <https://doi.org/10.1108/APJML-11-2024-1755>
- Haudi, Handayani, W., Musnaini, Suyoto, Y. T., Prasetyo, T., Pital-Oka, E., Wijoyo, H., Yonata, H., Koho, I. R., & Cahyono, Y. (2022). The effect of social media marketing on brand trust, brand equity and brand loyalty. *International Journal of Data and Network Science*, 6(3), 961–972. <https://doi.org/10.5267/j.ijdns.2022.1.015>
- Ibrahim, B., Aljarah, A., & Sawaftah, D. (2021). Linking social media marketing activities to revisit intention through brand trust and brand loyalty on the coffee shop facebook pages: Exploring sequential mediation mechanism. *Sustainability (Switzerland)*, 13(4), 1–16. <https://doi.org/10.3390/su13042277>
- Jamil, K., Dunnan, L., Gul, R. F., Shehzad, M. U., Gillani, S. H. M., & Awan, F. H. (2022). Role of Social Media Marketing Activities in Influencing Customer Intentions: A Perspective of a New Emerging Era. *Frontiers in Psychology*, 12. <https://doi.org/10.3389/fpsyg.2021.808525>
- Kamyabi, M., Özgüt, H., & Ahmed, J. N. (2025). Sustaining Digital Marketing Strategies to Enhance Customer Engagement and Brand Promotion: Position as a Moderator. *Sustainability (Switzerland)*, 17(7). <https://doi.org/10.3390/su17073270>
- Kleilat, M. M., El Namar, S., Bakhit, W., Vrontis, D., Kokkinopoulou, E., & Rebeiz, K. S. (2026). Augmented reality in retail: unravelling the nexus of customer engagement and purchase intentions. *Competitiveness Review*, 36(3), 618–638. <https://doi.org/10.1108/CR-03-2025-0096>
- Lee, M. C., & Breckon, D. (2025). Factors affecting customer engagement in AI marketing. *Telematics and Informatics Reports*, 19. <https://doi.org/10.1016/j.teler.2025.100230>
- Li, Z., Zhang, J., & Tang, J. (2026). The Risk-Value Trade-Off: Impact of Risk Perception, Perceived Value on Consumers' Purchase Intention: A Meta-Analysis. *Sustainability*, 18(13), 6447. <https://doi.org/10.3390/su18136447>
- Liu, X., & Zhang, L. (2024). Impacts of different interactive elements on consumers' purchase intention in live streaming e-commerce. *PLoS ONE*, 19(12). <https://doi.org/10.1371/journal.pone.0315731>
- Lu, B., & Chen, Z. (2021). Live streaming commerce and consumers' purchase intention: An uncertainty reduction perspective. *Information and Management*, 58(7). <https://doi.org/10.1016/j.im.2021.103509>
- Mehrabian, A., & Russell, J. A. (1974). *An Approach to Environmental Psychology*. M.I.T. Press. <https://books.google.co.id/books?id=upV9AAAAAAJ>
- Moslehpour, M., Dadvari, A., Nugroho, W., & Do, B. R. (2021). The dynamic stimulus of social media marketing on purchase intention of Indonesian airline products and services. *Asia Pacific Journal of Marketing and Logistics*, 33(2), 561–583. <https://doi.org/10.1108/APJML-07-2019-0442>
- Nguyen, N. M., Nguyen, H. T., & Cao, T. A. (2024). Effects of Social Media Marketing Activities on Perceived Values, Online Brand Engagement, and Brand Loyalty. *Emerging Science Journal*, 8(5), 1957–1975. <https://doi.org/10.28991/ESJ-2024-08-05-017>

- Park, Y., Ko, E., & Do, B. (2023). The perceived value of digital fashion product and purchase intention: the mediating role of the flow experience in metaverse platforms. *Asia Pacific Journal of Marketing and Logistics*, 35(11), 2645–2665. <https://doi.org/10.1108/APJML-11-2022-0945>
- Ramadhoni, M. F., & Prassida, G. F. (2025). The Impact of Perceived Value on Engagement, Purchase Intention, and Continuance Usage Intention: A PLS-SEM Study on Social Commerce Live Streaming Context. *Jurnal Sistem Informasi Bisnis*, 3. <https://doi.org/10.1471/vol15iss3pp310-320>
- Shammout, E., Megdadi, O., Shammout, A. B., & Alshaketheep, K. (2025). Sustainable Marketing's Impact on Purchase Intentions: The Roles of Brand Image, Trust, and Customer Engagement. *Journal of Logistics, Informatics and Service Science*, 12(6), 31–44. <https://doi.org/10.33168/JLISS.2025.0602>
- Sohaib, M., & Han, H. (2023). Building value co-creation with social media marketing, brand trust, and brand loyalty. *Journal of Retailing and Consumer Services*, 74. <https://doi.org/10.1016/j.jretconser.2023.103442>
- Syamsuar, D., & Witarsyah, D. (2025). The Role of Perceived Value and Risk in Shaping Purchase Intentions in Live-Streaming Commerce: Evidence from Indonesia. *Journal of Theoretical and Applied Electronic Commerce Research*, 20(4). <https://doi.org/10.3390/jtaer20040298>
- Vinerean, S., & Opreana, A. (2021). Measuring customer engagement in social media marketing: A higher-order model. *Journal of Theoretical and Applied Electronic Commerce Research*, 16(7), 2633–2654. <https://doi.org/10.3390/jtaer16070145>
- Wang, J., Shahzad, F., Ahmad, Z., Abdullah, M., & Hassan, N. M. (2022). Trust and Consumers' Purchase Intention in a Social Commerce Platform: A Meta-Analytic Approach. *SAGE Open*, 12(2). <https://doi.org/10.1177/21582440221091262>
- Wongkitrungrueng, A., & Assarut, N. (2020). The role of live streaming in building consumer trust and engagement with social commerce sellers. *Journal of Business Research*, 117, 543–556. <https://doi.org/10.1016/j.jbusres.2018.08.032>
- Xu, P., Cui, B. J., & Lyu, B. (2022). Influence of Streamer's Social Capital on Purchase Intention in Live Streaming E-Commerce. *Frontiers in Psychology*, 12. <https://doi.org/10.3389/fpsyg.2021.748172>
- Yin, J., & Qiu, X. (2021). Ai technology and online purchase intention: Structural equation model based on perceived value. *Sustainability (Switzerland)*, 13(10). <https://doi.org/10.3390/su13105671>
- Yu, W., Han, X., Ding, L., & He, M. (2021). Organic food corporate image and customer co-developing behavior: The mediating role of consumer trust and purchase intention. *Journal of Retailing and Consumer Services*, 59. <https://doi.org/10.1016/j.jretconser.2020.102377>
- Yu, & Zheng, R. (2022). The effects of perceived luxury value on customer engagement and purchase intention in live streaming shopping. *Asia Pacific Journal of Marketing and Logistics*, 34(6), 1303–1323. <https://doi.org/10.1108/APJML-08-2021-0564>
- Zhai, M., & Chen, Y. (2023). How do relational bonds affect user engagement in e-commerce livestreaming? The mediating role of trust. *Journal of Retailing and Consumer Services*, 71. <https://doi.org/10.1016/j.jretconser.2022.103239>
- Zhang, Y., & Xu, Q. (2024). Consumer engagement in live streaming commerce: Value co-creation and incentive mechanisms. *Journal of Retailing and Consumer Services*, 81. <https://doi.org/10.1016/j.jretconser.2024.103987>
- Zheng, R., Li, Z., & Na, S. (2022). How customer engagement in the live-streaming affects purchase intention and customer acquisition, E-tailer's perspective. *Journal of Retailing and Consumer Services*, 68. <https://doi.org/10.1016/j.jretconser.2022.103015>