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FROM DISRUPTIVE MARKETING TO VALUE CO-CREATION: THE SERIAL MEDIATION OF BUSINESS MODEL INNOVATION AND CUSTOMER ENGAGEMENT IN E- COMMERCE PLATFORM

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ABSTRACT

Objective: This study aims to analyze the influence of a disruptive marketing strategy on value co-creation through chain mediation, involving business model innovation and customer engagement, in the context of e-commerce platforms.

Research Design & Methods: This study uses a quantitative explanatory design and a survey of active e-commerce users in Indonesia, particularly on platforms like Shopee. Data were collected through a Likert-scale questionnaire and analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) to test direct and indirect relationships between variables.

Findings: The results show that a disruptive marketing strategy has a positive and significant effect on business model innovation, customer engagement, and value co-creation. Furthermore, business model innovation positively affects customer engagement, which in turn significantly affects value co-creation. Mediation analysis confirmed significant chain mediation.

Contribution: This research provides theoretical contributions by developing a conceptual framework that integrates disruptive marketing strategy, business model innovation, customer engagement, and value co-creation to explain the value creation process in digital business ecosystems more comprehensively. In addition to strengthening Service-Dominant Logic, this research also expands the Business Model Innovation literature by demonstrating the chain mediation role of business model innovation and customer engagement as a strategic mechanism that connects disruptive marketing strategy with shared value creation.

Novelty: The novelty of this research lies in testing a chain mediation model linking disruptive marketing strategy, business model innovation, and customer engagement to explain value co-creation, which is still rarely explored in the empirical literature.

Keywords: disruptive marketing strategy, business model innovation, customer engagement, value co-creation, e-commerce.

JEL codes: M31, M15, L81, D12.

Article type: research paper

INTRODUCTION

The increasingly rapid digital transformation has fundamentally changed the way companies design and implement marketing strategies. In the context of the digital economy, particularly on e-commerce platforms, marketing practices are no longer conventional and linear, but have become more dynamic, adaptive, and disruptive. Disruptive marketing strategies are characterized by the use of digital technology, data analytics, and innovative approaches such as algorithm-based personalization, real-time campaigns, and cross-platform integration, which can significantly change consumer behavior (Qasim & Khalifeh, 2025; Susanti, 2025). This phenomenon is clearly visible in the e-commerce ecosystem, where companies compete not only on product and price but also on creating unique and engaging marketing experiences for customers.

Although disruptive marketing strategies are increasingly adopted, fundamental questions remain about how they can create sustainable value for both companies and customers. In the modern marketing paradigm, value is no longer viewed as something created entirely by companies and passively consumed by customers. Instead, value is understood as the result of a process of interaction and collaboration between companies and customers, known as value co-creation (Chatterjee et al., 2022; Font et al., 2021). Thus, it is important to understand how disruptive marketing strategies can encourage active customer engagement in the value creation process.

The concept of value co-creation has been widely discussed in the marketing literature, but most research still focuses on the direct role of factors such as customer engagement, customer experience, or service quality in

influencing co-creation (Hijazi, 2022; Ribeiro et al., 2023). These studies tend to ignore the strategic role of disruptive marketing as an antecedent in the process. Furthermore, the relationship between marketing strategy and value co-creation is often assumed to be direct, without considering complex mediating mechanisms. On the other hand, strategic management literature indicates that business model innovation is a key element in creating competitive advantage in the digital era (Bell, 2024; Sewpersadh, 2023). Business model innovation enables companies to transform the way they create, deliver, and capture value, thereby responding more effectively to market changes. In the context of e-commerce, business model innovation can take the form of service integration, the use of digital platforms, and the development of ecosystems involving various actors, including customers. However, the relationship between disruptive marketing strategies and business model innovation remains underexplored empirically, particularly in terms of how the two jointly influence customer behavior.

Furthermore, customer engagement has been recognized as a crucial construct in explaining interactions between customers and companies in the digital environment (Bell, 2024; Li et al., 2023). Customer engagement reflects the level of cognitive, emotional, and behavioral involvement of customers with a brand or platform. Previous research suggests that engagement plays a crucial role in driving loyalty, advocacy, and co-creation (Nadeem et al., 2021; Nguyen, 2024). However, most studies still treat customer engagement as either an independent or a dependent variable, rather than as part of a more complex mediating mechanism in the relationship between marketing strategy and value co-creation. Furthermore, there is a significant research gap regarding the integration of three key domains—disruptive marketing strategies, business model innovation, and customer engagement—in explaining value co-creation. Most studies still examine these variables separately, thereby failing to provide a comprehensive understanding of how value creation unfolds holistically within the digital ecosystem. Furthermore, empirical research testing the serial mediation model in this context remains very limited, particularly in developing countries such as Indonesia.

The Indonesian context is interesting to study due to the rapid growth of e-commerce and the high adoption of digital technology by the public. Indonesian consumers are known to engage heavily with digital platforms, including leaving reviews, sharing experiences, and participating in various online activities. This indicates significant potential for value co-creation. However, there is limited research that specifically examines how disruptive marketing strategies on Indonesian e-commerce platforms can drive customer engagement and shared value creation.

This study offers novelty by developing a conceptual model that integrates disruptive marketing strategies, business model innovation, and customer engagement within a comprehensive analytical framework. Specifically, this study proposes that the influence of disruptive marketing strategies on value co-creation is not direct, but rather mediated through a chain of business model innovation and customer engagement. This approach provides a new perspective on the mechanisms by which marketing strategies can generate value through business system transformation and customer engagement. Furthermore, this study also makes a theoretical contribution by expanding the application of Service-Dominant Logic (Vargo et al., 2010), which emphasizes the importance of interaction and collaboration in value creation. By integrating concepts from the marketing, strategic management, and consumer behavior literatures, this study seeks to bridge the gap between these disciplines, which have often remained separate. The main objective of this study is to empirically test the influence of disruptive marketing strategies on value co-creation, mediated by business model innovation and customer engagement, in the context of e-commerce platforms.

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Service-Dominant Logic (S-D Logic)

This study adopts the Service-Dominant Logic framework, which emphasizes that value is not created unilaterally by a company, but rather through interactions between various actors, particularly customers and the company (Vargo et al., 2010). In this perspective, customers are no longer passive objects but rather co-creators of value who play an active role in the value-creation process. S-D Logic emphasizes that the primary source of competitive advantage is a company's ability to integrate resources and build meaningful interactions with customers. In the digital context, these interactions are facilitated by platform technologies that enable two-way communication, personalization, and customer participation in various marketing activities (Lemon & Verhoef, 2016). Therefore, disruptive marketing strategies, business model innovation, and customer engagement can be understood as interrelated mechanisms in driving value co-creation.

Several studies from reputable international journals have strengthened the argument that digital-based marketing strategies play an important role in encouraging customer participation and collaborative value creation. Research by Siaw & Sarpong, (2021) explains that digital interaction enables firms to build service ecosystems that facilitate resource integration and collaborative value creation. Furthermore, disruptive marketing practices supported by digital platforms can accelerate organizational adaptation and encourage firms to redesign their business models to remain competitive in rapidly changing markets. Platform business models remove time/space barriers, use data-intensive software, and reconfigure producer–consumer interactions, rapidly disrupting traditional markets and forcing incumbents to “survive” by changing strategies and offerings (Agyei-Boapeah et al., 2022). Other research shows that business model innovation enables companies to create new forms of customer interaction, improve service personalization, and strengthen engagement through digital ecosystems. Digital

transformation through business model innovation enables companies to better understand customer needs and create highly personalized value propositions, including engaging customers in value co-creation (e.g., through smart apps, 3D printing, crowdsourcing) (Vaska et al., 2021). These findings indicate that disruptive marketing strategy and business model innovation are essential antecedents in enhancing customer engagement and value co-creation within digital business environments.

However, previous studies also present antithetical findings regarding the effectiveness of digital marketing strategies and business model innovation in creating value co-creation. Several scholars argue that the implementation of disruptive marketing strategies does not always lead to positive customer engagement outcomes because excessive digitalization may reduce trust, create information overload, and weaken emotional relationships between firms and customers (Kim & Yang, 2024; Urdea et al., 2021). In addition, some studies suggest that business model innovation may fail to enhance value co-creation if firms are unable to align technological transformation with customer expectations and organizational capabilities (Trischler & Li-Ying, 2023; Volberda et al., 2021). These inconsistencies indicate that the relationship between disruptive marketing strategy and value co-creation is not purely direct or linear, but involves more complex organizational and behavioral mechanisms. Therefore, this study proposes that business model innovation and customer engagement serve as serial mediators linking disruptive marketing strategies to shared value creation. Through this integrated framework, this study provides a more comprehensive explanation of how digital marketing strategies can be transformed into sustainable value creation processes through business model transformation and active customer engagement.

Disruptive Marketing Strategy and Value Co-Creation

In the digital era, companies are required to develop more innovative, adaptive, and technology-based marketing strategies to create more interactive relationships with customers. Disruptive marketing strategy refers to a marketing approach that utilizes digital technology, customer data, social media, and real-time interactions to create a more personalized and participatory customer experience. From a Service-Dominant Logic perspective, value is no longer generated unilaterally by the company, but is formed through a collaborative process between the company and customers (Schmidt et al., 2026). Therefore, implementing a disruptive marketing strategy allows customers to be actively involved in the communication, evaluation, and development of the company's products and services. Disruptive marketing strategies also create a more open and dynamic interaction space, encouraging customers to participate in the process of creating shared value or value co-creation.

Disruptive marketing strategies can increase value co-creation because they strengthen two-way interactions between companies and customers through the use of digital platforms (Lei et al., 2022). When companies are able to deliver more personalized, interactive, and experience-based marketing, customers tend to feel a stronger sense of attachment to the company and are encouraged to actively contribute to business activities. Customers act not only as end consumers but also as co-creators who participate in the creation of experiences, ideas, and product innovations. Therefore, the more effectively a company implements a disruptive marketing strategy, the greater the opportunity for value co-creation within the digital business ecosystem.

Several previous studies support the relationship between disruptive marketing strategy and value co-creation. Research by Lu & Chen, (2024) shows that digital interactions and customer experiences built through technology platforms can increase customer participation in the value creation process. Furthermore, research by Chatterjee et al., (2022) confirms that marketing strategies based on customer interaction and collaboration are important factors in creating value co-creation. Other studies also show that digital marketing and engagement-oriented marketing can increase customer involvement in company activities, thereby strengthening the process of shared value creation (C. L. Wang, 2021). Based on the theoretical explanation and the results of previous research, the hypotheses proposed in this study are as follows:

H1: Disruptive marketing strategies have a positive effect on value co-creation.

Disruptive Marketing Strategy and Business Model Innovation

Disruptive marketing strategies are innovative approaches that leverage digital technology to transform how companies interact with customers, such as personalization algorithms, data-driven campaigns, and real-time marketing (Kobets, 2024). These strategies not only affect marketing activities but also drive more fundamental changes in a company's business model. According to Zang et al., (2024), business model innovation is the process of redefining how a company creates, delivers, and captures value. In the context of e-commerce, disruptive marketing strategies often encourage companies to adopt platform-based business models, ecosystems, and integrated digital services (Gawer, 2022). In other words, marketing innovation triggers business model transformation. Previous research has shown that companies that aggressively adopt digital strategies tend to be more capable of business model innovation (Chen et al., 2024). This is due to the need to adapt organizational structures, operational processes, and value propositions to align with digital market dynamics. Based on these arguments, the following hypothesis is proposed:

H2: Disruptive marketing strategies have a positive effect on business model innovation.

Business Model Innovation and Customer Engagement

Business model innovation impacts not only operational efficiency and revenue but also customer experience and engagement. Innovative business models enable companies to create interactive ecosystems that facilitate customer participation in various activities, such as reviews, feedback, and collaboration (Troisi et al., 2023). Customer engagement is defined as the level of cognitive, emotional, and behavioral involvement of customers with a brand or platform (Barrett et al., 2025). In the digital environment, engagement becomes increasingly important because customers have numerous choices and can easily switch to other platforms. Research shows that business model innovations that focus on customer experience, ease of access, and interactivity can significantly increase engagement (Suh, 2026). For example, integrating features such as live chat, personalized recommendations, and rating systems can encourage more active customer interaction. Therefore, the following hypothesis is proposed:

H3: Business model innovation positively affects customer engagement.

Customer Engagement and Value Co-Creation

Customer engagement is a key determinant of the value co-creation process. Actively engaged customers tend to participate in various activities that contribute to value creation, such as providing feedback, sharing experiences, and collaborating on product development (Hien & Luu, 2026). According to Stojčić et al., (2024), user engagement through customisation and co-creation significantly promotes product innovation success across development, positioning, and commercialization stages. Value co-creation occurs when customers voluntarily contribute to the value creation process through interactions with the company. Engagement is a crucial prerequisite because, without high levels of engagement, customers lack the motivation to actively participate. Empirical research also shows that engagement is significantly and positively related to various forms of co-creation, including advocacy, feedback, and collaborative behavior (Sundararajan et al., 2025). Therefore, the higher the level of engagement, the greater the likelihood of value co-creation. Based on this description, the following hypothesis is proposed:

H4: Customer engagement positively affects value co-creation.

The Role of Chain Mediation: Business Model Innovation and Customer Engagement

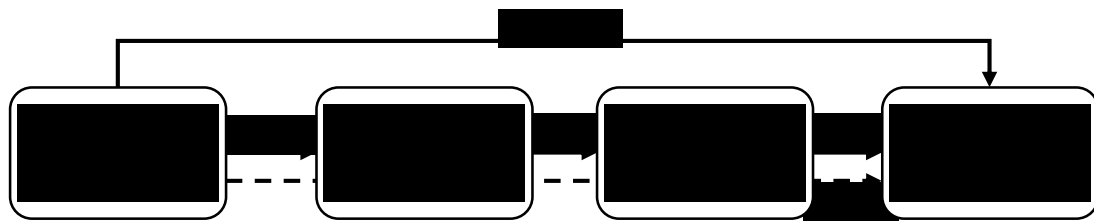
This study proposes that the relationship between disruptive marketing strategy and value co-creation is mediated through a chain of relationships involving business model innovation and customer engagement. This means that a disruptive marketing strategy first drives business model innovation, which then increases customer engagement and ultimately results in value co-creation. This chain mediation approach provides a more comprehensive understanding than a single mediation model because it captures the transformation process occurring simultaneously at the organizational and individual levels. According to Benzidia et al., (2021), a chain mediation model allows researchers to identify more complex and realistic pathways of influence. In this context, a disruptive marketing strategy does not directly create value, but rather through changes in business systems and customer behavior. This aligns with the Service-Dominant Logic perspective, which emphasizes the importance of interaction and resource integration in value creation. Disruptive marketing strategy encourages firms to adopt more adaptive, technology-driven, and customer-oriented marketing approaches (da Silva & Cardoso, 2025). The implementation of digital personalization, social media interaction, real-time campaigns, and platform-based communication requires firms to redesign their business systems in order to remain competitive and responsive to changing customer expectations. Consequently, firms are encouraged to undertake business model innovation by developing new mechanisms for value creation, delivery, and capture. Innovative business models supported by digital platforms allow firms to create more interactive customer experiences, facilitate customer participation, and strengthen relationship quality. In this regard, business model innovation functions as an organizational mechanism that transforms disruptive marketing practices into customer-centered business processes.

Furthermore, business model innovation is expected to enhance customer engagement because innovative business systems provide customers with greater opportunities to interact, communicate, and participate in the firm's activities. Features such as personalized recommendations, interactive services, live commerce, digital communities, and feedback systems enable customers to become more emotionally and behaviorally connected with the company. Higher customer engagement subsequently increases the likelihood of value co-creation because engaged customers tend to actively contribute ideas, experiences, and feedback that support collaborative value creation. Within the S-D Logic perspective, customers are viewed as operant resources who actively participate in creating value rather than merely consuming products or services. Therefore, customer engagement becomes a critical behavioral mechanism linking business model innovation with value co-creation.

Several previous studies support the proposed chain mediation relationship. Research conducted by Ancillai et al. (2023) and Z. Wang et al. (2023) demonstrates that digital transformation and innovative business models enable firms to improve customer interaction and adaptability in dynamic markets. Additionally, studies by Sashi (2021) reveal that customer engagement plays a significant role in strengthening collaborative relationships

between firms and customers in digital environments. In business networks, digital communication enables real-time interactive contact across organizations, helping individuals share task information, build trust and commitment, and jointly create superior customer value. Meanwhile, Cui et al. (2022) emphasize that value co-creation emerges through interactive processes involving resource integration and customer participation. Despite these findings, prior studies generally examine these relationships separately and rarely integrate disruptive marketing strategy, business model innovation, customer engagement, and value co-creation into a single sequential mechanism. Therefore, this study attempts to fill this gap by proposing a chain mediation model that explains how disruptive marketing strategy can indirectly enhance value co-creation through business model innovation and customer engagement. Based on the theoretical arguments and empirical findings above, the following hypothesis is proposed:

H5: Business Model Innovation and Customer Engagement sequentially mediate the relationship between Disruptive Marketing Strategy and Value Co-Creation.



METHODS

This study uses a quantitative approach with an explanatory design that aims to test the causal relationship between variables in the developed conceptual model, namely the influence of disruptive marketing strategy on value co-creation through the chain mediation of business model innovation and customer engagement. The population of this study were individuals who are active users of e-commerce platforms in Indonesia, especially those who have experience in interacting with various digital features such as algorithm-based promotions, content personalization, product reviews, and other interactive activities on platforms such as Shopee. The sampling technique used was non-probability sampling with a purposive sampling approach, namely selecting respondents based on certain criteria that are in accordance with the research objectives. The respondent criteria include: (1) having made transactions at least two to three times in the last three months, (2) having interacted with platform features, and (3) being at least 17 years old.

The sample size in this study follows the Partial Least Squares-based Structural Equation Modeling (PLS-SEM) analysis guidelines recommended by Hair et al. (2019). Based on the 5-to-10-times rule, the minimum sample size is determined by the largest number of indicators or the number of structural paths leading to a variable. Given the complexity of the model, which involves multiple latent constructs and chain-mediated relationships, the sample size was 163 respondents. Data collection was conducted by distributing a structured online questionnaire via a survey platform such as Google Forms. This method was chosen because it is efficient and well-suited to respondents who are active users of digital technology. The research instrument was constructed using a five-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree), which is commonly used in consumer behavior research to measure respondents' perceptions, attitudes, and levels of agreement with the statements. Prior to the distribution of the main questionnaire, a pilot test was conducted with 30 respondents to ensure language clarity, initial validity, and instrument reliability.

The variables in this study were measured using indicators adapted from previous research and validated in the international literature. Disruptive marketing strategy (DMS) was measured using indicators reflecting technology-based marketing innovation, personalization, and interactivity in digital campaigns, which have been shown to be key characteristics of modern marketing in the digital environment (Athaide et al., 2025; Pascucci et al., 2023). Furthermore, business model innovation (BMI) was measured through the company's ability to create, deliver, and capture value in new ways, including service integration and utilization of digital platforms, as stated in the strategic literature (Salfore et al., 2023; Vaska et al., 2021). Meanwhile, customer engagement (CE) was measured across cognitive, emotional, and behavioral dimensions that reflect the level of customer involvement with the platform or brand, a multidimensional construct recognized in marketing research (Behnam et al., 2021; Roy et al., 2023). Value co-creation (VCC) is measured by the extent of active customer participation in providing feedback, sharing experiences, and contributing to service quality improvements, which constitutes a tangible form of collaborative interaction between customers and companies (Chatterjee et al., 2022; Solakis et al., 2022).

The data analysis technique used was Partial Least Squares-based Structural Equation Modeling (PLS-SEM). The analysis was conducted in two main stages: measurement model evaluation and structural model evaluation. In the measurement model evaluation stage, convergent validity was tested using outer loading values (>0.70) and Average Variance Extracted (AVE >0.50), as well as discriminant validity using the Fornell-Larcker criteria and

the HTMT ratio (<0.90). Construct reliability was tested using Cronbach's Alpha and Composite Reliability values, which are expected to exceed 0.70.

RESULT

Based on the descriptive statistics presented in Table 1, the majority of respondents in this study were male, with 108 respondents (66.26 percent), while female respondents numbered 55 (33.74 percent). In terms of education level, most respondents had secondary to higher education, with a predominance of high school graduates (82 respondents; 50.31 percent), followed by undergraduate graduates (69 respondents; 42.33 percent), and postgraduates (12 respondents; 7.36 percent). This composition indicates that the majority of business actors in the study have a relatively adequate level of education to understand business management, business decision-making, and the use of technology and information in their business activities. In addition, the age distribution of respondents is dominated by the productive age group, namely those aged 25-30 years, with 69 respondents (42.33 percent), and those aged 31-35 years, with 46 respondents (28.22 percent). This finding indicates that most respondents are in a productive age phase and are adaptive to changes in the business environment and the development of business digitalization. In terms of business age, the majority of respondents (118, or 72.39 percent) operated businesses between 1 and 5 years old, followed by businesses between 6 and 10 years old at 12.88 percent. Meanwhile, businesses older than 15 years only accounted for 2.45 percent. This indicates that most of the businesses studied are still in the early growth stage, and therefore tend to be dynamic and adaptable to market changes.

Table 1 Descriptive statistics

Characteristic	<i>N</i>	<i>percen</i>
Gender		
Male	108	66.26
Female	55	33.74
Education		
Elementary School	-	
Junior High School	-	
High School	82	50.31
Bachelor's Degree	69	42.33
Postgraduate Degree	12	7.36
Age		
Less than 25 years	21	12.88
Between 25 and 30 years	69	42.33
Between 31 and 35 years	46	28.22
Between 36 and 40 years	13	7.98
More than 40 years	14	8.59
Business Age		
Less than 1 year	8	4.91
Between 1 - 5 years	118	72.39
Between 6 - 10 years	21	12.88
Between 11 - 15 years	12	7.36
More than 15 years	4	2.45

Source: data proceed, 2026

The results of the validity and reliability tests presented in Table 2 indicate that all constructs in this study have met the criteria recommended in Partial Least Squares Structural Equation Modeling. The Cronbach's alpha value for each variable is in the range of 0.683–0.818, while the composite reliability ranges from 0.685–0.836, indicating that all constructs have an adequate level of reliability because they have approached and exceeded the minimum limit of 0.70. In addition, the Average Variance Extracted (AVE) values for all variables range from 0.515 to 0.646, indicating that the constructs explain more than 50 percent of the variance in their indicators and meet the convergent validity criteria. The outer loading values for each indicator also show good results, ranging from 0.645 to 0.875, indicating that the indicators have an adequate ability to reflect the latent construct being measured. Furthermore, the adjusted R-square values indicate that the model explains 63.9 percent of the variance in Business Model Innovation, 67.0 percent in Customer Engagement, and 62.4 percent in Value Co-Creation. These results suggest that the model possesses substantial explanatory power for the endogenous variables examined in this study.

Table 2 Validity and Reliability tests

Variables	Cronbach's alpha	Composite reliability	AVE	Outer Loading	R-square adjusted
Disruptive Marketing Strategy	0.764	0.775	0.585	DMS3 (0.673) DMS6 (0.807)	

Variables	Cronbach's alpha	Composite reliability	AVE	Outer Loading	R-square adjusted
Business Model Innovation	0.683	0.685	0.515	BMI5 (0.645) BMI4 (0.777)	0.639
Customer Engagement	0.714	0.719	0.536	CE8 (0.694) CE2 (0.779)	0.670
Value Co-Creation	0.818	0.836	0.646	VCC4 (0.744) VCC2 (0.875)	0.624

Source: data proceed, 2026

Table 3 Model fit

Measurement	Saturated model	Estimated model
SRMR	0.075	0.077
NFI	0.805	0.807

Source: data proceed, 2026

The results of the model fit test presented in Table 3 indicate that the research model has a good and acceptable level of fit. The SRMR value for the saturated model is 0.075 and the estimated model is 0.077, both below the cut-off limit of 0.08, indicating that the model is able to represent empirical data well and has low residuals. Meanwhile, the NFI value of 0.805 for the saturated model and 0.807 for the estimated model indicates an acceptable level of model fit. Based on the SRMR and NFI values, this research model is considered feasible and meets the goodness-of-fit criteria for use in further analysis.

Table 4 Fornel-lecker

Variables	BMI	CE	DMS	VCC
Business Model Innovation (BMI)	0.717			
Customer Engagement (CE)	0.688	0.732		
Disruptive Marketing Strategy (DMS)	0.665	0.576	0.765	
Value Co-Creation (VCC)	0.474	0.502	0.635	0.804

Source: data proceed, 2026

Table 5 Heterotrait-monotrait ratio (HTMT)

Relationship between variables	Heterotrait-monotrait ratio (HTMT)
Customer Engagement <-> Business Model Innovation	0.879
Disruptive Marketing Strategy <-> Business Model Innovation	0.814
Disruptive Marketing Strategy <-> Customer Engagement	0.762
Value Co-Creation <-> Business Model Innovation	0.632
Value Co-Creation <-> Customer Engagement	0.627
Value Co-Creation <-> Disruptive Marketing Strategy	0.772

Source: data proceed, 2026

The results of the discriminant validity test using the Fornell-Larcker criteria in Table 4 and the Heterotrait-Monotrait Ratio (HTMT) in Table 5 indicate that all constructs in this study have met the requirements of discriminant validity. Based on the Fornell-Larcker criteria, the square root of the Average Variance Extracted (AVE) value for each construct, namely Business Model Innovation (0.717), Customer Engagement (0.732), Disruptive Marketing Strategy (0.765), and Value Co-Creation (0.804), is higher than the correlation value between other constructs. This finding indicates that each construct is better able to explain its own indicators than other constructs in the model. In addition, the HTMT results indicate that all correlation values between variables are below the 0.90 threshold, with the highest being 0.879 for the relationship between Customer Engagement and Business Model Innovation. This value confirms the absence of multicollinearity or conceptual overlap among constructs. Thus, the results of the Fornell-Larcker and HTMT tests demonstrate that the research model has good discriminant validity, allowing all constructs to be declared valid and suitable for further structural analysis using Partial Least Squares Structural Equation Modeling.

Table 6 Hypothesis Testing Result

Relationship between variables	f-square	Original sample	T statistics	P values
Disruptive Marketing Strategy -> Value Co-Creation	0.315	0.518	4.602	0.000
Disruptive Marketing Strategy -> Business Model Innovation	0.793	0.665	12.565	0.000
Business Model Innovation -> Customer Engagement	0.900	0.688	14.037	0.000
Customer Engagement -> Value Co-Creation	0.409	0.542	8.647	0.000

Source: data proceed, 2026

The results of the hypothesis testing presented in Table 6 show that all relationships between variables in this study have a positive and significant influence. Disruptive Marketing Strategy is proven to have a positive effect on Value Co-Creation with an original sample value of 0.518, a t-statistic value of 4.602, and a p-value of 0.000. These results indicate that the better the implementation of disruptive marketing strategies, the higher the company's ability to create shared value with customers. In addition, Disruptive Marketing Strategy also has a strong positive influence on Business Model Innovation with a path coefficient of 0.665, a t-statistic of 12.565, and a p-value of 0.000. These findings indicate that innovative and adaptive marketing strategies can encourage companies to develop business models that are more flexible, creative, and in line with market dynamics.

Furthermore, Business Model Innovation is proven to have a positive and significant effect on Customer Engagement with an original sample value of 0.688, t-statistics of 14.037, and p-values of 0.000. These results indicate that effective business model innovation can increase customer engagement by creating more relevant experiences and interactions. On the other hand, Customer Engagement also has a positive effect on Value Co-Creation with a path coefficient of 0.542, t-statistics of 8.647, and p-values of 0.000, which indicates that the higher the customer engagement, the greater the opportunity for creating value collaboration between the company and customers. In addition to the significance of the relationship, the f-square value shows that all variables have a moderate to large effect on endogenous variables, especially on the influence of Business Model Innovation on Customer Engagement (0.900) and Disruptive Marketing Strategy on Business Model Innovation (0.793). Thus, all hypotheses in this study are acceptable and support the proposed conceptual model.

Table 7 Indirect Effect

Relationship between variables	Original sample	T statistics	P values
Disruptive Marketing Strategy -> Business Model Innovation -> Customer Engagement	0.458	8.155	0.000
Business Model Innovation -> Customer Engagement -> Value Co-Creation	0.403	8.015	0.000
Disruptive Marketing Strategy -> Business Model Innovation -> Customer Engagement -> Value Co-Creation	0.293	4.756	0.000

Source: data proceed, 2026

The results of the indirect effect test in Table 7 show that all mediation relationships in this study have a positive and significant influence. Disruptive Marketing Strategy is proven to have an indirect influence on Customer Engagement through Business Model Innovation with an original sample value of 0.458, t-statistics of 8.155, and p-values of 0.000. These findings indicate that the implementation of disruptive marketing strategies can increase customer engagement through the development of business model innovations that are more adaptive and relevant to market needs. In other words, Business Model Innovation acts as a mediator that drives the relationship between disruptive marketing strategies and customer engagement. In addition, Business Model Innovation also has a significant indirect influence on Value Co-Creation through Customer Engagement with an original sample value of 0.403, t-statistics of 8.015, and p-values of 0.000. These results indicate that effective business model innovation can increase shared value creation by increasing customer involvement in the company's business activities.

The results of the study also show a serial mediation effect on the relationship between Disruptive Marketing Strategy and Value Co-Creation through Business Model Innovation and Customer Engagement with an original sample value of 0.293, t-statistics of 4.756, and p-values of 0.000. These findings confirm that disruptive marketing strategies not only directly influence shared value creation, but also work through the mechanisms of business model innovation and increasing customer engagement simultaneously. Thus, Business Model Innovation and Customer Engagement are proven to play a strategic role as mediating variables in strengthening the shared value creation process in organizations. These results also emphasize the importance of integrating innovative marketing strategies, business model development, and customer engagement in creating competitive advantage and business sustainability.

DISCUSSION

The results of this study indicate that all proposed hypotheses are empirically accepted, thus providing strong support for the conceptual model that integrates disruptive marketing strategy, business model innovation, customer engagement, and value co-creation in the context of e-commerce platforms. These findings not only strengthen the validity of the theoretical framework used but also provide a more comprehensive understanding of the value creation mechanisms in the increasingly complex digital marketing environment. Specifically, the results of this study confirm that disruptive marketing strategy plays a crucial role as an initial trigger in the transformation process that culminates in the creation of shared value between companies and customers.

Disruptive marketing strategy and value co-creation

This study found that disruptive marketing strategies have a direct and significant impact on value co-creation. These findings indicate that innovative, adaptive, and digitally interactive marketing strategies can

increase customer engagement in the value co-creation process. In the digital era, companies no longer focus solely on conventional promotional activities but also create more personalized, interactive, and participatory customer experiences through the use of social media, digital platforms, artificial intelligence, and community-based marketing approaches. These conditions enable customers to actively engage in providing feedback, sharing experiences, and contributing to the development of the company's products and services (Schmidt et al., 2026). Thus, disruptive marketing strategies can create stronger collaborative relationships between companies and customers, enabling a more effective value co-creation process.

The direct influence of disruptive marketing strategies on value co-creation in this study can also be explained based on the characteristics of respondents, who were predominantly business owners of productive age and had relatively good levels of education. The majority of respondents were between the ages of 25–30 and 31–35, indicating that most business owners belong to a generation that is more adaptable to digital technology developments and changes in consumer behavior. This condition allows business owners to more easily implement disruptive marketing strategies such as social media-based marketing, live streaming, personalized marketing, and real-time digital interactions. Furthermore, the predominance of respondents with high school and college degrees indicates that business owners have a fairly good capacity to understand the importance of marketing innovation and customer engagement in creating shared value. With these characteristics, disruptive marketing strategies are more effective in encouraging customers to actively participate in the value co-creation process.

In addition to age and education, the age characteristics of the businesses also strengthen the relationship between disruptive marketing strategies and value co-creation. The majority of businesses in this study were between 1 and 5 years old, indicating that most businesses are still in the early stages of growth and tend to be more flexible in adopting marketing innovations than more established businesses. Relatively young businesses generally have a higher orientation towards market exploration, the use of digital technology, and building closer relationships with customers. Under these conditions, implementing disruptive marketing strategies becomes an important instrument for building intensive interactions with customers and creating more personalized and collaborative experiences (Lei et al., 2022). Therefore, the characteristics of this study sample support the finding that disruptive marketing strategies can directly increase value co-creation by increasing customer participation and involvement in the company's business activities.

Disruptive Marketing Strategy and Business Model Innovation

The research results show that disruptive marketing strategies have a positive and significant impact on business model innovation. This finding aligns with the view that innovations in marketing, particularly those based on digital technology, not only impact promotional activities but also drive more fundamental changes in how companies create and deliver value. Disruptive marketing strategies such as data-driven personalization, real-time campaigns, and cross-platform integration require companies to adapt their business models to be more flexible, responsive, and customer-oriented (Kobets, 2024). The research findings reinforce the argument that marketing is no longer merely an operational function but has become a key driver of business model transformation (Chen et al., 2024). Thus, companies that are able to effectively implement disruptive marketing strategies will be more likely to undertake sustainable business model innovation.

The positive influence of disruptive marketing strategy on business model innovation in this study can also be attributed to the characteristics of the respondents, who were predominantly young entrepreneurs and businesses still in the early stages of growth. The majority of respondents were in the productive age range of 25–35 years and had secondary to undergraduate education, thus tending to be more open to the use of digital technology, marketing innovation, and changes in more modern business patterns. Furthermore, the dominance of businesses aged 1–5 years indicates that most companies are still in the market exploration and development phase, thus having greater flexibility in adjusting their business models compared to established companies. This condition allows companies to more quickly adopt disruptive marketing strategies such as social media-based marketing, the use of customer data, and digital platform integration, which ultimately encourages the emergence of business model innovations that are more customer-oriented and adaptive to market dynamics. Thus, the characteristics of the research sample reinforce the finding that disruptive marketing strategy is a crucial factor in driving the transformation and innovation of companies' business models.

Business Model Innovation and Customer Engagement

The research findings also indicate that business model innovation has a positive effect on customer engagement. This suggests that innovations in business models, such as the integration of digital services, improved user experience, and the development of platform ecosystems, can significantly increase customer engagement. This finding is consistent with previous research that suggests that a customer-experience-oriented business model can create more intense and meaningful interactions between customers and companies (Barrett et al., 2025; Suh, 2026; Troisi et al., 2023). In the context of e-commerce, business model innovation often manifests itself in interactive features such as recommendation systems, live commerce, and feedback mechanisms, which enable customers to actively participate in the platform ecosystem. Therefore, the results of this study confirm that business model innovation not only impacts company performance but also plays a crucial role in building stronger relationships with customers through increased engagement.

The positive influence of business model innovation on customer engagement in this study can also be understood through the characteristics of the respondents, who were predominantly young entrepreneurs with relatively high levels of education and businesses that were still developing. The predominance of respondents in the productive age group indicates that entrepreneurs have a high ability to adapt to developments in digital technology and changes in consumer behavior, making it easier to implement digital platform-based business model innovations. Furthermore, the education level, dominated by high school graduates and undergraduates, allows entrepreneurs to have a better understanding of the importance of customer experience in increasing business competitiveness. The characteristics of businesses, which were mostly 1–5 years old, also indicate that companies are still in the growth stage and tend to be more flexible in developing interactive and customer-oriented service features, such as live interaction, digital feedback systems, and personalized recommendations. These conditions encourage more intensive interactions between companies and customers, resulting in customers becoming more actively involved in platform activities and business communication processes. Thus, the characteristics of the research sample reinforce the finding that business model innovation is a crucial factor in increasing customer engagement sustainably.

Customer Engagement and Value Co-Creation

The results of the study indicate that customer engagement has a significant positive influence on value co-creation. This finding reinforces the literature emphasizing that customer engagement is a key prerequisite in the process of shared value creation (Stojčić et al., 2024; Sundararajan et al., 2025). Customers with high levels of engagement tend to be more active in providing feedback, sharing experiences, and contributing to service or product development. From a Service-Dominant Logic perspective, this type of interaction is the core of the co-creation process, where value is no longer generated unilaterally by the company, but through collaboration between various actors (Hien & Luu, 2026). Thus, this finding suggests that a company's efforts to increase customer engagement will have a direct impact on increasing value co-creation.

The positive influence of customer engagement on value co-creation in this study can also be explained by the characteristics of the respondents, who were predominantly young entrepreneurs and relatively newly established businesses. The majority of respondents were in the productive age group of 25–35 years, who are generally more active in utilizing digital technology and social media as a means of interacting with customers. This condition allows for more intensive, responsive, and participatory communication between companies and customers. Furthermore, the respondents' educational level, which was predominantly high school graduates and undergraduates, indicates that entrepreneurs have a fairly good understanding of the importance of building sustainable customer relationships through active customer involvement in business activities. The characteristics of businesses, which were mostly 1–5 years old, also indicate that companies are still in the market development stage, so they tend to be more open to receiving customer input, ideas, and participation to improve the quality of services and products. In this context, customer engagement is a strategic factor that can strengthen the value co-creation process because customers act not only as end users but also as collaborative partners in creating shared value for the company.

The Role of Chain Mediation: Business Model Innovation and Customer Engagement

The most significant finding of this study is the proven serial mediation role of business model innovation and customer engagement in the relationship between disruptive marketing strategy and value co-creation. These results indicate that the influence of disruptive marketing strategy on value creation does not occur instantly, but rather through a gradual process involving business model transformation and increased customer engagement. In other words, disruptive marketing strategy first drives innovation in the business model, which then creates a conducive environment for increased customer engagement, and ultimately results in value co-creation. These findings make an important contribution to the literature by demonstrating that the relationships between variables in digital marketing are complex and cannot be explained by a simple linear model. The results of this study provide empirical support for Service-Dominant Logic, which emphasizes the importance of interaction and collaboration in value creation (da Silva & Cardoso, 2025). By integrating concepts from marketing, strategic management, and consumer behavior, this study successfully demonstrates that value creation in a digital context is the result of a multidimensional process involving strategy, systems, and behavior.

The findings of chain mediation in this study can also be explained by the characteristics of the respondents, who were predominantly young entrepreneurs with relatively new businesses. The majority of respondents were in the productive age range and had a relatively good level of education, thus tending to be more adaptive to digital transformation and changes in consumer interaction patterns. These conditions enable companies to more easily implement disruptive marketing strategies through the use of social media, digital platforms, and data-driven marketing approaches. Disruptive marketing strategies then encourage companies to adjust and innovate their business models to be more flexible, customer-oriented, and able to create more personalized customer experiences. These business model innovations subsequently create a broader interaction space for customers to actively participate in platform activities, resulting in a significant increase in customer engagement. Thus, the characteristics of the research sample strengthen the argument that digital marketing transformation can be a trigger for business model changes and customer engagement, ultimately resulting in value co-creation.

Furthermore, the results of this study indicate that the process of creating shared value in the context of digital business is an integrated and sustainable process. Disruptive marketing strategies do not directly generate optimal value co-creation without the support of business model innovation and customer engagement as connecting mechanisms. In this context, business model innovation plays a role in building a business system capable of facilitating more effective customer interactions, while customer engagement is a behavioral factor that strengthens customer participation in the value creation process. These findings indicate that companies need to integrate innovative marketing strategies with the development of customer-driven business models to create stronger collaborative relationships. Therefore, companies that are able to simultaneously manage the linkages between disruptive marketing strategies, business model innovation, and customer engagement will have a greater opportunity to create sustainable value co-creation and enhance competitive advantage in the digital era.

CONCLUSION

This study aims to examine the role of disruptive marketing strategy in driving value co-creation through a chain mediation mechanism involving business model innovation and customer engagement in the context of e-commerce. Based on the analysis, all hypotheses in this study were proven significant. These findings indicate that disruptive marketing strategy not only has a direct impact on value creation but also works indirectly through business model transformation and increased customer engagement. Thus, value creation in a digital ecosystem is a multidimensional process and cannot be explained by a simple linear relationship. The results confirm that disruptive marketing strategy acts as an initial trigger that drives business model innovation. Business model innovation then creates a more interactive and responsive environment, thereby increasing customer engagement. Furthermore, high customer engagement is proven to be a key determinant in driving value co-creation, where customers actively participate in providing feedback, sharing experiences, and contributing to service improvements. Furthermore, the research findings also indicate that the indirect effect through chain mediation is stronger than the direct effect, highlighting the importance of understanding the process mechanisms underlying the relationships between variables.

This research makes a significant contribution to the development of Service-Dominant Logic by providing empirical evidence that value creation results from the dynamic interaction between strategy, business systems, and customer behavior. This research also expands the literature on business model innovation by positioning it as a mediating variable linking marketing strategy and customer engagement, a previously rarely empirically tested variable. Furthermore, the integration of digital marketing, strategic management, and consumer behavior perspectives within a chain mediation model provides a more comprehensive approach to understanding the value co-creation process in the digital era.

The findings of this research offer important implications for businesses, particularly e-commerce companies like Shopee. First, companies need to view disruptive marketing strategies as strategic tools capable of driving business model innovation, not merely promotional activities. Therefore, the implementation of digital technology, personalization, and interactivity in marketing must be integrated with the development of more adaptive and customer-centric business models. Second, companies need to prioritize increasing customer engagement through the creation of interactive, personalized, and emotional experiences, as customer engagement has been shown to be key to driving value co-creation. Third, companies need to adopt a collaborative approach by providing platforms that enable customers to actively participate in the value creation process, such as through reviews, communities, or other interactive features.

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