"Co-creation experience in Indonesian mobile commerce: A self-determination theory perspective"

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CO-CREATION EXPERIENCE IN INDONESIAN MOBILE COMMERCE: A SELF-DETERMINATION THEORY PERSPECTIVE

Abstract

Understanding customer co-creation experience in mobile commerce helps business to tailor their offerings, improves customer engagement, and cultivates long-lasting brand relationships, ultimately leading to business success in the competitive digital marketplace. Anchoring in service-dominant logic and self-determination theory framework, this study aims to investigate customers' internal stimuli as the antecedents of the co-creation experience and its impact on brand relationship behavior. An online survey was employed to gather data from 499 users of Shopee, Tokopedia, Bukalapak, and Lazada mobile commerce marketplaces in Indonesia. PLS-SEM is used to analyze the conceptual model. The results reveal that customers' internal stimuli of enabling the self and gratifying the self positively influence the co-creation experience (t-value > 1.645, p-value < 0.001). At the same time, no significant effect was found on the relationship between enriching the self and the co-creation experience. This study also confirms the role of co-creation experience in motivating continuance intention and E-WOM (t-value > 1.645, p-value < 0.001). The findings contribute to developing and validating the co-creation experience concept by demonstrating the role of customer internal stimuli in influencing the co-creation experience, thus motivating customer continuance intention and E-WOM behavior. The findings suggest the importance of the focus given by mobile commerce marketplace managers in designing mobile commerce platforms that can also meet the inner needs of users. A positive co-creation experience can enhance customer commitment and thus encourage positive E-WOM. These factors contribute to the long-term success and growth of mobile commerce platforms in an increasingly competitive market.

INTRODUCTION

The global e-commerce market was expected to surpass two trillion US dollars in 2022 with the shifting of purchasing power from the US and Europe to China and Southeast Asia, primarily due to their growing purchasing power and the widespread use of mobile devices (Statista, 2023). Indonesia emerges as a notable mobile commerce market, with 76% of the population regularly engaging in monthly purchases through mobile platforms (Price, 2023).

Customer engagement is critical to success in mobile commerce (Japutra et al., 2022). In mobile commerce, value co-creation involves the exchange of ideas, joint efforts, and incorporating shared resources to create value (Wang et al., 2023). Co-creation experience is the underpinning of value creation, which enables customers to collectively create unique and personalized experiences, unlocking

and creating new competitive advantages for a company (Prahalad & Ramaswamy, 2004). Positive co-creation experience will lead to brand relational outcomes such as continuance intention and E-WOM (Roy et al., 2019).

Scholars and marketers have identified features from mobile commerce, such as information quality, interactivity, and visual design, that positively affect users' co-creation experience (Loureiro et al., 2020). Self-determination theory suggests that an individual is motivated not only by extrinsic but also intrinsic factors (Ryan & Deci, 2020). Therefore, it is essential to understand customer internal factors that affect co-creation experience in mobile commerce. Such stimuli can facilitate consumer motivation to contribute to co-creation activities by encouraging the formation of consumer engagement in co-creation (Hsieh & Chang, 2016).

1. LITERATURE REVIEW AND HYPOTHESES

Service-dominant (S-D) concept suggests that value is co-created, interactive, and contextual through exchange between customers and companies, customers, and other actors (Vargo & Lusch, 2008). The value itself is created experientially and socially constructed (Helkkula et al., 2012). In other words, value is experiential and socially constructed, where each actor plays an interactive and collaborative role. Co-creation experience refers to the mental state individuals perceive as a result of co-creation (Zhang et al., 2015). This co-creation experience is multidimensional, consisting of learning, personal, hedonic, and social experiences (Nambisan & Baron, 2009). Learning experience is related to the acquisition and comprehension of information regarding environmental conditions; personal experience refers to the benefits derived from enhancing customer status and credibility; social experience encompasses the advantages gained through the reinforcement of relationships with other relevant actors, and hedonic experience encompasses aesthetic benefits and the enjoyment of pleasant experiences (Zhang et al., 2015).

In mobile commerce, multiple participants engage with each other and exert mutual influence. Customers and sellers, as well as customers with one another, can interact through product review columns and discussion forums, buyers can interact with courier services, and courier services can interact with sellers, which will influence one another (McLean et al., 2020).

Intrinsic motivation refers to engaging in an activity for the intrinsic contentment of the activity rather than the expected outcome (Ryan & Deci, 2000). When an individual is intrinsically motivated, they tend to engage in the activity for interest and enjoyment of the engagement with the activity itself (Tripathi, 1992). Dweck (1996) stated that there is a consensus in the psychology literature that the basis for someone's actions is their goal. The content of the goal will serve as the foundation for the direction of action (Fishbach & Ferguson, 2007). Li and Han (2021) revealed the critical role of intrinsic goal pursuit in forming emotional attachment and consumer engagement behavior. Park et al. (2006) mentioned three types of intrinsic goal pursuit: gratifying the self, related to hedonic needs fulfillment, enabling the self, associated with self-efficacy, and enriching the self, linked to the need for reflecting oneself as an ideal individual. These three goals represent different needs of intrinsic motives (Li & Han, 2021).

Literature has shown that when individuals are in an autonomous state, the likelihood of positive outcomes is more significant than when they are in a controlled state (Osei-Frimpong, 2019). Therefore, when individuals have a high level of autonomy, they will engage with a high internal motivation that facilitates cognitive, social, and personal experiences and enjoyment (Hsieh & Chang, 2016).

Shulga and Busser (2021) showed that a customer's perception of competence influences the value co-creation process. Therefore, this sense of competence will affect a person's experience in value co-creation in terms of information and understanding of product knowledge, experience in finding self-image, experience in connecting with others, and enjoyable experiences.

When individuals interact in a virtual service ecosystem, it implies that they want to establish relationships with other actors in the network. Shulga and Busser (2021) concluded that relatedness enhances value co-creation. Therefore, when individuals feel that pleasant interactions in a mobile commerce marketplace can provide a sense of connectedness, it will influence the formation of positive cognitive, personal, social, and hedonic experiences in value co-creation (Li & Han, 2021).

Continuance intention is the desire of an individual to continue using an information system (as opposed to the desire to use it for the first time) (Battacherjee, 2001). The success of a technology platform depends not only on the initial adoption by customers but also on the continuity of its usage, which plays a crucial role in maintaining its sustainability (Yan et al., 2021).

In co-creation, the service exchange is obtained through the use of resources by each actor in the service ecosystem (Vargo, 2021). Knowledge sharing and learning are some of the co-creation experiences that individuals can feel, which can improve their connection with the brand (Behnam et al., 2021), ultimately leading to the desire to reuse the platform. Enjoyment experienced by customers during co-creation activities can influence their commitment to continue using the platform in the future (Lin et al., 2020). One of the drivers of continuance to use is the interaction with other actors (Windasari et al., 2021) or social value, which is the perception of being part of a group that emphasizes the relational aspect of the interaction (Nambisan & Baron, 2009). Thus, co-creation experiences felt by customers can influence their desire to continue using the platform (Wang et al., 2023). Engaging in co-creation activities in a service ecosystem such as a mobile commerce marketplace is a pleasurable experience that can drive continued platform use.

E-WOM refers to statements, whether positive or negative, about a product or company that is accessible to a wide range of individuals and organizations via the Internet (Hennig-Thurau et al., 2004). Electronic word-of-mouth (e-WOM) facilitates the formation of connections between individuals, firms, brands, and other customers, resulting in mutual advantages for both consumers and companies and contributing significantly to the overall performance of a company (Akbari et al., 2022).

The literature suggests that one factor that drives customers to participate in E-WOM activities is their positive engagement experience, which makes them feel satisfied with the engagement quality (Luong et al., 2021). Customer engagement is an interactive elaboration involving cognitive, affective, and behavioral experiences (Loureiro et al., 2017). Prior research has indicated that factors such as credibility (Mainolfi & Vergura, 2022), congruence with self-image (Ortiz et al., 2017), feelings of belonging to a group (Mainolfi & Vergura, 2022), and enjoyable co-creation experiences (Loureiro et al., 2017) positively influence E-WOM.

Abu-Taieh et al. (2022) have shown that continuance intention positively influences E-WOM intention. Retained customers will recommend other customers to use similar products or services (Li & Liu, 2014). In the mobile commerce marketplace context, it is logical to expect loyal users to recommend the service to others. In contrast, if users have no intention of using the service again, they are less likely to promote it to others.

Although previous studies have discussed the external stimuli affecting the co-creation experience (Rachão et al., 2021; Silanoi et al., 2022), research that has delved deeper into customer internal stimuli influencing the co-creation experience remain scant. To address this gap, the present study extends self-determination theory (SDT) (Deci & Ryan, 2000) as internal stimuli affecting the co-creation experience. Therefore, the objective of this study is to assess the influence of customer internal stimuli on co-creation experience in mobile commerce. Additionally, it aims to investigate the effects of co-creation experience in promoting continuance intention and E-WOM.

Drawing upon previous research findings and the development of the research model, this study proposes the following hypotheses:

H1: *Enriching the self has a positive effect on co-creation experience.*

H2: *Enabling the self has a positive effect on co-creation experience.*

H3: *Gratifying the self has a positive effect on co-creation experience.*

H4: *Co-creation experience has a positive effect on continuance intention.*

H5: *Co-creation experience has a positive effect on E-WOM.*

H6: *Continuance intention has a positive effect on E-WOM.*

2. METHOD

All items used to measure each construct in this study employed validated measures from previous studies using a 7-point Likert scale. Measurement adapted for internal stimuli consists of enriching the self with five items, enabling the self with four items, and gratifying the self with four items from Li and Han (2021), initially developed by Park et al. (2006). The items were adjusted to the research context, which is the mobile commerce marketplace. The co-creation experience in this study is a first-order construct. Second-order constructs of learning experience were measured using eight items; personal experience has five items, social experience has five items, and hedonic experience has four items adapted from Nambisan and Baron (2009) and Verleye (2015). Three items from Battacherjee (2001) and Sthapit et al. (2020) were used to measure continuance intention. E-WOM was measured using four items from Ortiz et al. (2017).

The purposive sampling technique was employed in this study. Prior to the main study, to ensure the accuracy and consistency of the measurement, a preliminary test involving 54 samples was conducted. All reliability and validity parameters have been satisfied with KMO and Bartlett's test values > 0.7, Cronbach alpha > 0.7, and item loadings range from 0.615 to 0.897.

An online survey was administered using an electronic survey platform. Four screening questions were used to ensure appropriate samples. The study collected 499 valid responses. As shown in Table 1,

the respondents involved in this study were 58.9% male (n = 294) and 41.1% female (n = 205), comprising various professions in the age range of 17-34 years at 68.9% (n = 344), 35-54 years at 26.4% (n = 137), and above 55 years at 3.6% (n = 18).

Table 1. Demographic profile of respondents

Profile	Frequency	Percentage
Gender		
Male	205	41.1
Female	294	58.9
Respondents' most used marketplace apps		
Tokopedia	115	23.0
Shopee	358	71.7
Bukalapak	4	.8
Lazada	22	4.4
Occupation		
Board director	25	5.0
Senior level manager	19	3.8
Middle manager	36	7.2
Lower manager/supervisor	55	11.0
Professional	81	16.2
Technician	24	4.8
Administrative	60	12.0
Labor	23	4.6
Entrepreneur	51	10.2
Housewife	41	8.2
Unemployed	11	2.2
Retired	2	0.4
Others	71	14.2
Expenses per month, excluding installments		
Below USD 350	314	62.9
Between USD 350 and below USD 700	135	27.1
Between USD 700 and below USD 1400	24	4.8
Above USD 1400	26	5.2
Age		
18-24	220	44.1
25-34	124	24.8
35-44	80	16.0
45-54	57	11.4
55-64	15	3.0
65+	3	0.6
Duration of using mobile commerce apps		
Below one year	51	10.2
Between one to three years	225	45.1
Above three years	223	44.7

Note: n = 499.

Partial least square structural equation modeling (PLS-SEM) was used to measure the relationship among constructs. PLS-SEM is an approach that emphasizes causal-predictive analysis and aims to explain the variance in the dependent variables of the model (Chin et al., 2020). Co-creation expe-

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rience is a relatively still developing concept that determines the appropriateness of PLS-SEM for exploratory value (Hair et al., 2022).

Prior to analyzing the measurement, the data were examined to ensure that common method bias did not occur using the full collinearity test technique, as suggested by Kock and Lynn (2012). Table 2 shows all latent variable VIF values < 3.3, indicating the absence of common method bias. Therefore, the investigation proceeded with the measurement analysis.

Table 2. Common bias method report

Full collinearity test								
ENR	ENA	GRA	LEA	SOC	HED	PER	CON	WOM
2.001	2.345	2.992	2.373	1.743	2.214	2.283	2.183	2.283

3. RESULTS

Confirmatory composite analysis (CCA) was conducted to test the measurement validity and reliability (Hair et al., 2020). First, the composite reliability (CR) of the constructs needs to be established with a threshold value ≥ 0.7 (Hair et al., 2019). In this study, all constructs have CR values > 0.7 and Cronbach alpha values > 0.7. Therefore, the construct reliability parameters have successfully exceeded the threshold values.

Convergent validity assesses the positive correlation among indicators within a dimension. A loading factor of 0.708 and an average variance extracted (AVE) of 0.5 is acceptable (Hair et al., 2022). As presented in Appendix A, all items measuring each construct had a loading factor greater than 0.708, and the AVE for all constructs was greater than 0.5, which confirms the establishment of convergent validity.

Discriminant validity is how a particular measure is differentiated from other theoretically unrelated measures (Fornell & Larcker, 1981). The heterotrait-monotrait of ratio correlations (HTMT) method by Henseler et al. (2015) was used to test discriminant validity in PLS-SEM. Table 3 shows that all square root AVE values were less than 0.85, indicating that discriminant validity has been established.

Before testing the hypotheses (Table 4), this study analyzed the potential correlation among independent variables by examining the VIF values. As shown in Table 5, the VIF values for all independent variables were < 3. Therefore, it is concluded that there were no multicollinearity issues among the independent variables (Hair et al., 2021).

The hypotheses were analyzed by examining the values of path coefficients, variance explained, effect sizes, and t-values through a bootstrapping process of 5000 resamples. The first step was to analyze the relationship between internal stimuli and co-creation experience, followed by an analysis of the influence of co-creation experience on continuance intention and E-WOM.

Next, the value of f^2 was evaluated, which measures the size of the effect produced by independent variables regardless of the sample size (Benitez et al., 2020). This effect size can be classified into three categories: small ($0.02 < f^2 < 0.15$), medium ($0.15 < f^2 < 0.35$), and large ($f^2 > 0.35$) (Manley et al., 2021). Table 4 shows that the effect sizes of the exogenous variables range from the smallest value of 0.003 to the largest value of 0.330, indicating that the effect size of independent variables on the co-creation experience is up to medium strength. The effect size of co-creation experience as an independent variable on continuance intention and E-WOM is large,

Table 3. Discriminant validity with HTMT

		1	2	3	4	5	6	7	8	9
1	CON									
2	WOM	0.737								
3	ENA	0.498	0.512							
4	ENR	0.503	0.469	0.756						
5	GRA	0.658	0.653	0.776	0.724					
6	HED	0.777	0.742	0.533	0.506	0.785				
7	LEA	0.658	0.696	0.640	0.548	0.764	0.727			
8	PER	0.555	0.674	0.654	0.558	0.700	0.702	0.816		
9	SOC	0.464	0.569	0.547	0.454	0.607	0.628	0.632	0.776	

Table 4. Hypothesis testing results

Path	β	SD	t-value	Interval bias corrected	p-value	f²	Result
Enriching the self → Co-creation experience (H1)	0.052	0.047	1.096	(−0.025, 0.129)	0.137[n.s]	0.003	Rejected
Enabling the self → Co-creation experience (H2)	0.232	0.047	4.966	(0.155, 0.308)	0.000	0.055	Supported
Gratifying the self → Co-creation experience (H3)	0.539	0.048	11.157	(0.457, 0.617)	0.000	0.330	Supported
Co-creation experience → Continuance intention (H4)	0.623	0.033	18.855	(0.565, 0.674)	0.000	0.636	Supported
Co-creation experience → E−WOM (H5)	0.353	0.043	11.198	(0.409, 0.549)	0.000	0.334	Supported
Continuance intention → E−WOM (H6)	0.484	0.040	8.804	(0.286, 0.419)	0.000	0.178	Supported

Note: n.s = not significant.

with values of 0.636 and 0.334, respectively, while the f² value for the relationship between continuance intention and E-WOM is 0.178.

The path coefficient analysis (Figure 1, Table 4) on the relationship between internal stimuli shows a positive and significant influence of enabling the self (β = 0.232, t-value = 4.966, p-value = 0.000) and gratifying the self (β = 0.539, t-value = 11.157, p-value = 0.000) on co-creation experience while enriching the self does not affect co-creation experience (β = 0.052, t-value = 1.096, p-value > 0.05). Further analysis shows that co-creation experience positively influences continuance intention (β = 0.623, t-value = 18.855, p-value = 0.000) and E-WOM (β = 0.353, t-value = 11.198, p-value = 0.000) while continuance intention positive-

ly influences E-WOM (β = 0.484, t-value = 8.804, p-value = 0.000).

The next step is to investigate the model's coefficient of determination (R^2). This coefficient explains how much variance in the endogenous variable can be explained by all exogenous variables that are connected to the endogenous variable. R^2, also called in-sample predictive power, is the correlation value of actual and predicted values and includes all the data used in the estimation process. Table 5 presents the R^2 values of co-creation experience (0.565), continuance intention (0.389), and E-WOM (0.572). To determine the criteria for the magnitude of R^2 values, 0.25 indicates weak in-sample predictive power, 0.50 indicates moderate, and 0.75 indicates substantial (Sarstedt et al., 2014).
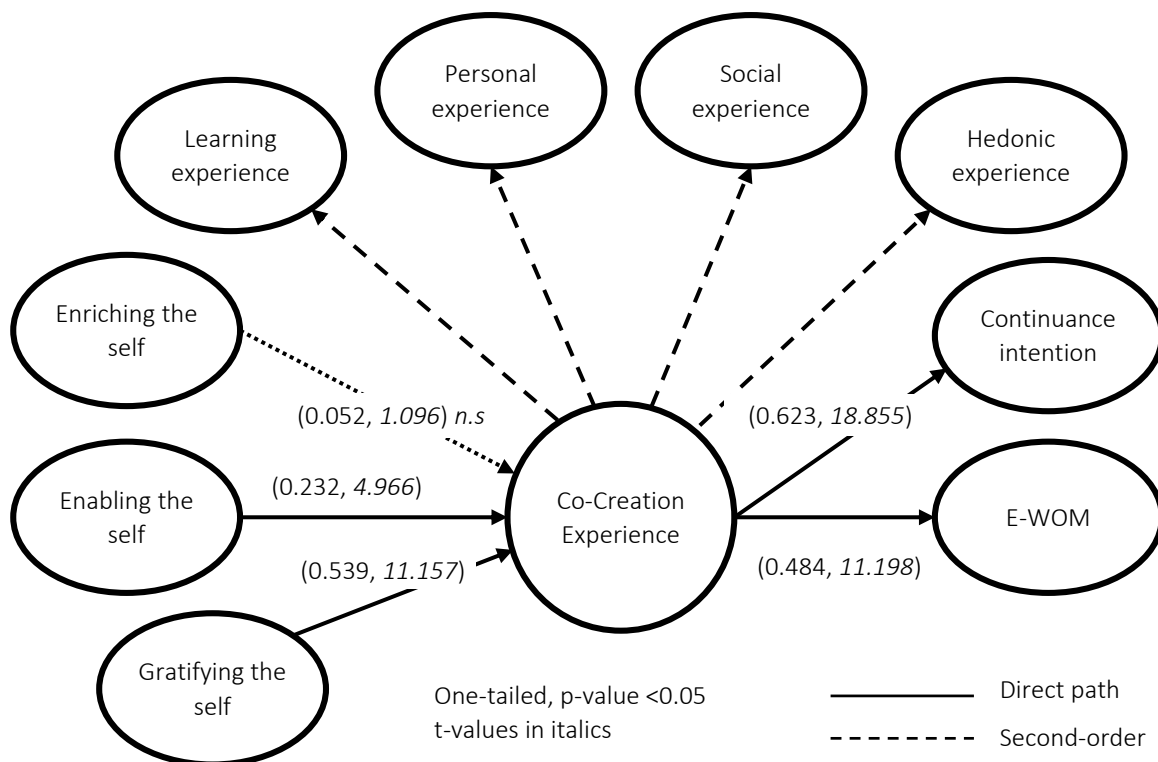

Figure 1. Conceptual model with results

Table 5. Structural analysis results

Inner model assessment	R²	Adjusted R²	VIF	Q²	Model fitness
Co-creation experience	0.565	0.562	–	0.557	–
Continuance intention	0.389	0.387	–	0.307	–
E–WOM	0.572	0.570	–	0.329	–
Enriching the self	–	–	2.242	–	–
Enabling the self	–	–	2.062	–	–
Gratifying the self	–	–	2.025	–	–
SRMR	–	–	–	–	0.087
dULS	–	–	–	–	15.624

Further, the study assessed the predictive relevance of the model to evaluate its out-sample predictive power using the PLSpredict technique, as Shmueli et al. (2019) recommended. Table 5 shows that the Q^2 predict values for all endogenous variables are above zero. Based on Hair et al.'s (2020) out-sample predictive power categories, this research model has strong predictive power because most of the PLS-SEM_RMSE values for the endogenous variable items are smaller than the LM_RMSE.

The study conducted a multigroup analysis to determine whether there were significant differences in the paths between the two major respondent groups in this study, namely the users of Tokopedia and Shopee. Multigroup analysis was performed using the approach Henseler et al. (2016) suggested, namely the three-step method of measurement invariance of composite analysis (MICOM) in PLS-SEM. MICOM analysis ensures measurement invariance or that measurement is not interpreted differently in each group of Tokopedia and Shopee users. Since the model only met the criteria for partial invariance, a full multigroup analysis was not performed. Thus, the standardized path coefficients were compared between the two groups using a multigroup bootstrap analysis. The study showed non-significant path differences between the two groups at the structural level. The parameters of the two standardized coefficients for each group must be close to or the same as each other, and the p-value must be below 0.05. Tables 6 and 7 indicate differences in the influence of the three internal stimuli on the co-creation experience among two groups of users.

4. DISCUSSION

This study analyzed the impact of enriching the self, enabling the self, and gratifying the self on users' co-creation experience in mobile commerce. The study also discussed the influence of co-creation experience on users' continuance intention and E-WOM and the effect of continuance intention in motivating E-WOM.

The influence of enriching the self on co-creation experience is rejected in this study (β = 0.052, t value = 1.096, p-value = 0.137, f^2 = 0.003), which contrasts with Li and Han (2021). This suggests that users' actual self-expression motives do not influence their co-creation experience in mobile commerce. The absence of evidence indicating a connection between enriching the self and the co-creation experience could be attributed to the primary feature of a mobile commerce marketplace. The comprehensive mobile commerce marketplace offers users a one-stop solution for find-

Table 6. Multigroup analysis results

Path/user	β		*p*-value		Invariant
	Tokopedia	Shopee	Tokopedia	Shopee	
Enriching the self → Co-creation experience	0.000	−0.001	0.426	0.050	No
Enabling the self → Co-creation experience	0.000	−0.001	0.475	0.208	No
Gratifying the self → Co-creation experience	0.002	0.002	0.286	0.018	No
Co-creation experience → Continuance intention	0.556	0.656	0.000	0.000	Yes
Co-creation experience → E-WOM	0.470	0.505	0.000	0.000	Yes
Continuance intention → E-WOM	0.309	0.368	0.001	0.000	Yes

ing and purchasing a wide range of products. This breadth of options may not adequately facilitate individuals in identifying their aspirations.

The results of the study indicated that enabling the self had a positive effect on customers' co-creation experience (β = 0.232, t-value = 4.966, p-value = 0.000, f^2 = 0.055), which is consistent with Li and Han (2021). Enabling the self is associated with self-efficacy. Mobile commerce users gain product information from various sources within the platform, including from other users, perceiving it as more reliable and functional than information only provided by firms or sellers. This enhances users' confidence in their decision-making abilities and problem-solving skills, contributing to a sense of mastery.

The findings also demonstrated the role of gratifying the self in increasing mobile commerce users' co-creation experience (β = 0.539, t-value = 11.157, p-value = 0.000, f^2 = 0.330). Gratifying the self is associated with fulfilling hedonic needs critical to creating positive customer experiences (Carlson et al., 2019). In the mobile commerce marketplace, users can derive pleasure from engaging in convenient shopping activities, socially interactive experiences, and receiving prompt responses from other users. The stronger influence of gratifying the self on the co-creation experience than enabling the self may be explained by the immediate response of enjoyment toward engagement behaviors (Japutra et al., 2022). This means mobile commerce users are likely to elicit both cognitive and emotional responses as the attainment of gratifying the self is perceived. At the same time, they will likely need time to learn what they can master and achieve from the platform.

The results found that co-creation experience positively affects users' continuance intention (β = 0.623, t-value = 18.855, p-value = 0.000, f^2 = 0.636). The finding confirms Wang et al. (2023). The mobile commerce marketplace functions as a service ecosystem where network participants work together to generate value for one another. It involves diverse stakeholders like customers, sellers, platform providers, and service providers who engage and cooperate within the ecosystem, enabling the exchange of goods, services, and information. Their collaborative and interactive actions promote continuance intention among users, emphasizing the enduring commitment and engagement within the mobile commerce marketplace.

Further, this study demonstrates the positive influence of co-creation experience in driving E-WOM (β = 0.353, t-value = 11.198, p-value = 0.000, f^2 = 0.334). This finding is in line with Xie et al. (2021). This is due to the development of emotional attachment and loyalty to the platform when users have a positive and engaging co-creation experience. This positive emotional state can increase their willingness to share their positive experience.

This study finally confirms the role of continuance intention in promoting E-WOM (β = 0.484, t-value = 8.804, p-value = 0.000, f^2 = 0.178), consistent with Abu-Taieh et al. (2022). The mobile commerce marketplace provides users with the necessary information, knowledge, and skills. For example, users can filter various search strings in the search column to produce the most relevant search results. Over time, users can start engaging in discussions or reviews where they contribute back through experience sharing.

CONCLUSION

This study offers insights into the impact of customers' internal stimuli, driven by their inner needs, on their co-creation experience within mobile commerce platforms. It also examines the influence of co-creation experience on motivation for continued use and electronic word-of-mouth (E-WOM). The findings reveal the positive roles of self-enablement and self-gratification in influencing the co-creation experience, while no significant effect was found for self-enrichment. Moreover, the study demonstrates that co-creation experience motivates brand relationship behaviors such as continued intention and E-WOM, with continued intention positively affecting E-WOM. These results have important implications for mobile commerce and retail managers. It is crucial to prioritize incorporating fun and enjoyment to enhance user experience, improving the quality of activities that bring pleasure to users.

Additionally, delivering a positive and personalized co-creation experience, which enhances customers' knowledge and insights, fosters a sense of belonging, and provides a pleasurable experience, is essential. Such a positive experience can drive user loyalty and encourage word-of-mouth recommendations. Therefore, managers should focus on implementing marketing strategies that prioritize customer experience enhancement.

This study has some limitations. First, the concept of co-creation experience has not been extensively studied in the literature, leading to different interpretations. Further research could validate the dimensions of the co-creation experience and offer guidance to researchers and practitioners. Second, the present study addresses the co-creation experience but does not provide a detailed account of the specific co-creation activities. Future studies should focus on identifying the value of co-creation activities resulting in customers' co-creation experience.

AUTHOR CONTRIBUTIONS

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APPENDIX A

Table A1. Confirmatory composite analysis

Construct/item	Loading	Cr. α	Rho_A	CR	AVE	t-statistic
FIRST ORDER CONSTRUCT						
Enriching the self (ENR)		0.889	0.897	0.918	0.693	
This application reflects my personality.	0.750					24.190
This application is an extension of my inner self.	0.857					51.134
This application mirrors the real me.	0.869					53.455
This application contributes to my image.	0.872					65.568
Being a member of this application adds to my social role.	0.809					45.742
Enabling the self (ENA)		0.877	0.879	0.916	0.731	
This application makes me feel competent in what I do.	0.852					51.720
This application makes me feel very capable and effective.	0.848					45.932
This application makes me feel I can complete difficult tasks and projects.	0.879					75.050
This application makes me feel that I can take on and master difficult challenges.	0.839					50.033
Gratifying the self (GRA)		0.843	0.844	0.895	0.680	
I enjoyed the time spent on this application.	0.820					43.503
It is pleasurable to participate in this application.	0.828					44.371
Participation in this application is a good sensory experience.	0.839					51.152
I immerse myself in this application.	0.813					41.303
Learning experience (LEA)		0.932	0.933	0.944	0.677	
This application enhances my knowledge about the product and its usage.	0.763					27.025
I obtain solutions to specific product–usage–related problems by using this application.	0.819					39.716
This application enhances my knowledge about product advances, related products, and technology.	0.862					56.074
I can improve my skills by using this application.	0.867					53.793
I gain new knowledge/expertise by using this application.	0.854					59.222
I can test my capabilities by using this application.	0.782					42.883
This application allows me to keep up with new ideas and innovations.	0.827					44.384
This application enables me to come up with new ideas.	0.803					44.618
Personal experience (PER)		0.911	0.911	0.933	0.737	
This application enhances my status/reputation as a product expert in the community.	0.855					53.636
This application reinforces my product–related credibility/authority in the community.	0.866					55.287
I derive satisfaction from influencing product usage by other customers using this application.	0.826					38.237
I can make a good impression on others using this application.	0.877					60.203
I can make others aware of my knowledge and ideas.	0.867					54.073
Social experience (SCX)		0.936	0.937	0.952	0.797	
This application expands my personal/social network.	0.884					57.578
This application enhances the strength of my affiliation with the customer community.	0.919					84.667
This application enhances my sense of belongingness with this community.	0.880					57.193

Table A1 (cont.). Confirmatory composite analysis

Construct/item	Loading	Cr. α	Rho_A	CR	AVE	t-statistic
I can connect with other people by using this application.	0.897					67.470
I meet others with whom I share similar interests by using this application.	0.884					57.501
Hedonic experience (HED)		**0.853**	**0.853**	**0.901**	**0.694**	
I spend some enjoyable and relaxing time using this application.	0.847					48.666
I derive fun and pleasure from using this application.	0.830					46.093
This application entertains and stimulates my mind.	0.864					52.929
I enjoy problem-solving and idea generation using this application.	0.789					38.673
Continuance intention (CON)		**0.865**	**0.865**	**0.917**	**0.787**	
I want to continue using this application rather than discontinue its use.	0.865					55.976
I intend to continue using this application rather than any alternative means.	0.883					69.135
I want to continue my use of this application for shopping.	0.914					71.634
E-WOM (WOM)		**0.909**	**0.910**	**0.936**	**0.786**	
I spend some enjoyable and relaxing time using this application.	0.892					73.562
I derive fun and pleasure from using this application.	0.891					58.422
This application entertains and stimulates my mind.	0.882					59.024
I enjoy problem-solving and idea generation using this application.	0.882					68.350
Second order construct		**Cr. α**	**Rho_A**	**CR**	**AVE**	**t–statistic**
Co-creation experience	–	0.959			0.540	–

Note: All p-values are significant at p < 0.05.