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The Role of Independent Value Creation, Value, and Trust on Banking Marketing Performance: Moderating Role of Gender

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Abstract

Research aims: The paper aims to examine independent value creation (IVC) and its implication on value, trust, and marketing performance (satisfaction and loyalty) in the banking sector in Indonesia. The research model was developed from the existing literature to show the relationship between IVC and marketing performance.

Design/Methodology/Approach: A survey design was used in this investigation, and the questionnaire collected study data. The data were analyzed from 385 respondents selected by purposive sampling and taken from bank customers. PLS-SEM analysis was used for hypothesis testing, and multi-group analysis was performed for moderating testing.

Research findings: The findings demonstrated a strong positive link between IVC and marketing performance – satisfaction and loyalty. It was also found that learning value and trust partially mediated the relationship. Moreover, gender moderated the relationship between IVC and customer satisfaction and trust.

Theoretical contribution/Originality: This study provides an academic contribution to explaining IVC and its role in value, trust, and marketing performance. The impact of IVC is further demonstrated by the role of gender moderation, which contributes to the Service-Dominant Logic (S-D Logic) literature by providing additional context.

Practitioner/Policy implication: The study suggests that managers should pay attention to what customers do independently in value creation. They should also alter their perspective of the source of competitive advantage by shifting to customer activities in finding bank services. Furthermore, the impact of IVC on satisfaction and trust needs to consider the role of gender.

Research limitation/Implication: The sampling technique limited the generalization of findings, and IVC measurement needs to be explored in future research.

Keywords: Independent Value Creation; Enjoyment and Learning Value; Trust; Banking Customers; S-D Logic; Indonesia



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Introduction

The study of the customer's role in obtaining service value has received attention in the literature. It was followed by the emergence of concepts describing the role of customers in transactional activities simultaneously with providers. The study involves the idea of engagement (Prentice & Nguyen, 2020; Merdiaty & Aldrin, 2022), participation (Wang, 2022), cooperation (Zhou et al., 2021), co-production (Yalley, 2021), and co-creation (Klafke & de Oliveira, 2022). This idea led to identifying

a continuum of consumer involvement in value creation, ranging from low involvement, such as only supplying information, to high involvement, such as acting as a product marketer.

Customer involvement is also a shift towards higher interaction where the customer does not interact directly with the provider. The concept of this interaction is called independent value creation (IVC), a creative process in which there is no direct communication between the consumer and the provider (Grönroos & Voima, 2012). Consumers only interact through transaction media, such as self-service technology, to carry out all communication and transaction activities.

Nevertheless, IVC has received little attention in the marketing literature, particularly its role in customer value and marketing performance. It is paradoxical to marketing practices, especially with the development of self-service technology that allows customers to carry out value-creation activities independently in various sectors. This technology applies to tourism (Kelly et al., 2019; Shiwen et al., 2021); banking (Guan et al., 2021), public services (Chen et al., 2021), restaurants (Park et al., 2021), supermarkets (Sharma et al., 2021), and airlines (Gures et al., 2018). Specifically, self-service technology in banking has developed rapidly, and customers rarely have direct contact with bank personnel. Customers can also create almost all services and value through self-service technological devices (ATM, internet banking, and mobile banking).

For various reasons, the study is urgent. Firstly, the literature has not explicitly discussed this phenomenon, so an explanation of value creation carried out independently is still unclear. There is a study gap related to this terminology. Secondly, value creation was studied more regarding co-creation, which was carried out jointly between the customer and the provider. For instance, studies of the positive effect of value creation have been confirmed in previous studies, namely on values (Niu & Chen, 2022) and trust (Nkoulou Mvondo et al., 2022). In addition, value creation supports customer satisfaction (Gligor & Maloni, 2022) and customer loyalty (Lyu et al., 2022). Thus, this study is a development from previous studies which examined more on value creation by providers independently. Finally, technological developments enable transaction activities to be carried out independently, which has developed rapidly. Consequently, customers only need to use their mobile phones, and all transactions can be done quickly, cheaply, and pleasantly.

Therefore, this study attempts to investigate the role of IVC on customer satisfaction and loyalty by examining the role of customer value (including enjoyment and learning value) and trust as mediating. This study also examines the moderating role of gender in these relationships to investigate the effect of IVC between males and females. Further, this study is expected to contribute to the literature in explaining the role of bank customers in creating value independently, significantly enhancing customer satisfaction and loyalty. Meanwhile, practical management's contribution is advising banks to manage customers whose ability to create value independently is expanding due to technological advances.

Literature Review and Hypotheses Development

S-D logic and independent value creation

Service-Dominant Logic (S-D Logic) provides a comprehensive foundation for understanding value creation that contributes to the firm's strategic advantage (Bettencourt et al., 2014). Value is always co-created jointly and reciprocally in interactions among actors through service delivery (Vargo & Lusch, 2004). Moreover, all economic and social players contribute to value creation similarly (Wieland et al., 2015). IVC was first presented within the framework of the value-in-use creation model (Grönroos, 2011), which shows value-creation activities carried out independently by customers. Another category is co-creation, creation value from the customer's perspective, and co-production, from the supplier's perspective. Meanwhile, value creation carried out independently by the provider is called value facilitation, an inversion of IVC. Co-creation and IVC have similarities in that both are value-creation activities carried out by customers. However, IVC is value creation carried out by not dealing with providers but with transaction media. It is similar to engaging as an active participant in Learning Health Systems (Gremyr et al., 2021), consumer engagement in AI technology (Wen et al., 2022), and co-creation in banking self-service technology (Galdolage & Rasanjalee, 2022). In banking, this activity is conducted by customers through self-service technology, namely ATM, mobile banking, and internet banking. In addition, IVC includes an interaction of focal customer activities and fellow customers (Su et al., 2021) and customer citizenship behavior such as word of mouth and helping behavior (Kim et al., 2020).

Studies on IVC in Indonesia are still limited in the literature, with diverse perspectives, such as studies on media services confirming the effect of value creation on marketing performance (Musfiandy et al., 2020). Studies on educational services verify the relationship between co-creation activities' input, process, and output (Aldianto et al., 2018). In addition, human resource management ensures that perceived usefulness strongly predicts e-HRM usage (Wahyudi & Park, 2014).

IVC, enjoyment, and learning value

The study of value-creation activities reveals a positive relationship associated with enjoyment value. Its values include excitement, a sense of adventure, enthusiasm, entertainment, and being immersed in exciting connections (Rodrigues et al., 2016). From another perspective, enjoyment covers the fun, excitement, positivity, and wisdom (Mostafa, 2020). Involvement in sharing, expressing personal needs, providing advice, and high participation also encourage increased customer pleasure (Chen & Wang, 2016). Moreover, cognitive, affective, and behavioral involvement increases emotional responses and creates certain moods (Rather, 2019). The relationship between engagement and pleasure can be identified from social media (Khajeheian & Ebrahimi, 2021) and online communities (Akman et al., 2019). In addition, previous studies uncover that value-creation in banking services enhances enjoyment benefits (Baabdullah et al., 2019).

Apart from its impact on enjoyment, IVC affects learning value. The learning value is reflected in increasing knowledge, providing solutions, and developing the product (Nambisan & Baron, 2009). This relationship is based on the theory of economic exchange, which states that a relationship must yield benefits from the sacrifices incurred (Cropanzano & Mitchell, 2005). Studies confirming participation's impact on learning value are on educational services (Nambisan & Baron, 2009; Sutarso et al., 2017) and social commerce (Aljukhadar et al., 2020). Therefore, customer activities in banking transactions through self-service technology are also based on the intention to get benefits of learning.

H_{1ab}: IVC positively influences a) enjoyment value and b) learning value; the higher bank customer IVC, the higher their enjoyment and learning value.

IVC, satisfaction, trust, and loyalty

Moreover, the relationship between co-creation or engagement activities and satisfaction is based on the argument that involvement enables customers to convey their wishes while receiving services according to their expectations. This relation has been confirmed in previous studies on banking (Grott et al., 2019), tourism (Rasoolimanesh et al., 2019), and higher education (Lane et al., 2021).

Additionally, customer involvement in various matters will encourage their trust in a brand or a provider. Participation, interactions, and collaboration activities in transactions encourage increased customer trust in business-business relationships (Franklin & Marshall, 2019). Customer activities expressing wishes, providing joint solutions and being involved in product development also increase trust in the brand (Iglesias et al., 2018).

Furthermore, active customer engagement will encourage positive word of mouth, inspire others and recommend. The role of engagement in loyalty can also be confirmed in previous studies (Iglesias et al., 2018; Seifert & Kwon, 2019). Based on the above description, customer engagement in bank self-service technology will allow customers to find satisfaction, trust, and loyalty.

H_{1c-e}: IVC has a positive influence on c) satisfaction, d) trust in the bank, and e) loyalty; the higher bank customer IVC, the higher their satisfaction, trust, and loyalty.

Enjoyment and learning value

Customer enjoyment has received attention in customer studies, which show that this aspect is essential in exchange (Sun & Zhang, 2021), which is currently being mainly studied in digital marketing studies (e.g., Lee et al., 2022; Mahmoud et al., 2021). Customer enjoyment indicates the extent to which consumption is perceived as pleasant, regardless of anticipated performance consequences (Abdullah et al., 2016). Therefore, it

is necessary to include perceived enjoyment as a concept, as it should be considered essential for enhancing a positive customer experience in an online environment (Klein & Martinez, 2022).

Furthermore, previous studies have confirmed that enjoyment value positively impacts satisfaction or loyalty (Chen & Demirci, 2019; Ladhari & Souiden, 2020; Klein & Martinez, 2022). Moreover, the learning value is the benefit obtained from knowledge of various related matters regarding the benefits and how to get them from the product. The learning value is similar to the value of novelty, namely, creating curiosity and satisfying a need for knowledge (Leroi-Werelds, 2019), knowledge value, and experience value (Prebensen et al., 2016). Therefore, learning value is also a source of satisfaction and loyalty (Nambisan & Baron, 2009).

H_{2a-b}: Enjoyment value positively influences a) satisfaction and b) loyalty.

H_{3c-e}: Learning value positively influences a) satisfaction and b) loyalty.

Trust in banking

Customers' trust in banking is essential and determines attitudes and behavior. It is reflected in confidence in providers, feeling that the bank puts customers' interests and consistently provides excellent and reliable service, which will increase satisfaction (Al-Ansi et al., 2019). Likewise, previous studies have verified that trust will increase customer loyalty (Chang & Hung, 2018; Alkhurshan & Rjoub, 2020). Hence, higher customer trust will enhance their satisfaction and loyalty.

H_{4a-b}: Trust in a bank positively influences a) satisfaction and b) loyalty.

Satisfaction and loyalty

The relationship between satisfaction in banking and loyalty has been consistently confirmed in previous studies for different contexts, for example, in banking in Bangladesh (Hossain et al., 2021), Sweden (Eriksson et al., 2020), Tunisia (Hamouda, 2019), and Taiwan (Chang & Hung, 2018); likewise, for other services, such as education (Raza et al., 2020), hotels (Moise et al., 2020), and airlines (Mohd-Any et al., 2019). Therefore, the relationship between satisfaction and loyalty can be hypothesized as follows.

H₅: Satisfaction positively influences loyalty.

Gender

The moderating role of gender has received the attention of researchers in the literature to distinguish the relationship between social variables. Previous studies have proven the

moderating role of gender on the effect of price perception on satisfaction (Zhong & Moon, 2020), focal customer on voice complaint intention (Joe & Choi, 2019), quality of information on value (Molinillo et al., 2021), source credibility on importance of shared content (Dedeoglu, 2019), and intention on use (Merhi et al., 2020). This finding denotes that males and females differ in banking services; the roles of customization, security, and mobility with trust are moderated by gender. Therefore, the differences between males and females determine the relationship between value creation and trust.

H_{6a-i}: Gender moderates the effects of IVC on value, trust, satisfaction, and loyalty; value and trust on satisfaction and loyalty; and satisfaction on loyalty.

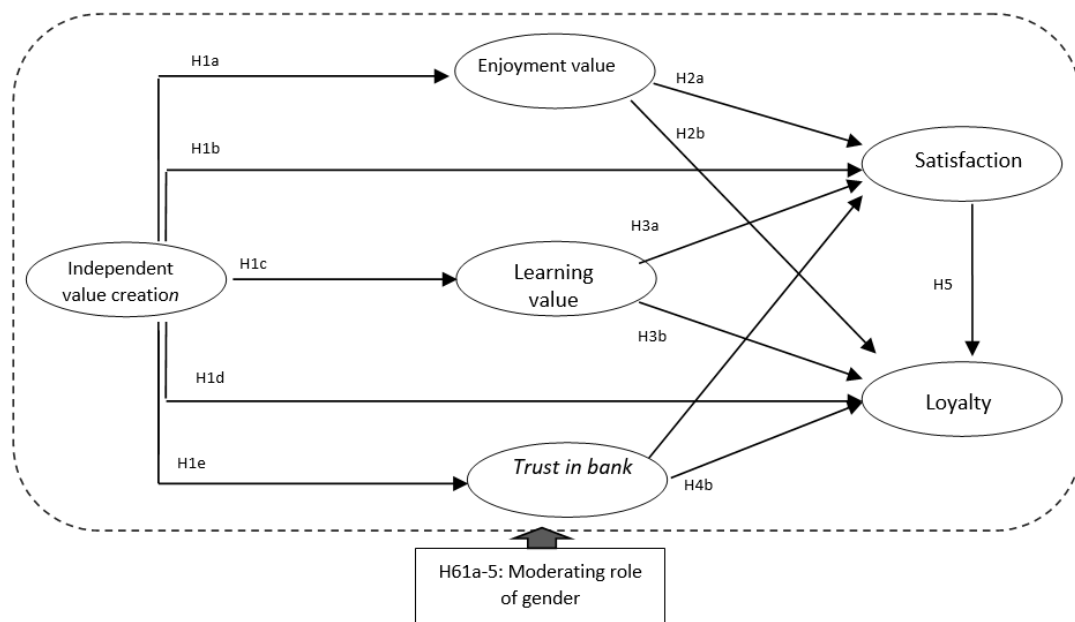


Figure 1 Theoretical Framework

Research Methods

Sample

The population of the study was bank customers in Indonesia, and the unit of analysis was individual or bank customers. The sampling technique used two-stage sampling: bank-level and respondent-level. The selection of samples for both levels employed judgment sampling. The criteria for selection at the bank level were that they were included in the ten largest banks in Indonesia and had good technology coverage and services. Meanwhile, the criteria for respondents' level were that they were over 19 years old, and the bank they selected was the primary bank. Then, a survey questionnaire was used to collect data to confirm the research model and examine research hypotheses. As a result, the study involved 385 respondents from two major cities in Indonesia (Jakarta and Surabaya). Based on previous studies, the sample size met the requirement number (Shah & Goldstein, 2005; Kline, 2016).

The demographic descriptions of the sample showed that the percentage of male and female respondents was almost equal (50.4 percent of males and 49.6 percent of females). The most significant demographic percentage of the banking customer was undergraduates (45.7 percent), private employee jobs (49.4 percent), Bank Central Asia (BCA) (32.7 percent), and ages between 26-35 years (35.6 percent). Thus, relatively, the composition of the respondents is described as equal among gender, although not equal among other aspects.

Measurement

Appendix 1 shows the items used to assess constructs, in which a seven-point Likert scale with anchors of “strongly disagree” to “strongly agree” was employed to measure each item. The measure of IVC was developed from the customer value co-creation behavior scale (Yi and Gong 2014). It was adapted to the value creation activities performed independently by the customer without direct interaction with the provider (Grönroos & Voima, 2012). It was also developed based on studying IVC activities in services (Sutarso et al., 2017). Thus, sixteen items measured IVC activities. In addition, other constructs were measured by adopting from the previous study: enjoyment value was measured by four items (Yim et al., 2012); learning value was assessed by four items (Nambisan & Baron, 2009); customer satisfaction was assessed by four items (Amin, 2016); trust was determined by four items (Alalwan et al., 2017); loyalty was measured by four items (Makanyeza & Chikazhe, 2017).

Instrument testing

This study used three steps in developing the instrument. The first step was the literature study, a search for literature related to the research topic and concept measurement. *Next*, the preliminary survey aimed to ensure that the theoretical basis followed the research setting. Furthermore, the initial instrument was made and discussed with an expert. Finally, the questionnaire trial to limited respondents was conducted; therefore, the instrument could meet the qualifications of sufficient validity and reliability. The 30 respondents were involved in the trial, and instrument revision was performed to adjust to the research setting and respondent’s characteristics. The revised instrument was then used as the final questionnaire and distributed to the respondents. All steps were carried out to obtain measurements that met the quality of construct validity, face validity, content validity and reliability (Trochim et al., 2016).

Data analysis technique

To test the hypotheses, this study used a structural equation model analysis with the Partial Least Square approach. This method was employed because this method enables researchers to estimate complex models with many constructs, indicator variables, and structural paths without imposing distributional assumptions on the data (Hair et al., 2019). The other reasons are the small sample size, non-normal data, and applicability for exploratory research (Zeng et al., 2021).

Results and Discussion

The research model was analyzed using SEM, a PLS structural equation modeling tool that estimates the measurement model and assesses the parameters of the structural model fitness. Even though considerations are tentative (Hair et al., 2019), three indicators were used to test the model fitness: Average path coefficient (APC), Average R-squared (ARS), and the Average block VIF (AVIF) (Kock, 2014). The test demonstrated that the value of APC = 0.237 ($p < 0.001$); ARS = 0.346, ($p < 0.001$); and AVIF = 1.615. By comparing the cut-off value, it was concluded that the model met the required criteria.

Table 1 Factor loading and cross loading

	IVC	EV	LV	TR	ST	LY	Sig
lv-IF	0.74	-0.17	0.20	-0.13	-0.07	0.01	<0.001
lv_PI	0.83	-0.11	0.15	0.09	-0.01	-0.10	<0.001
lv_HL	0.84	0.06	-0.08	-0.04	0.02	0.20	<0.001
lv_TL	0.69	0.23	-0.30	0.08	0.05	-0.15	<0.001
EV1	0.04	0.88	-0.06	0.07	-0.01	0.06	<0.001
EV2	-0.07	0.75	0.15	-0.12	0.04	0.01	<0.001
EV4	0.02	0.86	-0.08	0.03	-0.02	-0.06	<0.001
LV1	0.03	0.08	0.87	-0.07	-0.04	0.02	<0.001
LV2	-0.09	-0.01	0.92	0.05	0.00	0.06	<0.001
LV3	0.00	-0.02	0.87	-0.03	0.01	-0.08	<0.001
LV4	0.06	-0.05	0.88	0.04	0.03	-0.01	<0.001
TR1	0.02	-0.05	0.03	0.82	-0.08	0.22	<0.001
TR2	-0.06	-0.05	0.06	0.84	-0.03	-0.10	<0.001
TR3	0.06	0.02	-0.09	0.86	0.09	-0.02	<0.001
TR4	-0.02	0.08	0.00	0.87	0.01	-0.09	<0.001
SA1	-0.03	-0.05	0.05	-0.05	0.85	0.00	<0.001
SA2	-0.03	0.04	0.04	0.09	0.87	-0.07	<0.001
SA3	0.01	-0.01	-0.03	0.02	0.90	0.01	<0.001
SA4	0.05	0.03	-0.07	-0.07	0.80	0.07	<0.001
LA1	-0.04	0.00	-0.02	-0.20	0.19	0.79	<0.001
LA2	-0.07	0.03	0.16	-0.04	0.09	0.80	<0.001
LA3	-0.04	0.07	-0.16	0.09	-0.10	0.83	<0.001
LA4	0.14	-0.09	0.02	0.15	-0.17	0.84	<0.001

Measurement model

The model estimation of the outer model was performed by its validity and reliability, in which the validity was measured by convergent validity (loading factor, significance, and AVE) and discriminant validity (the square root of AVE) (Hair et al., 2019). Table 1 presents the items' loading factor and significance on the construct. The minimum factor loading in the construct was 0.69 (Lv TL), with a significance of $p < 0.001$. Moreover, the Average Variance Extracted was more than 0.50 (Table 2). Therefore, this score met the cut-off value, meaning that items in the construct converged.

Table 2 AVE and square roots of average variances extracted (AVEs)

No	Constructs	1	2	3	4	5	6
1	IVC	0.78	0.58	0.56	0.43	0.37	0.39
2	Enjoyment value	0.58	0.84	0.58	0.35	0.30	0.30
3	Learning value	0.56	0.58	0.88	0.52	0.50	0.44
4	Trust in bank	0.43	0.35	0.52	0.85	0.57	0.55
5	Satisfaction	0.37	0.30	0.50	0.57	0.86	0.47
6	Loyalty	0.39	0.30	0.44	0.55	0.47	0.81
Average Variances Extracted		0.53	0.70	0.78	0.72	0.73	0.66

Note: Square roots of average variances extracted (AVEs) are shown on a diagonal.

Moreover, the reliability was estimated by composite reliability and Cronbach alpha. Table 3 displays an assessment of reliability describing the lowest composite reliability of 0.86 at IVC and the lowest Croch Alpha of 0.78 at IVC, and the enjoyment value where the score exceeded the cut-off value (Klemelä, 2018).

Table 3 Assessment of reliability and collinearity

Constructs	The Composite Reliability	Cronbach Alpha	Full Coll VIF
IVC	0.85	0.77	1.93
Enjoyment value	0.87	0.78	1.75
Learning value	0.93	0.91	2.13
Trust in bank	0.91	0.87	1.91
Satisfaction	0.92	0.88	1.70
Loyalty	0.89	0.83	159

Structural model

Hypothesis testing was done by including control variables in the model to capture the impact of other variables on the model. This assessment confirms that age ($\beta= 0.027$, $p<0.299$) and bank ($\beta= -0.082$, $p<0.053$) had no impact on the model. The results of hypothesis testing in this study are depicted in Figure 2.

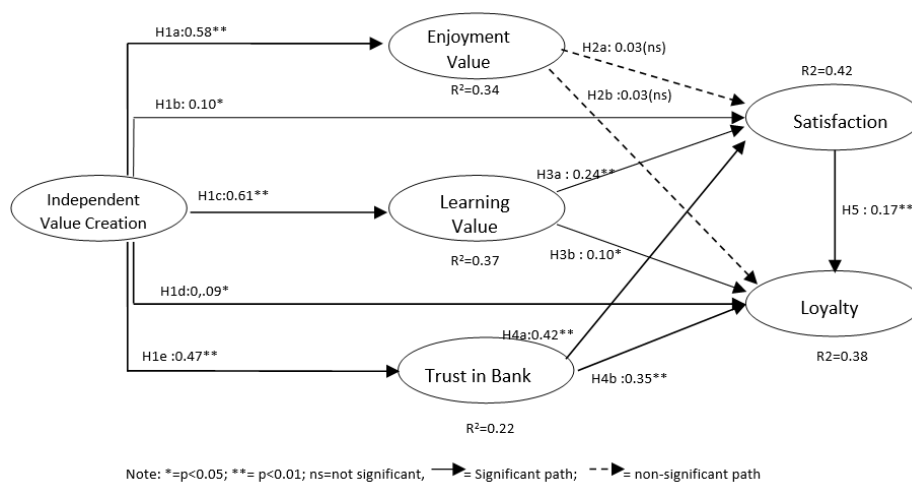


Figure 2 Hypothesis Testing

Hypothesis tests supported all relationship paths except H_{2a} and H_{2b} (see Fig. 2 for standardized path coefficients and significance levels). Hypotheses 1a–1e examined IVC's impact on enjoyment, satisfaction, learning value, loyalty, and trust. As a result, IVC had a significant effect on enjoyment value ($\beta=0.58$, $p<0.01$), satisfaction ($\beta=0.10$, $p<0.07$), learning value ($\beta=0.60$, $p<0.01$), loyalty ($\beta=0.09$, $p<0.03$), and trust ($\beta=0.43$, $p<0.01$). Therefore, hypotheses H_{1a} – H_{1e} were supported. Hypotheses 2a–2b explicated the influence of enjoyment value on customer satisfaction and loyalty. The effect of enjoyment value was insignificant on satisfaction ($\beta=0.03$, $p=0.29$) and loyalty ($\beta=0.03$, $p=0.23$). Hence, H_{2a} and H_{2b} were not supported. Hypotheses 3a–3b verified the relationship between learning value and two variables: satisfaction and loyalty. Learning value positively influenced satisfaction ($\beta=0.024$, $p<0.01$) and loyalty ($\beta=0.10$, $p=0.02$). Thus, hypotheses 3a–3b were supported. Hypotheses 4a–4b were about the impact of trust on satisfaction and loyalty. Trust was observed to have a significant positive effect on satisfaction ($\beta=0.42$, $p<0.01$) and loyalty ($\beta=0.35$, $p<0.01$), supporting hypotheses 4a–4b. The effect of satisfaction was also confirmed on loyalty ($\beta=0.17$, $p<0.01$); accordingly, H_5 was supported. Table 4 shows the finding of hypothesis testing and describes that all hypotheses were supported except H_{2a} and H_{2b} .

Table 4 Assessment of structural model

Hypothesis	Finding	Conclusion
H_{1a} : IVC has a positive influence on enjoyment value.	Yes, ($\beta= 0.590$, $p<0.001$)	Supported
H_{1b} : IVC has a positive influence on satisfaction.	Yes, ($\beta= 0.100$, $p<0.023$)	Supported
H_{1c} : IVC has a positive influence on learning value.	Yes, ($\beta= 0.605$, $p<0.001$)	Supported
H_{1d} : IVC has a positive influence on loyalty.	Yes, ($\beta= 0.093$, $p<0.033$)	Supported
H_{1e} : IVC has a positive influence on trust.	Yes, ($\beta= 0.466$, $p<0.001$)	Supported
H_{2a} : Enjoyment value has a positive influence on satisfaction.	No, ($\beta= 0.032$, $p<0.262$)	Not supported
H_{2b} : Enjoyment value has a positive influence on loyalty.	No, ($\beta= 0.032$, $p<0.266$)	Not supported
H_{3a} : Learning value has a positive influence on satisfaction.	Yes: ($\beta=0.237$; $p<0.001$)	Supported
H_{3b} : Learning value has a positive influence on loyalty.	Yes: ($\beta=0.105$; $p<0.019$)	Supported
H_{4a} : Trust in a bank has a positive influence on satisfaction.	Yes: ($\beta=0.424$; $p<0.001$)	Supported
H_{4a} : Trust in a bank has a positive influence on loyalty.	Yes: ($\beta=0.353$; $p<0.001$)	Supported
H_5 : Satisfaction has a positive influence on loyalty	Yes: ($\beta=0.174$; $p<0.001$)	Supported

Afterward, the gender moderation test used a multi-group analysis technique (Kock, 2014). Table 5 reveals the results of the gender moderation test, where there was confirmation of two gender-moderated relationships, i.e., gender moderated the

relationship between IVC and satisfaction (0.050, $p=0.046$). The effect of IVC on satisfaction was positive for males (0.124, $p=0.039$) but not for females (0.047, $p=0.256$). In addition, gender also moderated the effects of IVC on trust (0.05, $p=0.023$), where the impact was positive and higher for males (0.550, $p<0.001$) than females (0.398, $p<0.001$).

Table 5 Multi-group analysis of gender

Hypothesis	Male		Female		PD (B)	p	Conclusion
	PC (β)	p	PC (β)	p			
H _{61a} . IVC-EV	0.534	<0.001	0.617	<0.001	0.051	0.536	Not supported
H _{61b} . IVC-ST	0.124	0.039	0.047	0.256	0.050	0.046	Supported
H _{61c} . IVC-LV	0.639	<0.001	0.569	<0.001	0.051	0.334	Not supported
H _{61d} . IVC-LY	0.140	0.140	0.105	0.071	0.050	0.143	Not supported
H _{61e} . IVC-TR	0.550	<0.001	0.398	<0.001	0.050	0.023	Supported
H _{62a} . EV-ST	0.034	0.315	-0.039	0.294	0.083	0.101	Not supported
H _{62b} . EV-LY	0.026	0.359	0.111	0.060	0.036	0.480	Not supported
H _{63a} . LV-ST	0.132	0.030	0.293	<0.001	0.058	0.253	Not supported
H _{63b} . LV-LY	0.082	0.123	0.094	0.094	0.036	0.473	Not supported
H _{64a} . TR-ST	0.581	<0.001	0.270	<0.001	0.095	0.060	Not supported
H _{64b} . TR-LY	0.452	<0.001	0.287	<0.001	0.051	0.317	Not supported
H ₆₅ . ST-LY	0.043	0.275	0.235	<0.001	0.022	0.670	Not supported

Note: PC=Path coefficient; PD=Path difference; p=Probability; IVC=Independent value creation; EV=Enjoyment value; LV=Learning value; ST=Satisfaction; LY=Loyalty; TR=Trust.

Discussion

The role of IVC in banking

The analysis results showed several findings concerning IVC. First, the analysis confirmed the positive role of IVC on enjoyment value (H_{1a}). This finding indicates that increasing value creation independently through obtaining information from other customers, following provider directions, and interacting and helping other customers positively impacts feelings of pleasure and enjoyment. This finding supports previous online marketing studies (Akman et al., 2019; Baabdullah et al., 2019; Khajeheian & Ebrahimi, 2021).

Second, this study verified the relationship between IVC and satisfaction (H_{1b}) and supports previous studies linking engagement with its various variants with customer satisfaction (e.g., Chen & Wang, 2016; Khajeheian & Ebrahimi, 2021; Mostafa, 2020; Rather, 2019). Independent value activities also influenced customer satisfaction, reflected by customers becoming satisfied, considering providers as partners, and meeting their expectations. In addition, this finding reinforces the previous study that opinions, suggestions, and participation increase happiness in relationships and satisfaction (Grott et al., 2019). Involvement in enthusiasm, attention, interaction and identification also increases thinking about the right and wise choices and satisfaction with customer product choices (Rasoolimanesh et al., 2019). From another perspective, cognitive and emotional involvement increase satisfaction (Lane et al., 2021).

Third, customer involvement's positive role in increasing customer learning value (H_{1c}) was reflected by advancing knowledge, the ability to overcome difficulties, and a growing understanding of service developments. This finding is consistent with previous studies' results confirming the relationship (Nambisan & Baron, 2009) and confirms the economic exchange theory of reciprocal benefits (Cropanzano & Mitchell, 2005). Fourth, IVC activities also encouraged customer perceptions that the provider was reliable and provided confidence in good relationships in the future (H_{1d}). This finding also corroborates previous studies' results (Franklin & Marshall, 2019; Iglesias et al., 2018). Finally, the relation of IVC to trust (H_{1e}) was also verified, meaning customer activities through self-service technology encourage them to be sure and rely on banks—the finding proves previous findings (Franklin & Marshall, 2019; Iglesias et al., 2018).

The role of value, trust, and satisfaction in banking

The role of enjoyment value in banking provides different findings from other settings, where in this study, this factor did not positively impact customer satisfaction (H_{2a}) and loyalty (H_{2b}). In other words, increasing this aspect did not lead to an increase in customer satisfaction and loyalty. This finding is different from previous studies in other contexts, such as on tourism services (Ladhari & Souiden, 2020), mobile data services (Chen & Demirci, 2019), Spotify apps (Chen & Demirci, 2019), and food retailers (Klein & Martinez, 2022). In these contexts, enjoyment value positively correlated with satisfaction or behavior intention. This different finding could occur because the expectations of customers' entertainment needs in using bank services are low, and the time when using bank services is short; consequently, the entertainment aspect of bank services is not felt. The results of this study demonstrated that increasing learning value was also associated with higher levels of satisfaction (H_{3b}) and loyalty (H_{3b}). Therefore, increased learning value in banking services would increase customer satisfaction or loyalty. This finding is consistent with previous studies, especially the role of learning values in the field of educational services (Qi et al., 2020), human resources (Janssen et al., 2021), and tourism (Prebensen et al., 2016). These findings signify the importance of learning values in managing services.

Moreover, the study finding revealed trust determined satisfaction (H_{4a}) and loyalty (H_{4b}) to banking services. In addition, customers believe the bank's reliability, better relationship, and better treatment are sources of satisfaction and loyalty. This finding is consistent with previous studies (Chang & Hung, 2018; Al-Ansi et al., 2019; Alkhurshan & Rjoub, 2020).

As in previous studies, satisfaction impacted customer loyalty (H_5) in banking services. This finding consistently supports the results of previous studies, both in terms of the geographical perspective of the country (i.e., Chang & Hung, 2018; Hamouda, 2019; Eriksson et al., 2020; Hossain et al., 2021) and the type of service (i.e., Mohd-Any et al., 2019; Raza et al., 2020; Moise et al., 2020).

The moderating role of gender in banking

This study confirmed the moderating role of gender in the relationship of IVC with satisfaction and trust. There were differences in gender in the relationship between IVC and bank customer satisfaction (H_{61b}). For males, IVC had a positive effect on satisfaction, but IVC had no impact on females. It means that in males, the higher the IVC activity, the higher the satisfaction, while the higher the IVC does not lead to satisfaction in females. This finding can be explained by the fact that individual activities are more in line with the personality of males than females. Males tend to have independent characters; therefore, activities carried out independently will be more satisfying. Whereas for females, social activities with other involvement will be preferred, and individual activities will be less desirable. This finding authenticates previous studies in different contexts (Joe & Choi, 2019; Zhong & Moon, 2020; Molinillo et al., 2021), concluding that the environmental component is more important to male customers.

Moreover, gender moderated the relationship between IVC and trust (H_{61e}), where the effect was more substantial for males than females. The supported moderating effect of gender on the IVC-trust relationship implies that the IVC had a more significant influence on the trust of male customers than female customers. The trend of IVC effect on males will be easier to trust based on individual considerations. This finding is based on the view that males prefer logic and ratio, whereas females prioritize emotions and feelings (Lizarraga et al., 2007). This finding is consistent with the results of previous studies (Sutarso et al., 2017; Dedeoglu, 2019) even though it is inconsistent with the other study finding (Sultan & Wong, 2018). Also, the social role theory of gender in value-creation activities is supported by these findings. According to social role theory, the effects of IVC between males and females are different because of different societal roles; therefore, males and females tend to behave differently (Eagly et al., 2003).

Managerial implications

This study provides managerial implications for bank marketers. First, marketers must pay attention to IVC activities, which are essential in increasing learning value, trust, satisfaction, and loyalty. Customer facilitation needs to be encouraged to interact with other customers; they can communicate, ask and answer each other, and easily update customer conversations. Customers are also encouraged to fulfill obligations, procedures, responsibilities, and directions in facilitating access to the services needed. In addition, providers should promote friendly and polite customer interactions so that interactions will be enjoyable. Providing customer encouragement for assisting, advising, and telling other customers through practical methods can be done. Customer tolerance in receiving unexpected service also needs to be stimulated to increase their understanding, patience, and adjustment. Second, since the enjoyment value from bank services does not affect satisfaction and loyalty, marketers can ignore this aspect in managing customers. However, the learning value impacts performance. Therefore, marketers must encourage customer involvement to improve information about services, use services, solve problems, and understand service developments. Finally, trust contributes to enhancing satisfaction and loyalty. Hence, service reliability needs to be maintained, better

relationships must be developed, and better service needs to strive; thus, customers will rely on banks as providers.

Conclusion

This study aims to cover the limitations of the IVC study, i.e., the creation of value without dealing directly with providers but using transaction intermediaries since the literature has been more concerned with co-creation, the value creation by provider and consumer equally. This study's analysis results confirmed that IVC positively impacted a bank's enjoyment, learning, trust, and loyalty. Even so, this value creation did not directly impact satisfaction. The different finding is that the positive impact of enjoyment value did not occur on satisfaction and loyalty. Besides being influenced by IVC, satisfaction and loyalty were also affected by learning values and trust.

Further, this study expands the literature on IVC's important role in digital transactions. Thus, IVC is needed in banking transactions to improve satisfaction and loyalty. This study's findings contribute to banking practices in managing customers to create value. This study also confirms the importance of independent value creation for banking services. In this regard, self-service technology allows customers to do value creation independently. Banking value creation that emphasizes the bank side, such as service quality, also needs to shift to a more dominant on the customer side. Furthermore, independent value creation needs to be encouraged and developed.

Limitations and further research

This study is subject to limitations that could be addressed in future research. First, the context of banking services as long-service life products reduced the ability to explain IVC in the short-life products context, such as fast-moving consumer goods, food, and courier service. Further research is recommended to employ different contexts to create value for customers. Second, this study measured the IVC construct derived from co-creation measurement, which was reconstructed by eliminating value creation involving interacting with the provider directly. The measurements did not cover other potential dimensions and indicators; therefore, further research is suggested to reconstruct a more comprehensive measure, such as interaction, complaint, and suggestion activities through self-service technology. Finally, since the sampling technique using purposive sampling was the main limitation of this study, future research is recommended to use the random sampling technique so that the population's representation will be higher and more representative.

Appendix

Appendix 1 Construct Items

Independent Value Creation (IVC)

Information Finding (Iv-IF)

IF1 I ask other customers about bank services information.

IF2 I notice how other customers get good bank services.

IF3 I answer other customer questions about the bank's services.

Responsible behavior (lv_RB)

RB1 I fulfill the obligations required by the bank services.

RB2 I carry out the necessary steps in gaining bank services.

RB3 I fulfill my responsibility as a bank customer.

RB4 I followed the direction of the bank in the service received.

Personal interaction (lv_PI)

PI1 When another customer is talking to me, I listen well.

PI2 I'm being friendly to other customers.

PI3 I be polite to other customers.

Helping (lv_HP)

HP1 I assist other customers who have problems in understanding bank services.

HP2 I tell the other customers how to have better bank services.

HP3 I advise other customers about bank services.

Tolerance (lv_TL)

TL1 When banks provide less service to my expectation, I'm trying to understand.

TL2 When banks apply policies that, in my opinion, are not quite right, I try to be patient.

TL3 When I had to wait longer than usual to get the bank's services, I tried to adjust.

Enjoyment Value (EV)

EV1 I am pleased with the bank's services that require my involvement.

EV2 Bank services that require my involvement made the service time short.

EV3 Bank services that require my involvement is a tedious activity (R)

EV4 I enjoy the bank services that require my involvement in it.

Learning Value (LV)

LV1 My involvement in getting bank services to improve my knowledge of bank services.

LV2 My involvement in getting bank services to improve my knowledge about the use of bank services.

LV3 My involvement in getting bank services allows me to overcome the difficulties I encountered when getting bank services.

LRV My involvement in getting bank services increased my understanding of banking services' development.

Trust on Bank

TR1 I am sure that in the future, banks will be reliable in all respects.

TR2 I believe the bank will develop a better relationship with me in the future.

TR3 I can rely on banks.

TR4 I am sure, in the future, I will be treated better by the bank.

Satisfaction

SA1 I am satisfied with the services provided by the bank.

SA2 Bank is a good partner.

SA3 The services provided by the bank meet my expectations.

SA4 Overall, I am satisfied with the services of the bank.

Loyalty

LA1 I recommend the bank where I got the service to others.

LA2 I say positive things about the bank where I got banking services to others.

LA3 I encourage others who want to get the services of banks at the bank where I got service.

LA4 I showed my friend about the bank where I got service.

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