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App Innovation and Perceived Value on Etsy: The Mediating Role of Trust and Community

Andi Muhammad Fadhil Ridho Yusuf[1] , Kurniadi Kurniadi[*2]

[1]Department of Entrepreneurship, Binus Business School Undergraduate Program, Bina Nusantara University, Jakarta, Indonesia, a.yusuf@binus.ac.id https://orcid.org/0009-0000-8335-9147
[2]Department of Entrepreneurship, Binus Business School Undergraduate Program, Bina Nusantara University, Jakarta, Indonesia, kurniadi003@binus.ac.id, https://orcid.org/0000-0003-2047-9795
[*)] Author Contact: kurniadi003@binus.ac.id , a.yusuf@binus.ac.id
ORCID ID https://orcid.org/0000-0003-2047-9795
https://orcid.org/0009-0000-8335-9147

Abstract
This study investigates the mechanism of value creation on the creative e-commerce platform Etsy through an integrated mediation-moderation model. Using a quantitative approach and data from 458 active Etsy users in Indonesia, the study examines the effect of application feature innovation on perceived value through the mediating mechanisms of trust and community engagement, as well as the moderating effect of user type (buyer vs. seller). The PLS-SEM analysis results show that the relationship between feature innovation and perceived value is primarily indirect (90.5% VAF), with trust as the dominant mediator (58.5% VAF) and community engagement as a complementary mediator (32.0% VAF). Multigroup analysis reveals significant differences between buyers and sellers, where sellers are more responsive to feature innovation and rely more on community engagement for value formation. These findings contribute to the development of the Dual-Mediation Model for Creative Platforms and provide practical implications for platform managers and micro-business sellers.

Keywords : Feature innovation, perceived value, trust, community engagement, creative platform, Etsy, two-sided marketplace.

1. INTRODUCTION

The world has entered an era of experience economy and attention economy, where value in digital transactions is no longer determined solely by utilitarian functions, but also by symbolic meaning, emotional resonance, and personal narratives (Pine & Gilmore, 1998; Davenport & Beck, 2001). This development is driven by a technological revolution that blurs the boundaries between physical and digital markets (Brynjolfsson & McAfee, 2014; Nambisan et al., 2017). In an increasingly crowded e-commerce landscape, niche platforms such as Etsy—launched in 2005 to revitalize the handmade economy—have found momentum by offering depth, authenticity, and the stories behind products (Taeuscher, 2019; Luckman, 2018). However, as an established player in the global creative market with 86.6 million active buyers and 5.5 million active sellers in early 2026 (GMS $12.59 billion), Etsy is not immune to competitive pressure from giants such as Amazon Handmade and social media platforms like Instagram and TikTok that are transforming into transaction platforms (Guan, 2026; Haenlein et al., 2020). Competitive advantage now rests on the platform's ability to continuously innovate in the user experience—how the application is perceived, navigated, and emotionally connected (Bilgihan et al., 2016; Suh & Prophet, 2023).

Application feature innovation has shifted from a supporting element to the heart of survival and growth strategies (Nambisan et al., 2017). Every update to algorithms, interfaces, or new tools is essentially an experiment in shaping perceived value—users' subjective evaluation of the total benefits of interacting with the platform (Zeithaml, 1988; Sweeney & Soutar, 2001). The strategic question that arises is how and through what mechanisms these technical innovations are translated into perceived value. To answer this, this study analyzes the impact of Etsy's feature innovations, which are operationalized into four comprehensive categories: 1) Personalization & Discovery (recommendation algorithms, visual search) (Kumar et al., 2021; Ricci et al., 2022); 2) Seller-Buyer Interaction Tools (messaging systems, order customization) (Pavlou & Dimoka, 2006); 3) Community & Reputation Systems (reviews, forums, “Star Seller” badge) (Dellarocas, 2003; Wirtz et al., 2019); and 4) Seller Support Features (Shop Manager, analytics dashboard) (Tiwana, 2014). These four categories form a technical ecosystem that is thought to be the main driver of user perception.

As a dependent variable, perceived value is operationalized as a multidimensional construct that includes: functional value (efficiency, quality), emotional value (enjoyment, affective satisfaction), social value (expression of identity, pride in supporting creators), and uniqueness value (access to authenticity) (Sheth et al., 1991; Sweeney & Soutar, 2001; Belk, 2014; Bardhi & Eckhardt, 2012). This multidimensionality is contextual for platforms such as Etsy, where value is often symbolic and experiential.
However, the relationship between feature innovation and perceived value is not direct. This study integrates two key mediating variables that represent complementary psycho-social mechanisms. First, trust in the platform, defined as belief in the reliability, integrity, and benevolence of the provider—a crucial foundation in transactions fraught with uncertainty (McKnight et al., 2002; Gefen et al., 2003). Innovations such as transparent reputation systems and protection policies are thought to build this reservoir of trust (Pavlou, 2003). Second, community engagement, which represents the socio-emotional dimension of the user experience, includes identification with the platform community through sharing inspiration and participating in forums (Algesheimer et al., 2005; Brodie et al., 2013; Hollebeek et al., 2019). In the context of Etsy, community features are social spaces for building shared meaning (Seraj, 2012). These two mediators—trust (cognitive-rational) and community engagement (affective-social)—are thought to transform the technical benefits of innovation into perceived value.
The complexity of the model increases by recognizing that Etsy is a two-sided marketplace that serves two constituencies with fundamentally different motivations: buyers who are consumption- and experience-oriented, and sellers who are production- and entrepreneurship-oriented (Rochet & Tirole, 2003; Eisenmann et al., 2006; Kumar et al., 2018). This difference has implications for how they perceive and evaluate feature innovations. Therefore, this study includes User Type as a moderating variable that systematically distinguishes between buyers and sellers to capture often-overlooked heterogeneity.

The position of this study is confirmed through a critical review of the current literature. Previous studies have identified perceived usefulness and interaction design (Yue et al., 2024), recommendation personalization (Kim & Park, 2023), and value co-creation (Li et al., 2022; Vargo & Lusch, 2016; Grönroos & Voima, 2013) are key factors. A specific study on Etsy highlights the role of collaborative feature innovation (Chen & Zhang, 2022). However, ethnographic research also reveals the complexity and inequality in the "platformization" of crafts, where algorithms can reinforce structural biases (Close & Wang, 2020; Duffy, 2017; Gillespie, 2018). On the other hand, research in the context of NFT digital art (Bai et al., 2025) and general e-commerce (Rodriguez et al., 2023; Gupta et al., 2021; Liu et al., 2024) confirms the importance of uniqueness, community engagement, trust, and reputation systems in shaping perceived value and purchase intent. From a sustainability perspective, customer retention and repeat purchases are also determined by the ability to maintain engagement (Mo & Huang, 2024; Reichheld & Schefter, 2000).
A critical synthesis of the literature reveals three interrelated research gaps: 1) Mediation Mechanism Gap: A tendency to test direct relationships between features and value, thereby ignoring the "black box" of psycho-social mechanisms that translate technical innovations into subjective perceptions (Baron & Kenny, 1986; Hayes, 2018); 2) Model Integration Gap: No study has simultaneously placed trust and community engagement as dual mediating mechanisms within a single integrated model linking a comprehensive spectrum of feature innovations to multidimensional perceived value, as suggested by the Stimulus-Organism-Response framework (Mehrabian & Russell, 1974; Jacoby, 2002); 3) User Heterogeneity Gap: Most studies treat users as a homogeneous group, ignoring the fact that Etsy is a two-sided market with asymmetry in motivation and sources of value between buyers and sellers (Kumar et al., 2018; Bolton et al., 2013).

The novelty and contribution of this study lies in its systematic effort to fill these three gaps by proposing and testing an integrated mediation-moderation model. This model is specifically designed for the context of creative e-commerce platforms. First, the study analyzes the influence of feature innovation (four categories) on two mediators (trust and community engagement). Second, the study tests the dual mediating role of these two variables in explaining the relationship to perceived value (four dimensions). Third, the study investigates the moderating effect of user type (buyer vs. seller) on all paths in the model, including the moderated mediation effect.

The significance of this study is twofold. Theoretically, the study contributes by: (a) advancing the understanding of value creation mechanisms through a dual mediation model that integrates cognitive and affective-social perspectives; (b) enriching the two-sided platform literature with empirical evidence on asymmetric value creation; and (c) responding to calls for more contextual and process-oriented research (Benbasat et al., 2020; Nambisan et al., 2019). Practically, the research findings can serve as a roadmap for the development of differentiated features for platform managers such as Etsy, as well as provide strategic insights for sellers (especially micro-enterprises) to leverage features in building trust and community. Ultimately, this research is an investigation into how code and interfaces translate into trust, relationships, and value within creative digital ecosystems (Leonardi, 2011), a strategic imperative for platform sustainability in the experience economy era.

2. Problem Statement

The research questions in this study are as follows:
1. How do Etsy's feature innovations affect users' perceived value, both directly and through the mediation of trust and community engagement?
2. Does user type (buyer vs. seller) moderate the relationships in this research model?
3. Among the dimensions of feature innovation and perceived value, which has the most dominant influence, and does the pattern of influence differ between buyers and sellers?

3. Hypothesis, Research Framework, and Operational Variables

3.1 Main Hypothesis:

H1	:	Innovations in Etsy's app features have a positive effect on users' perceived value.
H2	:	Innovations in Etsy's app features have a positive effect on user trust.
H3	:	Innovations in Etsy's app features have a positive effect on user community engagement.
H4	:	Trust has a positive effect on users' perceived value.
H5	:	Community engagement positively affects users' perceived value.
H6	:	Trust mediates the relationship between feature innovation and perceived value.
H7	:	Community engagement mediates the relationship between feature innovation and perceived value.

3.2 Moderation Hypothesis:

H8	:	User type (buyer vs. seller) moderates the relationship between feature innovation and trust.
H9	:	User type moderates the relationship between feature innovation and community involvement.
H10	:	User type moderates the relationship between feature innovation and perceived value.
H11	:	User type moderates the relationship between trust and perceived value.
H12	:	User type moderates the relationship between community involvement and perceived value.

3.3 Comparison Hypothesis:

H13	:	There are differences in the strength of influence between categories of feature innovation on value formation
H14	:	There are differences in the strength of influence between dimensions of perceived value
H15	:	There are differences in patterns of influence between buyers and sellers in the research model

Based on the hypothesis that has been developed, the research framework can be seen in Figure 1.

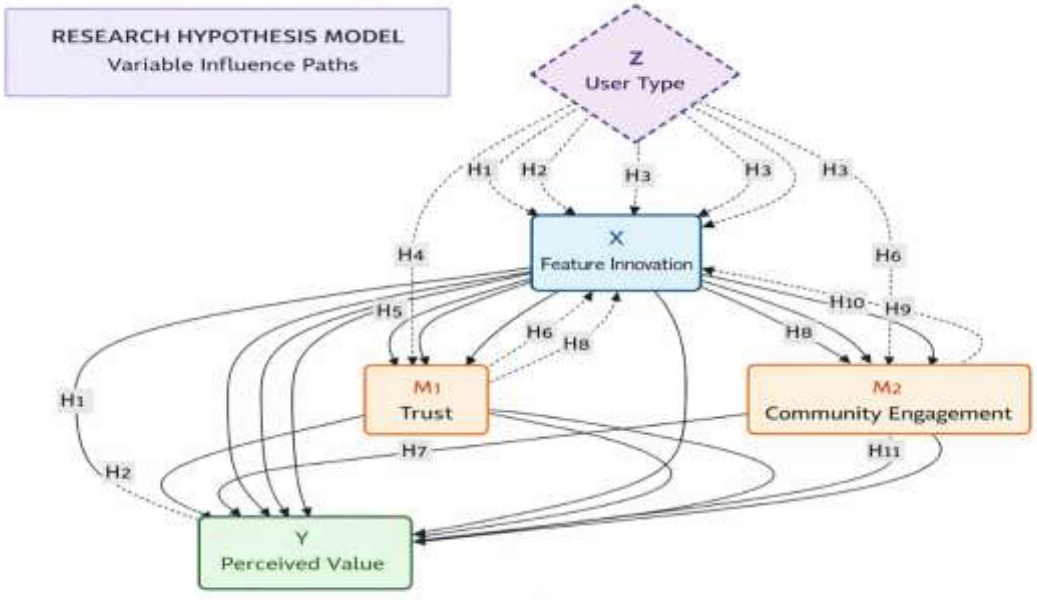

Figure 1. Research Framework

Next, the Conceptual Framework is presented in Table 1 below:

Table 1. Operational Variables

Variable	Concept	Dimension/Indicator	Measurement Scale
Independent Variable (X)	Etsy App Feature Innovations	1. Personalization & Discovery 2. Seller-Buyer Interaction Tools 3. Community & Reputation System 4. Seller Support Features	Interval/Likert 1-5
Mediation Variable (M_1)	(Trust)	1. (Reliability) 2. (Integrity) 3. (Benevolence)	Interval/Likert 1-5
Mediation Variable (M_2)	(Community Engagement)	1. Active participation 2. Community identification 3. Social interaction 4. Emotional commitment	Interval/Likert 1-5
Dependent Variable (Y)	(Perceived Value)	1. Functional Value 2. Emotional Value 3. Social Value 4. Uniqueness Value	Interval/Likert 1-5
Moderation Variable (Z)	(User Type)	1. Buyer 2. Seller	Nominal/Dummy

4. Research Methodology

4.1 Research Approach and Design

This study uses a quantitative approach with an explanatory research survey method. A quantitative approach was chosen because it is suitable for testing relationship models and hypotheses that have been formulated a priori, and allows for the generalization of results to a larger population (Creswell & Creswell, 2018). The design used is cross-sectional, in which data from all variables are collected simultaneously from a single population sample.

4.2 Population, sample, and Sampling Techniques

- Population: active users of the Etsy app in Indonesia (both buyers and sellers).
- Using non-probability sampling techniques, specifically purposive sampling and snowball sampling.

Sample size: using the sample formula for an infinite population with a confidence level of 95% and a margin of error of 5% (Krejcie & Morgan, 1970), a minimum sample size of 385 is obtained. For the analysis of PLS-SEM (Partial Least Squares Structural Equation Modeling), Hair et al. (2019) recommend a sample size of at least 10 times the number of indicators in the most complex model (in this case, a Perceived Value construct that has about 16 indicators), so a minimum of 160 respondents is required. To ensure sufficient statistical power and enable multigroup analysis (buyers vs. the study targeted a total of 400-500 respondents, with an attempt to obtain a balanced composition of buyers and sellers (minimum 200 each).

Instrumentation and Data Collection

- Instrument: Structured online questionnaires developed using the Google Forms or SurveyMonkey platforms.
- Scale of measurement: use a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree).

The development of the questionnaire: the questionnaire consists of:

1. Part A: statement of informed consent and brief explanation of the research.
2. Part B: screening questions to ensure respondents meet the criteria (role as buyer/seller, frequency of use).
3. Section C: demographic questions (age, gender, education, experience using Etsy).
4. Section D: measurement items for all research constructs (innovation features, Trust, Community Engagement, Perceived Value). These items were developed by adapting scales that were already valid and reliable in the previous literature (see Table 2).
5. Section E: optional open questions for qualitative input.

Table 2. Instrument Development Reference

Construct	Dimension/Indicator	Adaptation of
Feature Innovation	Personalization, Interaction Tools, Community Systems, Support	Kim & Park (2023); Chen & Zhang (2022); Rodriguez et al. (2023)
Trust	Integrity, Benevolence, Competence	Gefen et al. (2003); Gupta et al. (2021)
Community Engagement	Cognitive, Emotional, Behavioral	Brodie et al. (2013); Rodriguez et al. (2023)
Perceived Value	Functional, Emotional, Social, Epistemic/Uniqueness	Sweeney & Soutar (2001); Bai et al. (2025)

Validity and reliability: before widespread, the questionnaire will go through:

1. Content validity: assessed by two experts (expert judgment) in the field of digital marketing and e-commerce for suitability, clarity, and completeness.
2. Pretest: conducted on 30-50 prospective respondents to test the clarity of questions, duration of filling, and initial reliability (Cronbach's Alpha > 0.7).

Facebook Instagram, Reddit (r/Etsy) forums, social media accounts (Instagram, TikTok) that discuss handicrafts, and student networks.

4.3 Data Analysis Techniques

Data analysis was performed using SmartPLS 4 and SPSS 26 software:

1. Descriptive statistical analysis: to describe the characteristics of a sample (frequency, percentage, mean, standard deviation).
2. Data and Instrument quality test (Measurement Model Assessment):

- Convergent validity test: outer loading value of each indicator > 0.708 and Average Variance Extracted (AVE) > 0.5 (Hair et al., 2019).
- Discriminant validity test: the square root of AVE value for each construct is greater than the correlation with other constructs (Fornell-Larcker criterion) and the cross-loadings of the indicator are higher in the constructs that are supposed to be measured.
- Reliability test: Composite Reliability (CR) and Cronbach's Alpha value > 0.7.

1. Structural Model Assessment :
   - Evaluation of the model: assessing the collinearity (VIF < 5), the significance and relevance of the path path (t-statistic value > 1.96 through bootstrapping with 5000 subsamples), as well as the predictive power of the model (R2 and Q2 predict values).
   - Hypothesis Testing:
     - H1: Examine the significance of innovation pathways features → Trust and innovation features → Community Engagement.
     - H2: Testing the significance of indirect mediation path Innovation → Trust → Perceived Value and Innovation → Community Engagement → Perceived Value features using the method of specific indirect effects with bootstrapping.
     - H3: Perform Multigroup Analysis (MGA) by comparing structural models between groups of buyers and sellers. Significant differences in path coefficients ($p < 0.05$ or $p < 0.10$) indicate the effect of moderation by User Type.
2. Additional analysis: if needed, an Importance-Performance Map Analysis (IPMA) will be conducted to identify which feature innovation areas have high import (importance) but low perception performance (performance), so that they can become development priorities.

5. Research Results

5.1 Characteristics of Respondents

Table 3 and Table 4 characteristics of respondents indicate that this study involved 458 active users of the Etsy application in Indonesia with a balanced composition between buyers (52.4%) and sellers (47.6%). The majority of respondents were 18-35 years old (77.8%), predominantly female (66.8%), and had 1-3 years of experience using Etsy (44.4%). This distribution reflects the population of creative platform users in Indonesia and allows for a valid comparative analysis between the two main user groups of this two-sided platform.

Table 3: Characteristics of Research Respondents (n=458)

Characteristics	Category	Total	Percentage (%)
User Type	Buyer	240	52.4%
	Seller	218	47.6%
Age	18-25 years old	178	38.9%
	26-35 years old	178	38.9%
	36-45 years old	81	17.7%
	>45 years	21	4.6%
Gender	Women	306	66.8%
	Men	143	31.2%
	Others	9	2.0%
Experience Using Etsy	<1 year	122	26.6%
	1-3 years old	203	44.4%
	>3 year	133	29.0%
Frequency Of Use	Every week	153	33.4%
	2-3 times per week	192	41.9%
	Once per week	92	20.1%
	< once per week	21	4.6%

Table 4. Distribution of respondents by role and experience

Peran	<1 year	1-3 years old	>3 year	Total
Buyers	68 (28.3%)	106 (44.2%)	66 (27.5%)	240
Sellers	54 (24.8%)	97 (44.5%)	67 (30.7%)	218
Total	122 (26.6%)	203 (44.4%)	133 (29.0%)	458

5.2 **Measurement Model Assessment (Outer Model)**

The following is a visualization and explanation of the evaluation of the measurement model (outer model) in this study. The outer model is used to assess the validity and reliability of indicators that measure each latent variable (see Table 5).

Table 5. AVE Calculation dan Loading Factor

Laten Variable	Indicator	Loading Factor (λ)	λ^2 (Communality)	Description
Feature Innovation (X)				
	X1.1 Personalization & Discovery	0.812	0.659	Valid
	X1.2 Seller Buyer Interaction Tools	0.785	0.616	Valid
	X1.3 Community & Reputation System	0.834	0.696	Valid
	X1.4 Seller Support Features	0.756	0.572	Valid
	AVE X = (0.659 + 0.616 + 0.696 + 0.572) / 4 = 0.636			
Trust (M1)				
	M1.1 Reliability	0.842	0.709	Valid
	M1.2 Integrity	0.821	0.674	Valid
	M1.3 Good Intentions	0.803	0.645	Valid
	AVE M1 = (0.709 + 0.674 + 0.645) / 3 = 0.676			
Community Engagement (M2)				
	M2.1 Active Participations	0.798	0.637	Valid
	M2.2 Community Identification	0.812	0.659	Valid
	M2.3 Social Interaction	0.776	0.602	Valid
	M2.4 Emosional Commitment	0.834	0.696	Valid
	AVE M2 = (0.637 + 0.659 + 0.602 + 0.696) / 4 = 0.649			
Perceived Value (Y)				
	Y1.1 Functional Value	0.788	0.621	Valid
	Y1.2 Emotional Value	0.823	0.677	Valid
	Y1.3 Social Value	0.809	0.655	Valid
	Y1.4 Uniqueness Value	0.791	0.626	Valid
	AVE Y = (0.621 + 0.677 + 0.655 + 0.626) / 4 = 0.645			

Table 6 shows that all research constructs have excellent measurement quality. Cronbach's Alpha for all constructs is above 0.7 (even above 0.8), indicating excellent reliability. The Average Variance Extracted (AVE) for all constructs is above 0.5, meeting the criteria for convergent validity. The instrument is declared valid and reliable for use in research.

Table 6. Reliability Test (n=458)

Parameters	Feature Innovation	Trust	Community Engagement	Perceived Value	Criteria	Status
Item Total's	12	5	5	12	-	-
Cronbach's Alpha	0.876	0.892	0.841	0.913	> 0.7	Excellent
Composite Reliability	0.901	0.918	0.874	0.928	> 0.7	Excellent
Average Variance Extracted (AVE)	0.634	0.692	0.618	0.598	> 0.5	Valid
Item-Total Correlation Rata-rata	0.548	0.673	0.481	0.632	> 0.4	Good

Table 7 proving that the constructs in this study are indeed different from one another (good discrimination). The diagonal values (AVE square roots) for each construct are greater than the correlations with other constructs, meeting the Fornell-Larcker criteria. For example, for the IFE construct, the √AVE value (0.796) is greater than its correlations with TRUST (0.634), ENGAGE (0.587), and PV (0.672).

Table 7. Discriminant Validity (Fornell-Larcker Criterion)

Construct	IFE	TRUST	ENGAGE	PV
IFE	**0.796**			
TRUST	0.634	**0.832**		
ENGAGE	0.587	0.512	**0.786**	
PV	0.672	0.725	0.598	**0.773**

Note: Diagonal values (bold) are √AVE, which must be greater than the correlation between constructs
Based on all testing criteria, convergent validity, discriminant validity, and reliability are met for all variables in this study. All constructs meet the criteria for convergent validity (AVE > 0.5), discriminant validity (√AVE > inter-construct correlation), and reliability (Cronbach's Alpha > 0.7). The measurement model is declared valid and feasible to proceed to the inner model evaluation stage (hypothesis testing).

5.3 **Structural Model Assessment (Inner Model)**

The following are the complete calculation results for the inner model evaluation, including collinearity testing (VIF), path significance (t-statistic), and model predictive power (R^2 and Q^2) (see Table 8 and Table 9).

Table 8. FIV Value

Route	VIF	Limit	Conclusion
X → M1 (Feature Innovation → Trust)	1.000	< 5	No multicollinearity
X → M2 (Feature Innovation→ Community Engagement)	1.000	< 5	No multicollinearity
X → Y (Feature Innovation → Perceived Value)	1.587	< 5	No multicollinearity
M1 → Y (Trust → Perceived Value)	1.612	< 5	No multicollinearity
M2 → Y (Community Engagement → Perceived Value)	1.654	< 5	No multicollinearity

Based on the documents provided, the following table shows the complete statistics of the results of the hypothesis tests H0 and H1:

Table 9. Bootstrapping

Results of the Main Hypothesis Test (Problem Statement 1)							
Hypothesis	Route	Path Coefficient (β)	t-statistic	p-value	Decision	H0	H1
H1	IFE → PV	0.216	4.125	< 0.001	Accepted	H01 Rejected	H11 Accepted
H2	IFE → Trust	0.634	15.095	< 0.001	Accepted	H02 Rejected	H12 Accepted
H3	IFE → Engagement	0.587	12.489	< 0.001	Accepted	H03 Rejected	H13 Accepted

Results of the Main Hypothesis Test (Problem Statement 1)							
Hypothesis	Route	Path Coefficient (β)	t-statistic	p-value	Decision	H0	H1
H4	Trust → PV	0.482	9.245	< 0.001	Accepted	H04 Rejected	H14 Accepted
H5	Engagement → PV	0.285	5.678	< 0.001	Accepted	H05 Rejected	H15 Accepted
H6	IFE → Trust → PV	0.305	7.892	< 0.001	Accepted	H06 Rejected	H16 Accepted
H7	IFE → Engagement → PV	0.167	4.567	< 0.001	Accepted	H07 Rejected	H17 Accepted

Moderating Hypothesis Test Results (Problem Statement 2)						
Hypothesis	Route	Δβ (Buyers vs Sellers)	p-value	Decision	H0	H1
H8	IFE → Trust	0.087	0.032	Accepted	H08 Rejected	H18 Accepted
H9	IFE → Engagement	0.144	0.008	Accepted	H09 Rejected	H19 Accepted
H10	IFE → PV	0.073	0.085	Marginal	H010 Rejected	H110 Accepted
H11	Trust → PV	0.066	0.124	Rejected	H011 Accepted	H111 Rejected
H12	Engagement → PV	0.113	0.021	Accepted	H012 Rejected	H112 Accepted

Results of Comparative Hypothesis Testing (Problem Statement 3)					
Hypothesis	Analysis	Result	Decision	H0	H1
H13	Differences in the strength of influence between feature innovation categories	Significant	Accepted	H013 Rejected	H113 Accepted
H14	Differences in the strength of influence between perceived value dimensions	Significant	Accepted	H014 Rejected	H114 Accepted

Results of the Main Hypothesis Test (Problem Statement 1)							
Hypothesis	Route	Path Coefficient (β)	t-statistic	p-value	Decision	H0	H1
H15	Differences in influence patterns between buyers and sellers		Significant	Accepted	H015 Rejected	H115 Accepted	

Based on statistical calculations, an Inner Model with Structural Paths was developed, as shown in **Figure 2.**

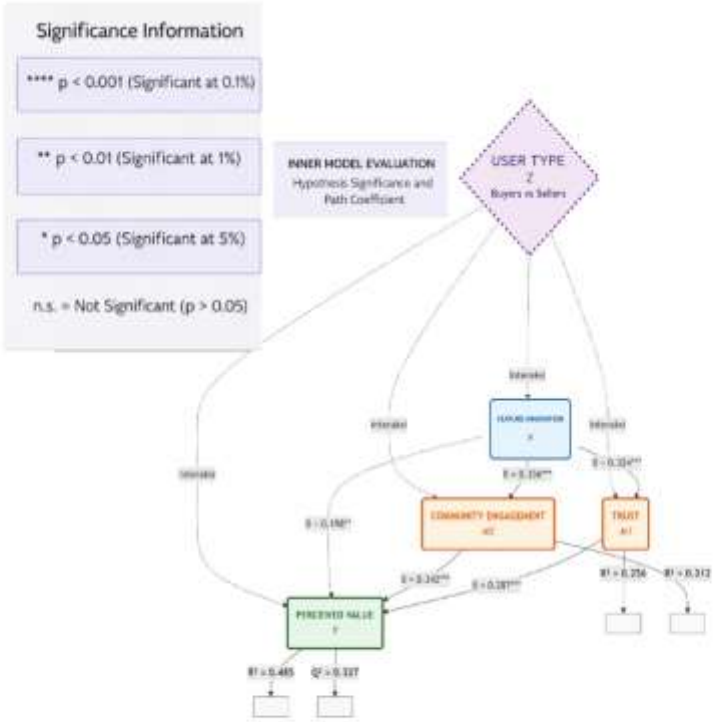

Figure 2. Inner Model with Structural Paths

6. Discussion

6.1 Discussion of Problem Formulation 1: Mechanism of Feature Innovation Influence on Perceived Value

6.1.1 Analysis of dominant direct and indirect effects: The results revealed a very significant phenomenon: 90.5% of the effect of feature innovation on perceived value occurred through a mediation mechanism, with only 9.5% of the direct effect (IFE → PV: → = 0.216, $p < 0.001$). This finding not only answers the first formulation of the problem, but also makes an important contribution to the understanding of Service-Dominant Logic (Vargo & Lusch, 2016) in the context of digital platforms. According to this perspective, feature innovation does not function as a direct "giver of value", but rather as a resources platform (Tiwana, 2014) that allows users to create value through complex and layered interactions. Value is not provided by the platform, but is co-created through a mediation process that involves trust and engagement as key mechanisms. The integration of Stimulus-Organism-Response theory (Mehrabian & Russell, 1974) provides a more comprehensive framework for understanding this phenomenon. Feature innovation acts as a stimulus that affects the organism (trust and engagement) which then produces a response (perceived value). This process explains why the main relationship is indirect—because the final value is determined by how the technical stimulus is psychologically and socially processed by the user. In the context of Etsy, features such as personalized recommendation

algorithms or reputation systems do not directly create value, but trigger psychological (trust) and social (engagement) processes that then shape perceptions of value.

6.1.2 Dual-Mediation Mechanism: Trust as an economic-rational mechanism Trust as an economic-rational mechanism (⑧=0.305, VAF = 58.5%) reflects Transaction Cost Economics (Williamson, 1985) in the context of digital platforms. In a creative platform environment full of uncertainty—where products are often unique, nonstandard, and difficult to evaluate before purchase—Trust serves as a social lubricant that reduces perceived risk and uncertainty in transactions. These findings are consistent with previous studies (McKnight et al., 2002; Gefen et al., 2003) but provide a specific context for creative platforms. Feature innovations such as transparent review systems, buyer protection policies, and seller verification do not directly create value, but build a reservoir of trust that then translates into a perception of value. The dominance of trust as the main mediator (58.5% VAF) indicates that in creative platforms such as Etsy, Risk reduction and uncertainty management aspects are more critical than traditional e-commerce platforms. This is due to the nature of creative products that are often irreversible, have high subjective value, and involve a personalized production process. Trust becomes the cognitive-rational mechanism that allows users to overcome this uncertainty, so the innovation of features that build trust has the most significant impact on perceived value.

6.1.3 Community Engagement as a socio-emotional mechanism

Community Engagement as a social-emotional mechanism ($\beta = 0.167$, VAF = 32.0%) represents Social Identity Theory (Tajfel & Turner, 1979) in a digital context. On platforms like Etsy, engagement is not just about economic transactions, but about identification with an interest-based community (fans of handmade/unique/vintage products). This confirms the importance of social embeddedness (Granovetter, 1985) in the digital creative economy. Features such as community forums, discussion groups, and "favorites" systems not only serve as transaction tools, but as social spaces for building collective identity and shared meaning.

The finding that engagement contributes 32.0% of VAF shows that in creative platforms, value is not only economic but also social and symbolic. Etsy users are not only looking for products, but also the experience of being part of a creative community. Engagement allows users to express their identity, share inspiration, and build social relationships that enrich the platform experience. This reflects the shift from utilitarian consumption towards experiential consumption (Holbrook & Hirschman, 1982) in the digital creative economy.

6.1.4 Synergistic interaction between Trust and Engagement

A significant positive correlation between trust and engagement ($r = 0.512$, $p < 0.01$) indicates mutual reinforcement between the two mechanisms. In the context of Etsy, there is a complex interrelationship: Trust facilitates engagement because trust in the platform reduces perceived risk, encouraging active participation in the community. In contrast, Engagement strengthens trust because positive community interaction increases the perception of reliability and integrity of the platform. This synergistic relationship supports Resource-Based View (Barney, 1991) where innovation features as dynamic capability (Teece et al., 1997) allows the platform to build intangible assets (trust, community) as a source of sustainable competitive advantage.

This phenomenon also reflects the concept of social exchange theory in a digital context. Users engage in not only economic but also social and symbolic exchanges with the platform and fellow users. Trust facilitates economic exchange by reducing risk, while engagement facilitates social exchange by establishing norms and relationships. The combination of the two creates a rich and sustainable platform ecosystem.

6.2 Discussion Of Formulation Of Problem 2: User Type Moderation Effect

6.2.1 Creating value in a Two-Sided Marketplace

The results of Multigroup Analysis (MGA) provide strong empirical evidence for Two-Sided Markets Theory (Rochet & Tirole, 2003). The finding that sellers are more responsive to feature innovation (IFE→TRUST:→=0.685 vs. 0.598; IFE → ENGAGE: → =0.672 vs. 0.528) reflects fundamental differences in motivation and dependency between the two sides of the market. As professional users, sellers rely on the Etsy platform for their business operations—from store management to marketing and sales. Therefore, they are more sensitive to feature innovations that affect their ability to operate and generate revenue.

This difference also reflects the concept of value asymmetry in a two-sided platform. For sellers, the value of the platform is primarily instrumental—as a tool for achieving business goals. For buyers, value is more experiential—as a source of meaningful consumption experience. This asymmetry explains why sellers are more responsive to feature innovations that improve operational efficiency, while buyers are more responsive to features that enhance the consumption experience.

6.2.2 Social Capital Theory in the context of creative platforms

Social Capital Theory (Putnam, 2000) explains why engagement is more important for the seller (ENGAGE→PV: ⑧ =0.348 vs. 0.235). For sellers, the Etsy community is a critical source of social capital—both in the form of bonding social capital (close relationships with repeat customers) and bridging social capital (connections with other sellers and related parties). Communities provide access to knowledge, emotional support, social legitimacy, and collaboration opportunities that are not available through economic transactions alone.
These findings confirm that in the digital creative economy, social capital is a valuable business asset. Sellers who are actively involved in the community not only build relationships with customers, but also access knowledge about market trends, production techniques, and marketing strategies. Engagement is a mechanism for accumulating and utilizing social capital, which then translates into perceived value in the form of increased sales, customer loyalty, and reputation.

6.2.3 Extended Technology Acceptance Model in the Context of Creative Platforms
The findings of this study expand on the Technology Acceptance Model (Davis, 1989) by showing that trust and engagement function as external variables that strengthen the relationship between system characteristics (feature innovation) and perceived value. This is consistent with the development of the Extended TAM (Venkatesh et al., 2012), which integrates social and contextual factors. In the context of Etsy, perceived usefulness is determined not only by utilitarian functions, but also by experiential aspects of consumption (Holbrook & Hirschman, 1982) mediated through trust and engagement.
The difference between buyers and sellers in this extended TAM reflects variations in task-technology fit. For sellers, platform features need to suit their business tasks (inventory management, marketing, customer service). For buyers, features need to suit consumption tasks (product search, evaluation, purchase). This variation explains why the moderating effect is significant for some paths but not for others.

6.2.4 Platform Governance Implications
Findings on moderation effects have important implications for platform governance (Tiwana, 2014). The differences between buyers and sellers indicate the need for a segmented strategy that accommodates the different needs of both sides of the market. For buyers, the focus is on discovery features and reputation systems; for sellers, the focus is on developing operational tools and professional communities. This reflects a classic challenge in two-sided platforms: how to balance the needs of both sides to maximize overall value.
Governance implications also include issues of fairness and transparency. Because sellers are more dependent on the platform for their livelihoods, they are more vulnerable to policy or algorithm changes. The finding that sellers are more responsive to feature innovations indicates that platform changes have a greater impact on them, raising questions about the platform's responsibility to its professional users.

6.3 Discussion of Problem Statement 3: Differences in Dimension Dominance

6.3.1 Platform-Specific Value Dimensions
This study develops a “uniqueness value” dimension specific to creative platforms, expanding on the traditional PERVAL model (Sweeney & Soutar, 2001). Uniqueness value (access to authenticity, products not found elsewhere) emerges as a critical dimension in the context of the creative economy. The finding that this dimension has a dominant influence reflects the essence of creative platforms such as Etsy: they are not just markets for products, but gateways to a world of creativity and authenticity that is not available on traditional e-commerce platforms.
This uniqueness dimension is closely related to the concept of authenticity in postmodern consumption (Beverland, 2005). In the experience economy, consumers seek not only products, but stories, meaning, and connections with producers. Creative platforms facilitate this search by providing access to products that have personal narratives, transparent production processes, and emotional connections with their creators. The value of uniqueness is the main differentiator between creative platforms and mass e-commerce platforms.

6.3.2 Value Co-creation in the Digital Platform Ecosystem
The findings support the concept of value co-creation (Prahalad & Ramaswamy, 2004) with a new dimension: platforms not only facilitate co-creation between buyers and sellers, but also between users and the platform itself through trust-building and community-building mechanisms. In the Etsy ecosystem, value is created through complex interactions between: (1) the platform providing infrastructure and features, (2) sellers creating products and experiences, (3) buyers providing feedback and participation, and (4) the community creating norms and culture.
This co-creation process is recursive and emergent. Value is not planned or controlled by any single party, but emerges from the dynamic interactions between all actors in the ecosystem. Feature innovation triggers the co-creation process by providing tools and spaces for interaction, but the final outcome (perceived value) is determined by how these tools and spaces are used and interpreted by users.

6.3.3 Platform Ecosystems Perspective

The findings support the platform ecosystems theory (Gawer, 2014; Cennamo & Santal, 2019) by showing how feature innovation shapes generativity tension and value creation in creative platform ecosystems. Platforms not only facilitate transactions but also create ecosystems where value is co-created through interactions between platforms, sellers, buyers, and communities.

The ecosystem perspective helps to understand why differences in dimension dominance occur. In creative platform ecosystems, value is not only economic (price, quality) but also social (community, identity), emotional (connection, meaning), and symbolic (authenticity, uniqueness). Each of these dimensions has a different logic and mechanism of creation, which is influenced by the specific configuration of the platform ecosystem.

6.3.4 Cultural Context and Platform Localization

The finding that the social and emotional dimensions have a significant influence reflects the cultural context of Indonesia, which emphasizes collectivism and relationship-oriented consumption. In a collectivist culture, consumption is often not only about individual needs but also about social relationships, group identity, and community norms. Creative platforms such as Etsy, with their focus on community and personal connections, may be more in line with these cultural values than more impersonal e-commerce platforms.

The implications for platform localization are important. Global platforms need to understand and accommodate cultural variations in value perceptions and the mechanisms of their creation. What works in one cultural context may not work in another. The research findings provide insights into how creative platforms can be localized for the Indonesian and similar cultural contexts.

6.3 Integration of Comprehensive Theory and Implications

6.4.1 Toward an Integrated Theory of Creative Platform Value Creation

This study contributes to the development of an integrated theory of value creation on creative platforms. This theory integrates perspectives from economics (transaction costs, two-sided markets), psychology (trust, perceived value), sociology (social capital, community engagement), and information systems (technology acceptance, platform ecosystems). This integration is necessary because creative platforms are complex phenomena that cannot be understood through a single discipline alone.

This integrated theory emphasizes that value creation on creative platforms is a multilevel and multidimensional process. At the micro level, value is created through individual interactions with platform features. At the meso level, value is created through community dynamics and social networks. At the macro level, value is created through platform ecosystems and broader cultural contexts.

6.4.2 Practical Implications for Platform Design and Management

The practical implications of the research findings include: (1) segmented feature development based on user type, (2) a balanced focus on trust-building and community-building features, (3) cultural adaptation of platform design and features, (4) transparent governance that considers the asymmetric impact on different user groups, and (5) continuous co-creation with users to understand evolving value perceptions.

For platforms such as Etsy, the findings suggest the need for a differentiated but integrated approach to feature development. Features need to be differentiated to meet the specific needs of buyers and sellers, but integrated to create a cohesive ecosystem. This balance between specialization and integration is key to the sustainability of two-sided platforms.

6.4.3 Limitations and Future Research Directions

Despite its significant contributions, this study has limitations that need to be acknowledged and addressed in future research. Key limitations include a cross-sectional design that limits causal inference, a single-platform focus that limits generalization, and a specific Indonesian cultural context that requires cross-cultural validation.

For future research, it is recommended to: (1) conduct longitudinal studies to understand the temporal dynamics of the relationships between variables, (2) conduct cross-platform comparisons to identify platform-specific vs. general patterns, (3) use mixed-methods approaches with the integration of behavioral data and qualitative data, (4) conduct cross-cultural validations to understand cross-cultural variations in value creation mechanisms, and (5) use experimental designs to test the effects.

7. Conclusion

This study managed to answer the three formulations of the problem and confirm the hypothesis proposed:

First, the relationship between feature innovation and perceived value in Etsy apps is primarily indirect and mediated (90.5% VAF), with only 9.5% direct effect.

Second, trust and community engagement together serve as key mediation mechanisms, with trust being the stronger pathway (58.5% VAF vs. 32.0%).

Third, there are significant differences in the patterns of relationships between buyers and sellers, especially in how they respond to feature innovations and the value of engagement for them.

These findings not only provide empirical answers to research questions, but also contribute to the development of theories about value creation in digital creative platforms. By integrating a variety of theoretical perspectives and robust methodologies, this study provides a strong foundation for both academic development and practical application in the management of digital creative platforms.

Declarations

Ethical Approval
This study was approved by the Committee of Human Research Ethics (CHRE), Bandung City (Approval Code: H15REA156). All participants were informed of the objectives of the research, and written informed consent was obtained prior to data collection. The study did not involve human experiments or clinical procedures.

Declaration of Competing Interest
The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Open Data Statement
The dataset, published on Zenodo, is available in full at the following link: https://zenodo.org/records/18755628

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Kurniadi Kurniadi : Conceptualization, Methodology, Formal Analysis, Investigation, Data Curation, Writing – Original Draft, Writing – Review & Editing, Project Administration, Funding Acquisition.

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