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Analysis of User Experience and Perceived Value as the Basis for Enhancing User Loyalty Through User Satisfaction among Skill Academy Users in Jakarta, Indonesia

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A R T I C L E I N F O

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A B S T R A K

This study investigates the influence of Perceived Value (PV) and User Experience (UE) on User Loyalty (UL), mediated by User Satisfaction (US), within the competitive Jakarta MOOC market. Utilizing PLS-SEM on cross-sectional data from 150 Skill Academy users, the research tested the structural model. The results confirm that PV and UE significantly and positively affect UL via direct effects, with PV being the strongest predictor. Crucially, the study finds that User Satisfaction does not significantly predict or mediate loyalty, confirming a breakdown in the affective chain and highlighting the dominance of calculative commitment in this sector. This research contributes by challenging the traditional assumption that satisfaction precedes loyalty in utilitarian digital environments. The implication is that retention strategies must prioritize maximizing utilitarian value and technical functionality, rather than subjective contentment.

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INTRODUCTION

The Massive Open Online Courses (MOOCs) industry in Indonesia has experienced significant development, characterized by massive participation, open access, and structured online learning (Dasarathy et al., 2014; Hoy, 2014). This growth accelerated during the COVID-19 pandemic, driven by government support for distance learning and the critical need for workforce upskilling (Lubis et al., 2020; Sukirman et al., 2022). The urgency of MOOCs is underscored by a substantial skill gap in the labor market, ManpowerGroup (2023) reported that 75% of companies in Indonesia struggle to find employees with appropriate skills. Furthermore, LinkedIn (2025) data indicates that one in two recruiters find most applicants unqualified, with 63% highlighting gaps in AI, engineering, and soft skills. Consequently, MOOCs have emerged as a strategic alternative for enhancing technical skills and employment opportunities.

Among various platforms such as Ruangguru, MySkill, and Purwadhika, Skill Academy stands out as the largest online training platform in Indonesia, boasting over 8 million users and a diversified service portfolio ranging from civil service exam preparation to professional corporate. As an official partner of the government's Pre-Employment Card program (Kartu Prakerja) since 2020, Skill Academy excels in delivering content tailored to practical needs (Ibrahim et al., 2024). However, a large user base does not guarantee sustainability. Despite achieving a high rating of 4.8 on the Google Play Store, user feedback indicates dissatisfaction regarding platform usage. Data from Similarweb (June–August 2025) reveals a critical issue while Skill Academy recorded an average of 339,994 visitors with 86.4% unique audiences, returning visitors only ranged between 25,000 and 35,000. This figure significantly lags behind competitors like MySkill, which retained 148,000 returning users from 952,029 visits. This discrepancy highlights a retention problem, aligning with the global challenge of MOOCs where completion rates average below 10% and dropout rates reach up to 92% (Attan et al., 2024; Q. Li et al., 2024; Qi et al., 2023).

Previous studies have confirmed partial relationships between key variables such as perceived value and satisfaction, and user experience and satisfaction (Jo & Baek, 2024; Nurhudatiana & Caesarion, 2020; Rahayu et al., 2023). Furthermore, literature emphasizes that optimizing experiential factors and ensuring service quality are crucial determinants for fostering customer loyalty in competitive digital markets (Madiawati, 2023), with studies on service quality and technology confirming that fulfilled satisfaction acts as a necessary mediating variable influencing future repurchase intention (Maulida & Pradana, 2022; Suprayogi et al., 2022). However, most of these studies only examine partial relationships or focus on single dimensions. Therefore, this research aims to fill the literature gap by comprehensively integrating four main variables User Perceived Value (UPV), User Experience, User Satisfaction, and User Loyalty within a single structural framework, specifically within the context of Indonesian MOOC platforms, such as Skill Academy.

Therefore, this study aims to bridge this gap by simultaneously examining the influence of UPV and User Experience on User Loyalty, mediated by User Satisfaction among Skill Academy users in Jakarta. By analyzing these variables

holistically, this research intends to provide deep insights and practical recommendations for developing strategies to enhance user retention and ensure business sustainability in the competitive MOOC landscape.

THEORETICAL REVIEW

Perceived Value

Perceived Value (PV) is generally defined as an overall consumer appraisal of a service's utility based on the ratio of what is received to what is given, significantly influencing the user's continued desire to utilize the service (Madanaguli et al., 2021). This assessment is holistic, evaluating perceived benefits against associated sacrifices such as cost, time, and effort (Sweeney & Soutar, 2001). Sweeney and Soutar's (2001) Perval model serves as a framework, proposing PV dimensions that include Convenience Value (ease and speed of use), Monetary Value (price utility relative to quality), Emotional Value (affective response derived from use), and Social Value (the product's ability to enhance social image or identity). This convenience aspect underscores that system quality and usability are critical elements driving Perceived Usefulness, which is highly significant in technology-driven educational contexts (Rubiyanti, N. et al., 2023). Crucially, PV is established as a robust predictor of user behavior, determining User Satisfaction by ensuring needs are efficiently met (Ruiz-Alba et al., 2021; Sriwidadi & Prabowo, 2023), and fundamentally building User Loyalty for continued repurchase (J. Li, 2021; Tanurahardja & Cokki, 2023).

User Experience

User Experience (UX) is a comprehensive concept encompassing all aspects of a user's interaction with a digital product or service, including the interface, graphic design, interaction flows, and system performance (Akmal Muhamat et al., 2021). In online learning, a superior UX is paramount, as demonstrated by studies showing that perceptions of usefulness and ease of use significantly influence user satisfaction, ultimately driving the intention to continue using the platform (Kim et al., 2024; Mäkinen et al., 2023). The evaluation of UX is often structured around Peter Morville's Honeycomb framework (2004), which defines seven core dimensions essential for effective design: usefulness (meeting user needs), usability (ease of operation), desirability (emotional appeal), findability (ease of navigation), accessibility, credibility, and overall value (Nurhudatiana & Caesarion, 2020a). Therefore, a high-quality UX is fundamental for fostering engagement and effectiveness, making it a critical precursor to positive user outcomes.

User Satisfaction

User Satisfaction (US) measures the positive feeling experienced by users when they compare the perceived performance of a product or service against their initial expectations (Tanjaya, 2024). This comparative assessment is fundamentally influenced by factors such as service quality, system usability, and content quality (Tanjaya, 2024). Empirical studies emphasize the vital role of usability, with system ease-of-use contributing significantly to satisfaction in information systems (Hertyana et al., 2024; Nurdin & Lubis, 2024). Furthermore,

content quality is recognized as a key determinant of user contentment (Hidayatuloh et al., 2024). Consequently, satisfaction serves as a fundamental benchmark of service success, ensuring that user expectations derived from their experience and perceived value have been adequately met.

User Loyalty

User Loyalty (UL) is a core concept that explores the reasons and methods by which users commit to the long-term use of a specific product or service (J. Li, 2021). Loyalty is viewed as a conscious decision encompassing both behavioral dimensions (such as repurchase frequency) and attitudinal dimensions (the user's positive psychological predisposition toward the brand) (Išoraitė, 2016). In the context of Massive Open Online Courses (MOOCs), loyalty is specifically defined by the user's willingness to recommend the platform and their potential intention to register for additional courses offered through the same provider (Arquero et al., 2022).

Massive Open Online Courses (MOOCs)

Massive Open Online Courses (MOOCs) are online training designed for unrestricted participation and open access via the web, delivering structured learning materials through video, automated tests, and discussion forums (Saadatdoost et al., 2015; Wulf et al., 2014). Characterized by being massive, open, online, and a structured course (Hoy, 2014), the MOOC model facilitates flexible learning tailored to individual needs (Baturay, 2015). These platforms, which evolved from Open Educational Resources (OER), are typically classified into content-focused xMOOCs or collaboration-focused cMOOCs (Kesim & Altınpulluk, 2015).

The relationship between Perceived Value and User Satisfaction

The relationship between Perceived Value (PV) and User Satisfaction (US) is well-established, particularly in the context of increased online learning adoption (Jo & Baek, 2024). Studies emphasize that the core factors shaping PV, such as the quality of learning material and its delivery, significantly contribute to overall user contentment (Kumar & Kumar, 2020). Furthermore, interactive learning experiences are shown to enhance perceived value, resulting in higher user satisfaction (Sui & Sui, 2024). The comparison between received benefits and sacrifices (value) fundamentally forms the basis for the user's emotional state (satisfaction).

H1: Perceived Value has a positive and significant effect on User Satisfaction.

The relationship between User Experience and User Satisfaction

User Experience (UX) strongly influences User Satisfaction within online education settings. Research consistently shows that platform availability (Chen et al., 2020) and various UX dimensions including sensory, emotional, and cognitive aspects are positive contributors to user contentment (Jiang, 2024). The application of the Expectation Confirmation Theory highlights that factors like flow and user interest, enhanced by superior UX, increase satisfaction among MOOC participants (Lu et al., 2019). Studies on major platforms like Coursera confirm that elements such as usability, desirability, and findability significantly impact satisfaction levels (Nurhudatiana & Caesarion, 2020).

H2: User Experience has a positive and significant effect on User Satisfaction.

The relationship between Perceived Value and User Loyalty

Perceived Value (PV) is empirically linked to strengthening User Loyalty, often alongside high service quality (Rahayu et al., 2023). In MOOCs, the concept of value co-creation, encompassing knowledge, hedonic, and social value, significantly influences the user's intent to continue using the platform. The integration of resources from the platform, instructors, and participants enhances PV and drives long-term usage (Qi et al., 2023). Furthermore, content quality and pedagogical value are identified as primary factors in forming PV and subsequently ensuring sustained user commitment (Sharma et al., 2025).

H3: Perceived Value has a positive and significant effect on User Loyalty.

The relationship between User Experience and User Loyalty

Although often studied indirectly through satisfaction, User Experience (UX) can directly influence User Loyalty by fostering commitment and engagement. A seamless digital experience, characterized by high-quality content and robust user relations, positively contributes to user attachment (Yang & Lee, 2022). Furthermore, when key UX dimensions like usability and clarity are optimized, they directly influence the user's overall perception of the platform's reliability and quality, creating a preference that leads to sustained engagement and loyalty (Lu et al., 2019).

H4: User Experience has a positive and significant effect on User Loyalty.

The relationship between User Satisfaction and User Loyalty

User Satisfaction (US) is recognized as a pivotal factor in cultivating User Loyalty within the MOOC environment. High levels of user contentment, often coupled with enjoyment and platform reputation, strongly influence the decision to maintain loyalty (Arquero et al., 2022). Empirical studies demonstrate a direct link between high satisfaction and positive behavioral outcomes, including lower dropout rates and increased course completion (Junıor et al., 2019). While US is primarily driven by content quality and course assessment (Kumar & Kumar, 2020), this relationship might be influenced by extrinsic motivation, where external factors can sometimes moderate the link (Arquero et al., 2022).

H5: User Satisfaction has a positive and significant effect on User Loyalty.

The relationship between Perceived Value and User Loyalty mediated by User Satisfaction

User Satisfaction (US) is hypothesized to mediate the relationship between Perceived Value (PV) and User Loyalty. High PV, which is derived from excellent service quality, initially leads to increased satisfaction, which in turn acts as the direct catalyst for user loyalty (Rahayu et al., 2023). In the e-learning context, PV's impact on satisfaction is highly multidimensional, covering aspects like system quality, instructor effectiveness, and administrative support (L. T. Vu et al., 2025). Thus, the full benefit of a platform's value is realized through the mediating step of satisfied users.

H6: Perceived Value has a positive and significant effect on User Loyalty through User Satisfaction.

The relationship between User Experience and User Loyalty mediated by User Satisfaction

User Satisfaction (US) is also expected to mediate the influence of User Experience (UX) on User Loyalty. Positive UX dimensions, such as ease of use, aesthetic appeal, and information clarity, are proven drivers of immediate satisfaction (Nurhudatiana & Caesarion, 2020). This elevated satisfaction then translates into greater user commitment and higher continuance intention toward the platform. Furthermore, the contribution of various UX aspects including sensory, emotional, and cognitive elements to satisfaction reinforces this mediated path to long-term loyalty (Jiang, 2024).

H7: User Experience has a positive and significant effect on User Loyalty through User Satisfaction.

The following is the framework of this research:

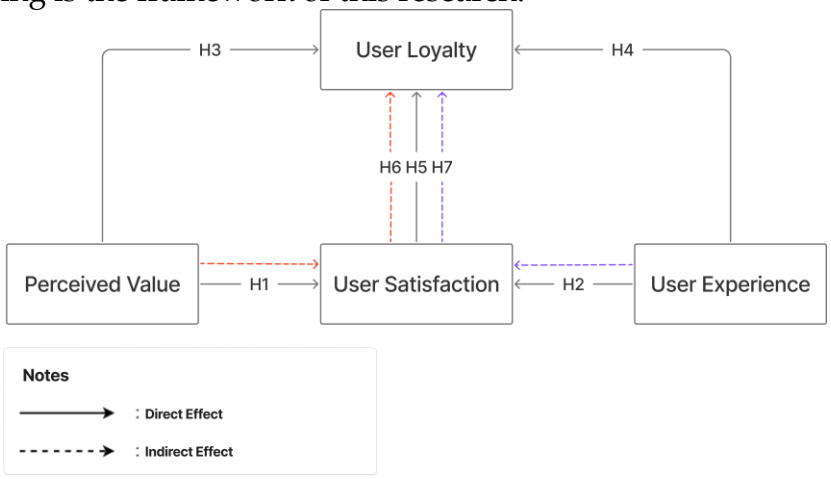

Figure 1. Conceptual Framework

METHODOLOGY

This study utilizes a quantitative approach with a causal explanatory design to systematically test the established theoretical framework (Creswell & Creswell, 2023; Sekaran & Bougie, 2019), specifically examining the causal relationships between the independent variables (Perceived Value and User Experience), the mediating variable (User Satisfaction), and the dependent variable (User Loyalty). Data collection was conducted online from October to November 2025 using a digital questionnaire distributed through the Populix online survey platform, with the Skill Academy platform as the research object. The target population included all Skill Academy users aged 16 years and older residing in the Jakarta area who have previously accessed or used the platform's products.

Purposive sampling was employed to select respondents based on predefined criteria. Although G*Power calculated a minimum sample of 107 respondents, the study set the total sample size at 150 respondents, adhering to the recommendation for robust analysis in Structural Equation Modeling (SEM) (Hair et al., 2022). The questionnaire utilized a 5-point Likert scale to capture

respondent opinions on the four constructs, which were measured using 8 items for Perceived Value, 9 items for User Experience, and 4 items each for User Satisfaction and User Loyalty. Data analysis was conducted using both descriptive and inferential statistical methods, specifically applying the Structural Equation Modeling – Partial Least Squares (SEM-PLS) technique via SmartPLS 4 software. The analysis was performed in two stages: assessing the Measurement Model (Outer Model) to confirm the validity and reliability of the constructs, and testing the Structural Model (Inner Model) to evaluate the hypothesized causal relationships.

RESULTS

Descriptive Statistics Summary

The descriptive analysis involved 150 respondents, revealing a demographic profile primarily consisting of young to middle-aged adults who are active in the workforce. The dominant age group was 25–35 years old, accounting for 69.3% of the total sample, reflecting a strong representation of individuals in their early-to-mid career stages seeking skill enhancement. In terms of gender, the sample was nearly balanced, with females (51%) slightly more dominant than males (49%). Private sector employees formed the largest occupational group (74%), followed by entrepreneurs (14%), confirming that Skill Academy is predominantly utilized by formal workers for professional upskilling.

Usage duration was high, with the majority of users (42.66%) having used the platform for more than 6 months, indicating a population with substantial long-term experience with the service. Furthermore, user access is highly flexible, although the mobile application (Android) was the primary access platform (82.66%), many users employed a combination of mobile and desktop browsers for learning flexibility. Regarding platform usage, the most utilized services were General Skills/Knowledge Courses (82%) and the Prakerja Program (55.33%), while test preparation services (CPNS/BUMN/Civil Service Entrance Exams) were also utilized by a significant portion of users.

Crucially, the overall perception across all variables was overwhelmingly positive, as reflected by the high average percentage scores: Perceived Value (PV) at 91.65%, User Experience (UX) at 93.21%, User Satisfaction (US) at 93.07%, and User Loyalty (UL) at 92.73%.

Validity and Reliability Test

The evaluation of the measurement model (outer model) was conducted to assess the validity and reliability of the constructs. Convergent validity was measured using the Average Variance Extracted (AVE), where a value above 0.50 indicates that the construct explains more than half of the variance of its indicators. Internal consistency reliability was assessed using Cronbach's Alpha and Composite Reliability (CR), with a recommended threshold of 0.70 for both metrics to ensure the instrument is consistent and stable.

Table 1. Validity and Reliability Results

Variable	Cronbach's alpha	Composite Reliability	AVE
PV	0.877	0.903	0.540
UE	0.863	0.893	0.512
UL	0.717	0.826	0.549
US	0.780	0.859	0.605

As presented in Table 1, the measurement model demonstrates satisfactory validity and reliability. All constructs exhibit Average Variance Extracted (AVE) values ranging from 0.512 to 0.605, surpassing the minimum threshold of 0.50, which confirms adequate convergent validity. Furthermore, the reliability testing indicates high internal consistency, with Cronbach's Alpha values ranging from 0.717 to 0.877 and Composite Reliability scores ranging from 0.826 to 0.903. Since all reliability metrics exceed the required 0.70 cutoff, the research instrument is declared valid and reliable for further structural analysis.

Coefficient of Determination (R^2)

The Coefficient of Determination (R^2) is employed to measure the proportion of variance in the endogenous variables that is explained by the exogenous variables within the structural model. In the context of PLS-SEM, R^2 serves as a critical indicator of the model's predictive relevance (Hair et al., 2022). Following the criteria established by Chin (1998), R^2 values above 0.67, 0.33, and 0.19 are categorized as high (substantial), moderate, and weak, respectively.

Table 2. Coefficient of Determination Results (R^2)

Endogenous Construct	R-square	R-square adjusted	Interpretation
UL	0.723	0.717	High
US	0.797	0.794	High

As presented in Table 2, the structural model demonstrates strong predictive power. The User Loyalty (UL) construct yields an R^2 value of 0.723, while User Satisfaction (US) achieves an R^2 of 0.797. Both values exceed the 0.67 threshold, placing them in the "high" category according to Chin's (1998) classification. This result indicates that the exogenous variables Perceived Value and User Experience are capable of explaining approximately 72.3% of the variance in user loyalty and 79.7% of the variance in user satisfaction, thereby confirming the robustness of the proposed model.

Predictive Relevance (Q^2)

The predictive relevance of the model was assessed using the Stone-Geisser Q^2 test. This metric evaluates the model's capability to predict endogenous construct indicators out-of-sample. According to (Hair et al., 2022), a Q^2 value greater than zero implies that the model has predictive relevance for a certain dependent construct.

Table 3. Predictive Relevance (Q^2) Results

Variable	Q^2 (=1-SSE/SSO)	Interpretation
PV	0.000	Not Applicable (Exogenous)
UE	0.000	Not Applicable (Exogenous)
UL	0.371	Significant
US	0.473	Significant

As displayed in Table 3, the model exhibits strong predictive power. The endogenous variables, User Satisfaction (US) and User Loyalty (UL), yielded Q^2 values of 0.473 and 0.371, respectively. Both values are well above zero, confirming that the exogenous variables provide significant predictive relevance for the endogenous constructs. Conversely, Perceived Value (PV) and User Experience (UE) show values of 0.000 solely because they are exogenous variables with no predictors in this structural model.

Effect Size (f^2)

Effect size (f^2) is utilized to assess the substantive impact of an exogenous variable on an endogenous variable by measuring the relative change in R^2 when the predictor is included or excluded from the model. This test helps researchers evaluate the practical significance of a structural path, distinguishing it from mere statistical significance (Hair et al., 2022). Based on Cohen's standards f^2 values of ≥ 0.02, ≥ 0.15, and ≥ 0.35 indicate small, medium, and large effects, respectively.

Table 4. Effect Size (f^2) Results

Path	F^2 *Value*	Category
PV -> US	0.819	Large
PV -> UL	0.193	Medium
UE -> US	0.073	Small
UE -> UL	0.166	Medium
US -> UL	0.001	Small

As shown in Table 4, the relationship between Perceived Value (PV) and User Satisfaction (US) exhibits a large effect size (f^2 = 0.819), substantially exceeding the 0.35 threshold. This finding indicates that PV is the most dominant driver of user satisfaction in the model. Furthermore, both PV → UL (f^2 = 0.193) and User Experience (UE) → UL (f^2 = 0.166) demonstrate a medium effect. Conversely, the effect of UE on US (f^2 = 0.073) and the effect of US on UL (f^2 = 0.001) are categorized as small or negligible. These results suggest that the strategic focus should be on enhancing perceived value, as it contributes most significantly to both satisfaction and loyalty outcomes.

Path Coefficient and Hypothesis Testing

The structural model (Inner Model) was evaluated using the bootstrapping procedure (5000 resamples) to determine the statistical significance of the path coefficients. A hypothesized path is accepted if the P-value is less than 0.05 (or the T-statistic is greater than the critical value of 1.96).

Path Coefficient (β) represents the standardized regression weight linking two constructs within the structural model. This value is central to the analysis as it signifies the strength and direction (positive or negative) of the hypothesized causal relationship. A larger absolute β value indicates a greater relative impact of the predictor variable on the outcome variable.

Table 5. Summary of Path Coefficients and Hypothesis Testing

Hypothesis	Relationship	Path Coefficient (β)	T statistics	P values	Result
H1	PV -> UL	0,711	3.987	0.000	Accepted
H2	PV -> US	0,212	7.438	0.000	Accepted
H3	UE -> UL	0,544	3.793	0.000	Accepted
H4	UE -> US	0,387	2.161	0.031	Accepted
H5	US -> UL	-0,044	0.342	0.732	Rejected
H6	PV -> US -> UL	-0,031	0.339	0.735	Rejected
H7	UE -> US -> UL	-0,009	0.305	0.761	Rejected

The results of the hypothesis testing are elaborated below:

1. H1: PV → US (Perceived Value positively affects User Satisfaction). The path coefficient is 0.711 with a P-value of 0.000 (< 0.05). This hypothesis is accepted, confirming that Perceived Value has a substantial and highly significant positive influence on User Satisfaction.
2. H2: UE → US (User Experience positively affects User Satisfaction). The path coefficient is 0.212 with a P-value of 0.031 (< 0.05). This hypothesis is accepted, indicating that User Experience significantly contributes to User Satisfaction, although its influence is statistically weaker compared to Perceived Value.
3. H3: PV → UL (Perceived Value positively affects User Loyalty). The path coefficient is 0.544 with a P-value of 0.000 (< 0.05). This hypothesis is accepted, demonstrating that Perceived Value directly and significantly contributes to the formation of User Loyalty.
4. H4: UE → UL (User Experience positively affects User Loyalty). The path coefficient is 0.387 with a P-value of 0.000 (< 0.05). This hypothesis is accepted, showing that User Experience has a significant direct positive influence on User Loyalty.
5. H5: US → UL (User Satisfaction positively affects User Loyalty). The path coefficient is -0.044 with a P-value of 0.732 (> 0.05). This hypothesis is rejected, as there is no statistical evidence to support a significant influence, whether positive or negative, from User Satisfaction to User Loyalty in this model.
6. H6: PV → US → UL (User Satisfaction mediates the effect of Perceived Value on User Loyalty). The indirect effect is -0.031 with a P-value of 0.735 (> 0.05). This hypothesis is rejected, as the indirect effect is non-significant and negative, failing to support User Satisfaction's role as a mediator between Perceived Value and User Loyalty.
7. H7: UE → US → UL (User Satisfaction mediates the effect of User Experience on User Loyalty). The indirect effect is -0.009 with a P-value of 0.761 (> 0.05).

This hypothesis is also rejected, indicating that User Satisfaction does not significantly function as a mediator in the relationship between User Experience and User Loyalty.

DISCUSSION

The Influence of Perceived Value on User Satisfaction

The hypothesis confirming the positive and significant effect of Perceived Value (PV) on User Satisfaction (US) was strongly accepted. This strong relationship is rooted in economic theory applied to e-learning, where satisfaction is fundamentally determined by the user's positive evaluation of the ratio between the benefits received (e.g., relevant content, efficiency) and the investment made (time, cost) (Rahayu et al., 2023). This finding implies that the strategic priority for Skill Academy must be the systematic enhancement of this value perception. By consistently delivering high-quality, market-aligned content and ensuring seamless, intuitive services, the platform can maximize user contentment and establish a strong foundation for long-term commitment.

The Influence of User Experience on User Satisfaction

The hypothesis asserting a positive and significant influence of User Experience (UE) on User Satisfaction (US) was accepted, demonstrating that a superior user experience directly and significantly elevates satisfaction within the e-learning context. This finding is consistent with literature that identifies intuitive navigation, seamless interaction, and ease of access as paramount determinants of satisfaction among digital learners (Nurhudatiana & Caesarion, 2020). The perceived quality of the service is intrinsically linked to elements like interface design and overall responsiveness (Setiawan & Ratri, 2022). Consequently, for Skill Academy, the implication is that optimizing the entire user journey from initial onboarding to ongoing features like progress tracking must be treated not merely as a supplement but as the core value proposition. By prioritizing a friction-free and cohesive design, the platform ensures immediate user contentment, which is essential for fostering sustained engagement and long-term loyalty.

The Influence of Perceived Value on User Loyalty

The hypothesis proposing a positive and significant effect of Perceived Value (PV) on User Loyalty (UL) was strongly accepted, confirming that PV is a powerful direct driver of user commitment and retention. This finding is consistent with scholarly work identifying perceived value as a key predictor of student loyalty within e-learning platforms (T. H. Vu, 2025). Moreover, the result reflects the dynamics of the Indonesian edutech market, where studies indicate that younger users, such as Generation Z, emphasize perceived benefit, learning efficiency, and quality over mere satisfaction when committing to a platform (Munthe, 2025). Therefore, the strategic implication for Skill Academy is clear, loyalty must be built on demonstrable value. This requires focusing efforts on providing market-relevant content, implementing features that maximize efficiency, and ensuring transparency regarding cost and return on investment (ROI) to secure user retention in the competitive MOOCs landscape.

The Influence of User Experience on User Loyalty

The hypothesis asserting a positive and significant influence of User Experience (UE) on User Loyalty (UL) was strongly accepted, firmly establishing a direct and significant link between the quality of the user experience and long-term user retention. This finding reinforces literature in the edutech sector, which highlights that technical factors such as intuitive navigation, fast access speed, and seamless interactivity are key determinants of user preference and commitment (Setiawan & Ratri, 2022). Furthermore, the result aligns with observations that digital-native user segments are highly responsive to a smooth and enjoyable digital experience, which actively encourages attachment and continued usage (Nurhudatiana & Caesarion, 2020). The implication for Skill Academy is that technical excellence is crucial, poor experiences, such as complex interfaces or slow loading times, quickly diminish trust and sever engagement, regardless of content quality. Therefore, a strategic focus on user-based design, enhanced usability, and continuous accessibility evaluation is paramount to delivering a consistently effective learning journey and securing long-term loyalty.

The Influence of User Satisfaction on User Loyalty

The hypothesis proposing a significant positive effect of User Satisfaction (US) on User Loyalty (UL) was rejected. The statistical analysis indicated the absence of a meaningful relationship, positioning User Satisfaction as not a direct predictor of user loyalty in this context. This counter-intuitive finding can be fundamentally explained by the presence of calculative commitment among users (Roberts-Lombard, 2020). Loyalty, in this instance, appears to be driven less by emotional satisfaction and more by transactional factors or a structural lock-in effect, such as the necessity to complete the course to acquire official certificates or satisfy requirements of programs like Kartu Prakerja. This structural obligation compels users to continue platform usage regardless of their subjective satisfaction levels. This finding contrasts sharply with the accepted direct paths, where Perceived Value and User Experience significantly drove loyalty, underscoring that MOOC users in the Jakarta context operate primarily as rational and utilitarian actors, basing their commitment on functional benefits and ease of access rather than psychological contentment.

The Influence of User Experience on User Loyalty mediated by User Satisfaction

The hypothesis proposing that User Satisfaction (US) acts as a mediator in the relationship between User Experience (UE) and User Loyalty (UL) was also rejected. This result confirms the model's structural weakness where satisfaction fails to connect functional quality to final behavioral loyalty, consistent with the rejection of the direct US → UL path (H5), related with Ekasari et al. (2024) research. The findings suggest a direct-only effect from UE to loyalty, meaning that users' commitment is secured immediately by the functional quality of the experience (e.g., seamless navigation and fast performance) without requiring satisfaction as an intermediate affective mechanism. This outcome further reinforces the conclusion that Skill Academy users are utilitarian, their decision to remain loyal is driven by the direct, pragmatic effectiveness of the platform, not by subjective psychological contentment.

The Influence of User Experience on User Loyalty mediated by User Satisfaction

The final hypothesis, asserting that User Satisfaction (US) acts as a significant mediator in the relationship between User Experience (UE) and User Loyalty (UL), was rejected. This result confirms the model's structural deficiency where the quality of the user experience does not rely on satisfaction to secure loyalty. This finding can be understood through the Hygiene Factor Theory (Al-Fraihat et al., 2020), which posits that good UX features such as navigation and responsiveness are merely basic expectations that prevent dissatisfaction rather than actively driving emotional loyalty (Tjiptodjojo et al., 2023). Moreover, in the context of utilitarian MOOC platforms, studies suggest that loyalty often forms directly through habit formation (Daneji et al., 2019), driven by the user's focus on instrumental end-goals like certification or external incentives, bypassing the cognitive evaluation of satisfaction (Sukendro, 2020). Therefore, the finding conclusively demonstrates that loyalty in this competitive digital environment is established through a rational and instrumental direct path from the quality of the experience, rather than via an affective, mediating process.

Strategic Analysis of Enhancing User Loyalty

The structural analysis confirms that User Loyalty is driven primarily by the direct effects of Perceived Value (PV) and User Experience (UE), completely bypassing the mediation of User Satisfaction. This outcome underscores the dominance of calculative commitment in the MOOC environment. Strategically, retention efforts must prioritize utilitarian factors such as maximizing PV through enhancing educational ROI, career relevance, and accelerating certification (as the strongest predictor), while ensuring technical UE excellence (usability and reliability) to mitigate churn (as a hygiene factor). The finding asserts that loyalty in this competitive sector is sourced from functional relevance and system reliability, rather than subjective contentment.

CONCLUSIONS AND RECOMMENDATIONS

The research conclusively establishes a dominant "direct effect" structural pattern in the formation of User Loyalty among Skill Academy users, driven primarily by utilitarian factors rather than emotional attachment. All direct paths from Perceived Value and User Experience to both Satisfaction and Loyalty were found to be positive and significant, with Perceived Value emerging as the single strongest predictor in the entire model. Crucially, the rejection of User Satisfaction as both a predictor and a mediator reveals that loyalty is rooted in functional needs and calculative commitment (e.g., fulfilling certification requirements), not affective pleasure.

This outcome carries significant practical implications such as the strategic approach for MOOC platforms must pivot from increasing subjective satisfaction toward maximizing utility and functionality. Management should focus on building value-based loyalty by maximizing Perceived Value through clear educational ROI and career relevance, ensuring technical reliability (User Experience) as a critical hygiene factor, and continually adapting the curriculum for practical usefulness in the job market.

The findings also provide a key theoretical contribution by challenging the traditional assumption that satisfaction must precede loyalty, particularly in incentive-driven, utilitarian digital environments. Given the limitations of this cross-sectional study, future researchers are encouraged to explore alternative utilitarian mediators such as Perceived Usefulness, Habit, or Trust to accurately model loyalty. Furthermore, utilizing a larger sample, expanding the geographical scope, and employing a longitudinal methodology are necessary to capture long-term changes in loyalty behavior after immediate incentives have been fulfilled.

FURTHER STUDY

Further research should address the limitations of this study by replacing the non-significant mediator (User Satisfaction) with more relevant utilitarian variables such as Perceived Usefulness, Habit, or Trust to accurately model loyalty mechanisms in MOOC platforms. To enhance generalizability, subsequent studies are strongly advised to expand the geographical scope beyond the capital city, employ a larger sample size (e.g., exceeding 200 respondents), and utilize a longitudinal methodology to capture the evolution of user loyalty behavior after short-term incentives, such as program completion or certification, have expired.

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