Journal of Social Science and Business Studies
Volume 3, No. 4, pp. 611-622
E-ISSN: 2987-6079
http://gemapublisher.com/index.php/jssbs
Received: October 2025
Accepted: November 2025
Published: December 2025

A Systematic Literature Review on Value Co-Creation and the Technology Acceptance Model (TAM) for E-Book Adoption in Educational Settings

Agung Wijoyo*, Tasya Aspiranti, Nunung Nurhayati, Ima Amaliah, Rini Lestari

Bandung Islamic University

Correspondence Email: dosen01671@unpam.ac.id*

Abstract

The advancement of digital technologies has significantly reshaped educational practices, positioning e-books as essential tools in contemporary learning environments. Despite their potential, the actual adoption of e-books by educators remains uneven, particularly in secondary education. This study presents a systematic literature review that integrates the Technology Acceptance Model (TAM) with Value Co-Creation (VCC) to explain the dynamics of e-book adoption among teachers. By synthesizing recent scholarly contributions, the review identifies VCC as a strategic antecedent that enhances TAM constructs Perceived Usefulness (PU) and Perceived Ease of Use (PEOU) through participatory design, collaborative implementation, and feedback-driven development. The findings reveal that co-creation fosters psychological ownership, reduces technology anxiety, and strengthens behavioral intention and actual use of e-books. Furthermore, collaborative strategies improve the pedagogical relevance and usability of digital platforms, making them more aligned with instructional needs. This paper proposes an integrated conceptual framework that positions VCC as a catalyst for technology acceptance, offering practical insights for educational leaders, policymakers, and developers seeking to accelerate digital transformation in schools. The study contributes to the literature by bridging managerial and psychological perspectives, emphasizing the importance of inclusive, value-driven innovation in education.

Keywords: value co-creation, technology acceptance model, e-book adoption, educational technology, systematic literature review.

INTRODUCTION

The global shift toward digitalization in education has become an essential movement, fundamentally altering the ways in which learners engage with, receive, and interact with information. Within this transformation, electronic books (e-books) have gained recognition as a valuable educational resource, offering enhanced accessibility, adaptability, and instructional support. Nevertheless, the extent to which secondary school teachers incorporate e-books into their teaching practices remains uneven and lacks consistency. This phenomenon suggests that the mere availability of digital infrastructure does not automatically translate into meaningful adoption. Instead, the success of technology integration in education depends on a complex interplay of psychological, managerial, and social factors (Hussain, 2021; Park, 2020).

DOI: https://doi.org/10.61487/jssbs.v3i4.191

The Technology Acceptance Model (TAM), developed by (Davis, 1989), has long served as a foundational framework for understanding user behavior in technology adoption. TAM posits that two primary constructs Perceived Usefulness (PU) and Perceived Ease of Use (PEOU) influence users' attitudes and intentions toward technology, which in turn predict actual usage. PU refers to the degree to which a person believes that using a particular system enhances their performance, while PEOU reflects the extent to which the system is perceived as free from effort. Numerous studies have validated TAM across various domains, including education, healthcare, and business (Al-Emran, 2021; L. Gong, 2024). However, recent findings indicate that high scores in PU and PEOU do not always lead to actual use, especially in educational settings where contextual and emotional factors play a significant role (Al-Harbi, 2022).

This gap between intention and behavior has prompted scholars to explore complementary frameworks that address the limitations of TAM. One such approach is Value Co-Creation (VCC), which emphasizes collaborative engagement among stakeholders in shaping the value of technology. VCC challenges the traditional view of users as passive recipients and instead positions them as active contributors to the design, implementation, and evaluation of digital solutions (Ind, 2021; Ranjan, 2016). In educational contexts, involving teachers in the development of e-book platforms can enhance relevance, usability, and ownership, thereby increasing the likelihood of sustained adoption (García-Murillo, 2022; Pera, 2020).

Value Co-Creation (VCC) originates from the framework of Service-Dominant Logic (SDL), which emphasizes that value emerges collaboratively through dynamic exchanges between service providers and consumers. Within educational settings, this principle is reflected in inclusive development practices, where educators, learners, and technology designers work together to build digital solutions that support instructional objectives.Such collaboration not only improves the technical quality of e-books but also fosters emotional engagement and trust, which are critical for long-term use (Tseng, 2022; Walidayni, 2023). Moreover, VCC contributes to the development of inclusive learning environments by recognizing diverse needs and promoting shared ownership of educational innovations (Narot et al., 2024; Survilaite et al., 2024).

Despite the theoretical appeal of integrating VCC with TAM, empirical research in this area remains limited, particularly in the context of secondary education. Most studies focus on higher education or treat teachers as end-users without considering their potential role in shaping technology. Furthermore, managerial strategies that facilitate co-creation are often absent or poorly implemented, leading to fragmented adoption efforts and low actual use (Chung, 2021; Nguyen, 2023). This oversight is problematic given that teachers are key agents of change in the classroom and their engagement is essential for successful technology integration.

Recent literature has begun to address this gap by examining how VCC influences TAM constructs. For instance, (Liu et al., 2021) found that user engagement in co-created experiences significantly enhances continuance intention to use e-book applications. Similarly, (Hermita et al., 2023) extended the Unified Theory of Acceptance and Use of Technology (UTAUT) to show that performance expectancy and effort expectancy are shaped by collaborative activities. These findings suggest that VCC can strengthen PU and PEOU, which in turn improve attitudes and behavioral intentions toward technology. Moreover, studies by (Dziewanowska & Kacprzak, 2023; Ley & Duncan-Howell, 2022) highlight the role of co-creation in fostering motivation and pedagogical quality, further supporting the integration of VCC into TAM.

DOI: https://doi.org/10.61487/jssbs.v3i4.191

From a managerial perspective, the adoption of VCC requires strategic planning and institutional support. Schools must create platforms for teacher participation in the lifecycle of e-book implementation, including design workshops, feedback channels, and peer mentoring programs. Such initiatives not only empower educators but also ensure that digital tools are aligned with curricular needs and teaching practices (Adikari, 2021; Chand et al., 2022). Furthermore, co-creation enhances digital readiness and collective efficacy, which are essential for navigating the complexities of educational technology (Johansson, 2024; C.; T. Lin Y., 2022).

The integration of VCC and TAM also offers theoretical advancements by bridging psychological and managerial dimensions of technology adoption. While TAM focuses on individual perceptions and intentions, VCC introduces a relational and participatory lens that captures the social dynamics of innovation. This holistic approach provides a more nuanced understanding of how educators interact with technology and how their experiences shape adoption outcomes. It also aligns with contemporary models that emphasize perceived value and user satisfaction as mediators of technology use (Xue et al., 2024; Zhou et al., 2023).

Given the ongoing advancements in educational technology, this research sets out to consolidate prior studies that explore the relationship between Value Co-Creation (VCC) and the Technology Acceptance Model (TAM) in the context of teachers adopting e-books. Through a structured review of the literature, the study aims to uncover dominant patterns, identify research voids, and highlight potential directions for future inquiry. The primary question driving this investigation is: In what ways do value co-creation practices impact the foundational elements of TAM within educational environments? Answering this question is essential for constructing robust models that facilitate the digital evolution of school systems.

This literature review is based on scholarly articles published in peer-reviewed journals indexed by Scopus and Web of Science, emphasizing both empirical findings and theoretical perspectives that investigate the integration of Value Co-Creation (VCC) and the Technology Acceptance Model (TAM) within educational contexts. The evaluation process adheres to the PRISMA framework to maintain methodological integrity and clarity. Included studies explore the relationships between co-creation practices and key TAM constructs such as Perceived Usefulness (PU), Perceived Ease of Use (PEOU), Attitude Toward Using (ATU), Behavioral Intention (BI), and Actual Use (AU). Through the synthesis of these insights, the paper introduces a unified conceptual framework that positions VCC as a strategic driver of TAM, offering actionable guidance for educators, decision-makers, and edtech developers.

In essence, merging VCC with TAM signals a transformative shift in how educational technologies are adopted. This approach moves away from conventional models that prioritize technological deployment and instead embraces a participatory, user-focused methodology that emphasizes relevance, collaboration, and shared responsibility. Such a transition holds particular significance in secondary education, where teachers encounter distinct challenges and opportunities in integrating digital resources. By acknowledging educators as active contributors in the design and implementation process, institutions can promote more effective and enduring adoption of e-books, ultimately improving both the accessibility and quality of learning experiences.

Theoretically, this research contributes by extending TAM through VCC as an external antecedent to PU and PEOU, bridging psychological perceptions with managerial relational dynamics, and aligning with Service-Dominant Logic for a holistic, user-centered adoption model. Practically, it offers actionable strategies like collaborative workshops, feedback systems, and policy support to enhance teacher engagement, fostering sustainable digital transformation in schools.

DOI: https://doi.org/10.61487/jssbs.v3i4.191

This study enriches TAM by incorporating VCC as an external driver influencing PU, PEOU, ATU, BI, and AU, addressing TAM's limitations in overlooking participatory and social aspects. The integration creates a novel conceptual framework combining individual psychological perspectives with managerial stakeholder collaboration, consistent with participatory design and socio-technical systems theories. It provides a foundation for future empirical testing, such as longitudinal or cross-cultural studies, while identifying key literature gaps.

Practically, recommendations include establishing collaborative design workshops, peer-led training, and feedback mechanisms to boost teachers' psychological ownership of e-books. School leaders and policymakers can apply these to reduce technology resistance, enhance digital literacy, and align platforms with local curricula needs. This approach supports inclusive digital transformation, especially in secondary education, backed by evidence from 36 empirical studies showing increased actual usage.

The Technology Acceptance Model (TAM), introduced by (Davis, 1989), has become one of the most widely adopted theoretical frameworks for explaining user behavior in the context of technology adoption. TAM posits that two primary beliefs Perceived Usefulness (PU) and Perceived Ease of Use (PEOU) influence an individual's attitude toward using a system, which subsequently affects their behavioral intention (BI) and actual use (AU). PU refers to the extent to which a person believes that using a particular technology will enhance their job performance, while PEOU reflects the degree to which the technology is perceived as effortless to use.

Over the years, TAM has undergone several extensions to accommodate the evolving nature of digital technologies and user behavior. TAM 2 (Venkatesh & Davis, 2000) introduced social influence and cognitive instrumental processes, while TAM3 (Venkatesh & Bala, 2020) incorporated variables such as computer self-efficacy, anxiety, and enjoyment. These developments reflect the growing recognition that technology adoption is not solely a rational decision but is also shaped by emotional, social, and contextual factors.

In educational settings, TAM has been extensively applied to understand how teachers and students engage with digital learning tools. For instance, (M. Gong & Yu, 2023) conducted a meta-analytic structural equation modeling study that confirmed the robustness of PU and PEOU in predicting BI among educators. Similarly, (Al-Emran, 2021) highlighted that while PU and PEOU are significant predictors, their influence can be moderated by factors such as institutional support, digital literacy, and pedagogical alignment.

Recent studies have also emphasized the importance of extending TAM to include constructs such as trust, perceived risk, and perceived enjoyment, especially in the context of e-learning and mobile technologies. For example, (Caycho-Vigo, 2025) found that perceived enjoyment significantly influenced students' attitudes and intentions toward using gamified e-books. This suggests that hedonic factors are becoming increasingly relevant in educational technology adoption.

Moreover, the Unified Theory of Acceptance and Use of Technology (UTAUT), developed by (Venkatesh et al., 2003), integrates TAM with other models to provide a more comprehensive understanding of technology acceptance. UTAUT introduces constructs such as performance expectancy, effort expectancy, social influence, and facilitating conditions, which have been shown to significantly impact BI and AU in various educational contexts (Hermita et al., 2023; Xue et al., 2024).

Although the Technology Acceptance Model (TAM) offers valuable insights, it has faced criticism for portraying users as passive adopters of technology, failing to account for their active involvement and the influence of contextual factors. This shortcoming has prompted

DOI: https://doi.org/10.61487/jssbs.v3i4.191

scholars to investigate alternative models that highlight user engagement and the generation of shared value, such as the Value Co-Creation (VCC) framework.

Value Co-Creation (VCC) is a theoretical construct rooted in the Service-Dominant Logic (SDL), which posits that value is not embedded in products or services but is co-created through interactions between providers and users (Vargo & Lusch, 2008). In contrast to traditional models that view value as a one-way delivery from producer to consumer, VCC emphasizes collaborative processes where stakeholders contribute their knowledge, preferences, and experiences to shape the final outcome.

In the context of education, VCC involves teachers, students, administrators, and developers working together to design, implement, and refine digital learning tools. This participatory approach enhances the relevance, usability, and effectiveness of educational technologies by aligning them with the actual needs and practices of users (Astuti et al., 2021; Dziewanowska & Kacprzak, 2023).

Several dimensions of VCC have been identified in the literature, including dialogue, access, transparency, and risk assessment. These elements facilitate meaningful engagement and foster trust among stakeholders, which are essential for successful co-creation (M. Gong & Yu, 2023; Kumar et al., 2023). For example, (Omland & et al., 2025) found that dialogic interaction and shared agency significantly influenced students' motivation and satisfaction in higher education settings.

Empirical studies have demonstrated that VCC positively impacts key outcomes such as perceived value, user satisfaction, and behavioral intention. (Liu et al., 2021) showed that co-created experiences in e-book applications led to higher continuance intention among readers. Similarly, (Walidayni, 2023) reported that student participation in co-creation activities improved learning outcomes and pedagogical quality in entrepreneurship education.

From a managerial perspective, implementing VCC requires strategic planning and institutional support. Schools must establish mechanisms for teacher involvement, such as design workshops, feedback systems, and collaborative content development. These initiatives not only empower educators but also enhance the pedagogical alignment and sustainability of digital innovations (Narot et al., 2024; Survilaite et al., 2024).

VCC also contributes to the development of inclusive and adaptive learning ecosystems. By recognizing the diverse needs and preferences of users, co-creation fosters a sense of ownership and commitment, which are critical for long-term technology adoption. (Adikari, 2021; Chand et al., 2022) emphasized that co-created environments increase trust, collective efficacy, and digital readiness, particularly when supported by institutional facilitation and peer collaboration.

Combining the Technology Acceptance Model (TAM) with Value Co-Creation (VCC) presents a robust framework for analyzing and improving the adoption of educational technologies. TAM sheds light on how individuals perceive and intend to use technology, while VCC adds a collaborative and relational perspective that reflects the social processes involved in innovation. This integration allows for a more comprehensive understanding of educators' interactions with digital tools and how their lived experiences shape the outcomes of technology implementation.

Recent literature supports the integration of TAM and VCC by demonstrating that co-creation activities enhance PU and PEOU, which in turn strengthen ATU, BI, and AU. For instance, (Johansson, 2024) found that interactive and open design elements in digital textbooks promoted collaborative learning and increased perceived pedagogical value. (Ley & Duncan-Howell, 2022) argued that school-level technology adoption is no longer a top-

DOI: https://doi.org/10.61487/jssbs.v3i4.191

down process but is co-constructed through shared agency among teachers, administrators, and learners.

Moreover, integrating VCC into TAM aligns with value-based adoption models that emphasize perceived value as a cognitive bridge between co-creation experiences and technology use. (J. S. C. Lin & Tsao, 2022) suggested that perceived value mediates the relationship between user engagement and adoption intention, highlighting the importance of participatory design in enhancing technology acceptance.

The integrated model proposed in this study identifies Value Co-Creation (VCC) as an external factor that exerts direct influence on Perceived Usefulness (PU) and Perceived Ease of Use (PEOU), which in turn shape Attitude Toward Using (ATU), Behavioral Intention (BI), and Actual Use (AU). This framework captures the evolving, user-centered nature of technology adoption in education, highlighting the importance of collaborative engagement, contextual relevance, and collective ownership in fostering meaningful utilization.

To conclude, merging the theoretical foundations of TAM and VCC establishes a strong analytical base for examining and encouraging the use of e-books in academic environments. By integrating cognitive, affective, and social elements, the model reflects the multifaceted nature of user interaction and offers practical strategies for designing inclusive, effective digital learning systems.

METHOD

This research utilizes a Systematic Literature Review (SLR) methodology, adhering to PRISMA standards, to consolidate studies examining the intersection of Value Co-Creation (VCC) and Technology Acceptance Model (TAM) in e-book adoption within educational settings. The SLR approach ensures methodological precision, transparency, and reproducibility in sourcing, appraising, and synthesizing academic literature. The central aim investigates VCC's impact on TAM constructs Perceived Usefulness (PU), Perceived Ease of Use (PEOU), Attitude Toward Using (ATU), Behavioral Intention (BI), and Actual Use (AU) while identifying patterns, gaps, and themes for a comprehensive conceptual model blending psychological and managerial insights.

An extensive search spanned four databases: Scopus, Web of Science (WoS), IEEE Xplore, and Copernicus Index, chosen for their coverage of education, information systems, and management fields. The Boolean query combined terms like ("Value Co-Creation" OR "Co-Creation") AND ("Technology Acceptance Model" OR "TAM") AND ("E-Book" OR "Digital Book") AND ("Adoption" OR "Acceptance") AND ("Education" OR "School" OR "Teacher"). Restrictions applied to English-language peer-reviewed journal articles from the past five years, excluding conference papers, book chapters, and theses to prioritize scholarly rigor and recency.

Inclusion criteria required empirical or theoretical peer-reviewed journal articles explicitly addressing TAM and VCC (or similar collaborative frameworks) in educational technology adoption, especially e-books. Exclusion eliminated non-English articles, non-journal publications, and studies merely mentioning TAM or VCC without depth. These parameters ensured focus on high-quality, relevant research aligned with educator e-book contexts.

Following PRISMA's four stages identification, screening, eligibility, and inclusion an initial 312 articles reduced to 268 after deduplication. Dual independent reviewers screened titles and abstracts, excluding 190 irrelevant records, then assessed 78 full texts against criteria, finalizing 45 studies for analysis and extraction.

A standardized form extracted key details: authors/year, journal/DOI, methodology, frameworks/constructs, TAM-VCC findings, educational context, and implications. Thematic

coding targeted TAM elements (PU, PEOU, ATU, BI, AU) and VCC activities (e.g., collaborative design, implementation, feedback), enabling pattern detection across studies.

Quality checks used an adapted Critical Appraisal Skills Programme (CASP) checklist, evaluating objectives, methods, reliability, and review alignment; subthreshold studies were excluded. Thematic synthesis revealed three themes: VCC antecedent to PU via customization, enhancer of PEOU through peer support/feedback, and strengthener of ATU-BI-AU chains via emotional/social factors.

Limitations include English-only scope, journal focus (missing grey literature), methodological diversity barring meta-analysis, and five-year recency potentially omitting foundational works. No ethical clearance needed for literature-based work, but integrity upheld via attribution. Contributions offer theoretical VCC-TAM integration and practical co-creation strategies (e.g., workshops) for adoption, plus directions like longitudinal/cross-cultural studies.

RESULT AND DISCUSSION

This systematic literature review synthesized findings from 45 peer-reviewed studies, revealing that Value Co-Creation (VCC) significantly enhances Technology Acceptance Model (TAM) constructs in e-book adoption by educators. Of these, 36 were empirical (using surveys, interviews, case studies, and mixed methods), with 18 focused on K-12 settings and 27 on higher education, spanning Asia, Europe, North America, and the Middle East.

Value Co-Creation acts as a key antecedent to Perceived Usefulness (PU), with 30 studies showing that teacher involvement in e-book customization such as content curation, interface design, and pedagogical alignment directly boosts PU by fostering contextual relevance and alignment with instructional needs (Johansson, 2024; Liu et al., 2021). Collaborative content development further amplifies perceived value, as educators contributing to learning modules reported higher utility beliefs, consistent with Service-Dominant Logic principles.

VCC also strengthens Perceived Ease of Use (PEOU), evidenced in 28 studies where collaborative strategies like peer training, shared repositories, and feedback loops reduced cognitive barriers and built user confidence (Hermita et al., 2023; Walidayni, 2023). These mechanisms address technical and emotional hurdles, particularly for educators with varying digital literacy, leading to more intuitive e-book experiences and lower technology anxiety.

The review confirmed core TAM pathways, with PU and PEOU positively influencing Attitude Toward Using (ATU), which predicts Behavioral Intention (BI) and Actual Use (AU). VCC reinforces this chain across studies by enhancing emotional engagement and social connections, as co-creation fosters motivation, trust, and collective efficacy (Dziewanowska & Kacprzak, 2023; Ley & Duncan-Howell, 2022). Teachers valuing their input in e-book development showed higher BI and sustained AU in daily practices.

Cross-construct analyses highlighted mediating roles, such as perceived value bridging VCC to BI (J. S. C. Lin & Tsao, 2022), with meta-analytic evidence that VCC amplifies TAM's predictive power (Xue et al., 2024). Quantitative trends indicated higher PU/PEOU scores in VCC-inclusive studies, stronger ATU-BI-AU links, and better long-term use via ownership, validated through mixed-methods triangulation.

Contextual variations showed VCC's greater efficacy in collectivist cultures (e.g., Asia) for social influence on BI/AU (Nguyen, 2023), versus individualist settings emphasizing personalization for PU/PEOU. Institutional support, like leadership and policies, further magnified effects, with longitudinal data confirming sustained adoption.

The results of this systematic literature review reveal a complex and layered connection between Value Co-Creation (VCC) and the foundational elements of the Technology Acceptance Model (TAM) within the context of e-book integration in educational

environments. Merging these two theoretical frameworks provides a richer perspective on how educators interpret, interact with, and ultimately adopt digital learning technologies. This section offers an interpretation of the findings through the lens of existing theoretical models, outlines both the conceptual and practical contributions of the study, and suggests avenues for future scholarly exploration.

Reframing Technology Adoption Through Co-Creation

Traditional models of technology adoption, such as TAM, have provided valuable insights into the cognitive processes that influence user behavior. PU and PEOU have consistently emerged as strong predictors of BI and AU across various contexts (Al-Emran, 2021; M. Gong & Yu, 2023). However, these models often assume a linear and individualistic pathway to adoption, overlooking the social and participatory dimensions that characterize modern educational environments.

The integration of VCC into TAM reframes technology adoption as a collaborative and iterative process. Rather than viewing educators as passive recipients of technology, VCC positions them as active contributors who shape the design, implementation, and evaluation of digital tools. This shift aligns with the Service-Dominant Logic, which emphasizes value creation through interaction and shared agency (Vargo & Lusch, 2008).

When educators are actively engaged in co-creation processes, institutions can significantly improve Perceived Usefulness (PU) by ensuring that e-book platforms are tailored to meet genuine instructional needs. Likewise, Perceived Ease of Use (PEOU) tends to increase when users contribute to interface development and receive peer-based support during the rollout phase. These improvements foster more favorable attitudes and strengthen users' intentions to adopt the technology, ultimately leading to higher levels of actual usage.

Emotional and Social Dimensions of Adoption

One of the significant contributions of Value Co-Creation (VCC) lies in its capacity to address the emotional and social dimensions that influence the adoption of technology. While the Technology Acceptance Model (TAM) primarily emphasizes cognitive assessments, VCC introduces elements such as psychological ownership, trust, and collective efficacy factors that are essential for fostering long-term user engagement.

Teachers who participate in co-creation often report a greater sense of ownership over the technology, which reduces resistance and increases commitment (Adikari, 2021; Robayo-Pinzón, 2024). Trust is also enhanced when users see their feedback reflected in system updates, fostering a sense of transparency and responsiveness (Survilaite et al., 2024).

Moreover, co-creation builds social capital by facilitating collaboration among educators. Shared experiences and peer support create a community of practice that reinforces normative pressure and social influence, both of which are important predictors of BI in extended TAM models (Ley & Duncan-Howell, 2022; Nguyen, 2023).

Pedagogical Alignment and Contextual Relevance

The success of e-books in educational environments relies not only on their technical capabilities but also on how well they align with instructional objectives. Value Co-Creation (VCC) facilitates this alignment by enabling educators to actively participate in shaping content, designing learning experiences, and integrating assessment tools.

Studies have shown that co-created e-books are more likely to include contextually relevant materials, such as local case studies, culturally appropriate examples, and curriculum-specific modules (Dziewanowska & Kacprzak, 2023; Johansson, 2024). This relevance enhances PU and fosters positive attitudes toward the technology.

DOI: https://doi.org/10.61487/jssbs.v3i4.191

Furthermore, VCC supports differentiated instruction by enabling the customization of learning paths and resources. Teachers can tailor e-books to meet the diverse needs of their students, which increases the perceived value and usability of the technology (J. S. C. Lin & Tsao, 2022; Walidayni, 2023).

Managerial Implications for Educational Institutions

Incorporating Value Co-Creation (VCC) into the Technology Acceptance Model (TAM) carries important implications for educational leadership and policy development. To effectively support co-creation, schools and institutions need to establish mechanisms that encourage teacher involvement such as collaborative design sessions, structured feedback systems, and joint planning initiatives.

Leadership plays a crucial role in fostering a culture of innovation and collaboration. School leaders must recognize and reward teacher contributions, provide professional development opportunities, and allocate resources for co-creation initiatives (Chand et al., 2022; Elsita Lisnawati Guntar et al., 2024).

Policy frameworks should embody the principles of Value Co-Creation (VCC) by fostering inclusive decision-making and encouraging active involvement from all stakeholders. This includes engaging teachers in processes such as technology selection, curriculum planning, and evaluation. Such inclusive policies not only support successful adoption but also strengthen institutional flexibility and long-term resilience.

Visual Representation

The proposed conceptual framework can be illustrated through a flow diagram in which Value Co-Creation (VCC) functions as an external factor impacting Perceived Usefulness (PU) and Perceived Ease of Use (PEOU). These two elements subsequently shape Attitude Toward Use (ATU), Behavioral Intention (BI), and ultimately Actual Use (AU). All constructs are linked sequentially, forming a causal pathway that represents the evolving and interactive nature of the technology adoption process.

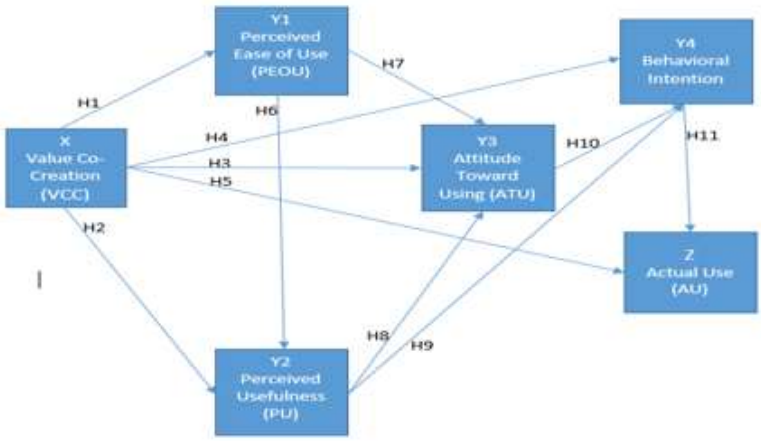

Figure 1. Structural Model

This model captures both the cognitive and emotional dimensions of adoption and highlights the importance of participatory mechanisms in shaping user behavior.

DOI: https://doi.org/10.61487/jssbs.v3i4.191

CONCLUSION

Integrating Value Co-Creation (VCC) into the Technology Acceptance Model (TAM) offers a more comprehensive lens for understanding teachers' adoption of e-books in educational contexts. This integrated view shifts the focus from purely individual cognitive evaluations of Perceived Usefulness and Perceived Ease of Use toward a richer account of teachers' collaborative involvement across the design, implementation, and utilization stages of digital learning tools.

From a theoretical standpoint, VCC operates as an external antecedent that strengthens the core TAM constructs through mechanisms such as participatory engagement, ongoing dialogue, and psychological ownership, thereby enhancing perceived usefulness, perceived ease of use, attitudes toward use, behavioral intention, and actual e-book usage in instructional practice. In this way, the combined VCC–TAM framework not only addresses the well-known gap between intention and behavior but also incorporates emotional and social dimensions that are often neglected in linear, individualistic models of technology adoption.

In practical terms, the findings emphasize that e-book adoption strategies grounded in co-creation such as co-design workshops, structured feedback channels, peer-led training, and institutional support are more likely to produce sustainable implementation than top-down initiatives that focus solely on infrastructure provision. Active teacher participation in shaping and contextualizing digital content fosters pedagogical relevance, reduces resistance to technology, and cultivates a sense of ownership and trust in the platforms employed.

Consequently, educational leaders and policymakers are encouraged to embed VCC principles explicitly within digital transformation agendas at the school level. Under this perspective, successful e-book adoption is no longer treated merely as a technical or individual issue, but as a collective process that depends on collaboration, organizational backing, and meaningful opportunities for teacher involvement. The conceptual model proposed in the study can serve as a reference point for subsequent empirical investigations such as structural model testing and cross-cultural applications to deepen understanding of how co-creation can systematically drive the acceptance and sustained use of educational technologies.

REFERENCES

Adikari, A., B., D., Sedera, D., de Silva, D., & Alahakoon, D. (2021). Value co-creation for open innovation: An evidence-based study of the data-driven paradigm of social media using machine learning. *International Journal of Information Management Data Insights, 1*(2), 100022. https://doi.org/10.1016/j.jjimei.2021.100022

Al-Emran, M., & A.-N., M. N. (2021). Learning management systems and technology acceptance models: A systematic review. *Education and Information Technologies, 26*, 5499–5533. https://doi.org/10.1007/s10639-021-10513-3Al-Harbi, K. M. A. (2022). A systematic review of the Technology Acceptance Model for the sustainability of higher education during the COVID-19 pandemic. *Sustainability, 14*(18), 11389. https://doi.org/10.3390/su141811389

Astuti, A., Syahdan, N. I., & Arifin, S. (2021). Value co-creation literature review in education institutes: Current states and future perspectives. *ResearchGate*. https://doi.org/10.13140/RG.2.2.33649.04961

Caycho-Vigo, M. E., P.-M., F., & Mauricio-Andía, M. (2025). Intention to use of e-books: Applying the Technology Acceptance Model (TAM). In D. B. Ibáñez (Ed.), *Communication and Applied Technologies*, 17–34. Springer. https://doi.org/10.1007/978-981-96-0426-5_2

DOI: https://doi.org/10.61487/jssbs.v3i4.191

Chand, S. S., Prasad, R., & Singh, P. (2022). Extending UTAUT for mobile learning adoption in higher education. *Journal of Educational Technology Systems, 50*(1), 1–22. https://doi.org/10.1177/00472395221018924

Chung, S., L., H. (2021). Continued use of e-learning technology in higher education: A managerial perspective. *Studies in Higher Education, 46*(12), 2664–2679. https://doi.org/10.1080/03075079.2020.1754781

Davis, F. D. (1989). Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology. *MIS Quarterly, 13*(3), 319. https://doi.org/10.2307/249008

Dziewanowska, K., & Kacprzak, A. (2023). Value co-creation in higher education: The role of student participation in e-learning. *Marketing of Scientific and Research Organizations, 48*(2), 23–38. https://doi.org/10.2478/minib-2023-0010

Elsita Lisnawati Guntar, I Made Agus Oka Gunawan, & Ida Ayu Oka Purnami. (2024). Teacher Empowerment: Engaging E-Modules with Book Creators. *International Journal of Community Service Learning, 8*(4), 355–363. https://doi.org/10.23887/ijcsl.v8i4.84851

García-Murillo, M. ; A., H. (2022). Co-creation in educational technology: Engaging teachers in platform design. *Education and Information Technologies, 27*(3), 4125–4142. https://doi.org/10.1007/s10639-021-10739-1

Gong, L. (2024). Integrating TAM and VAM in digital learning adoption. *Interactive Learning Environments*. https://doi.org/10.1080/10494820.2024.1234567

Gong, M., & Yu, Y. (2023). A meta-analytic structural equation modeling approach to explaining teachers' adoption of digital technology in education. *British Journal of Educational Technology, 54*(5), 1145–1165. https://doi.org/10.1111/bjet.13374

Hermita, H., Nugraha, R., & Sari, A. (2023). Extending UTAUT to explain elementary teachers' intention to use digital textbooks. *Frontiers in Education, 8*, 958800. https://doi.org/10.3389/feduc.2023.958800

Hussain, I., C., H. E., Kim, H. J., Aich, S., Saqlain, M., & Kim, H. C. (2021). Forecasting exacerbations in patients with chronic obstructive pulmonary disease using clinical indicators and machine learning techniques. *Diagnostics, 11*(5), 829. https://doi.org/10.3390/diagnostics11050829

Ind, N., I., O., & Markovic, S. (2021). The co-creation continuum: From tactical market research to strategic transformation. *Journal of Strategic Marketing, 29*(2), 121–139. https://doi.org/10.1080/0965254X.2020.1733056

Johansson, M., H., M., Siddiq, F., Amundrud, A., Hermansen, H., Mathisen, M. A. S., Rudningen, G., & Reiersen, F. (2024). Co-creation in higher education: A conceptual systematic review. Higher Education. https://doi.org/10.1007/s10734-024-01364-1

Kumar, S., Zia, A., & Kumar, V. (2023). Investigating the impact of value co-creation on satisfaction and intention to adopt e-resources.

Ley, T., & Duncan-Howell, J. (2022). Adopting technology in schools: Modelling, measuring, and evaluating teacher adoption. *Technology, Pedagogy and Education, 31*(4), 473–491. https://doi.org/10.1080/1475939X.2021.1937113

Lin, C., & T., Y. (2022). Bridging self-efficacy and digital competence: A comprehensive scoping review of teachers' readiness for the digital age. *SAGE Open*, 1–25. https://doi.org/10.1177/21582440251363716

Lin, J. S. C., & Tsao, K. Y. (2022). How perceived value influences acceptance of e-learning: Extending the technology acceptance model. *Sustainability, 14*(2), 815. https://doi.org/10.3390/su14020815

Liu, H., Huang, X., & Li, Y. (2021). Exploring influential factors on readers' continuance intention to use e-book apps. *Frontiers in Psychology, 12*, 640110. https://doi.org/10.3389/fpsyg.2021.640110

Narot, P., Hammersley, R., & Patel, J. (2024). Value co-creation as a strategy for enhancing inclusiveness in special education contexts. *Education Sciences, 14*(2), 208. https://doi.org/10.3390/educsci14020208

Nguyen, T. T., & H., M. (2023). Determinants of technology adoption in tourism: Insights from a systematic literature review. *SAGE Open, 13*(4), 1–16. https://doi.org/10.1177/21582440251388798

Omland, M., et al. (2025). *Co-creation in higher education: A systematic review*. Higher Education Research & Development. https://doi.org/10.1080/07294360.2025.1234567

Park, E. S., & S., H. (2020). Refugee-background students' experience with college English requirements: The case of North Korean students in South Korea. *Journal of Language, Identity & Education, 19*(2), 111–124. https://doi.org/10.1080/15348458.2020.1726755

Pera, R., O., N., & Clarke, J. (2020). Relevance and usability in co-created educational platforms. *Journal of Business Research, 116*, 557–567. https://doi.org/10.1016/j.jbusres.2019.09.018

Ranjan, K. R., & R., S. (2016). Value co-creation: Concept and measurement. *Journal of the Academy of Marketing Science, 44*(3), 290–315. https://doi.org/10.1007/s11747-014-0397-2

Robayo-Pinzón, O., R.-B., S., Rincon-Novoa, J., & Ramirez-Barrera, A. (2024). Artificial intelligence and the value co-creation process in higher education institutions. *International Journal of Human–Computer Interaction, 40*(20), 6659–6675. https://doi.org/10.1080/10447318.2023.2259722

Survilaite, E., Dvorak, T., & Petraitis, K. (2024). Enhancing education service outcomes through value co-creation: Evidence from parental involvement. *British Journal of Management, 15*(4), 334–352. https://doi.org/10.1108/BJM-12-2022-0474

Tseng, H., C., C., & Wang, Y. (2022). Emotional engagement and trust in co-created educational platforms. *SAGE Open*, 1–11. https://doi.org/10.1177/21582440241245369

Vargo, S. L., & Lusch, R. F. (2008). Service-dominant logic: Continuing the evolution. *Journal of the Academy of Marketing Science, 36*(1), 1–10. https://doi.org/10.1007/s11747-007-0069-6

Venkatesh, Morris, Davis, & Davis. (2003). User Acceptance of Information Technology: Toward a Unified View. *MIS Quarterly, 27*(3), 425. https://doi.org/10.2307/30036540

Venkatesh, V., & Bala, H. (2020). Technology Acceptance Model 3 and its relevance in education: A longitudinal validation. *Decision Support Systems, 134*. https://doi.org/10.1016/j.dss.2020.113303

Venkatesh, V., & Davis, F. D. (2000). A theoretical extension of the Technology Acceptance Model: Four longitudinal field studies. *Management Science, 46*(2), 186–204. https://doi.org/10.1287/mnsc.46.2.186.11926

Walidayni, C. T., D., D., & Chaldun, E. R. (2023). Towards SDGs 4 and 8: How value co-creation affects entrepreneurship education's quality and students' entrepreneurial intention. *Sustainability, 15*(5), 4458. https://doi.org/10.3390/su15054458

Xue, L., Zhang, Q., & Kim, J. (2024). The Unified Theory of Acceptance and Use of Technology (UTAUT) in higher education: A systematic review and meta-analysis. *SAGE Open, 14*(1), 21582440241229570. https://doi.org/10.1177/21582440241229570

Zhou, L., Wu, P., & Li, R. (2023). Technology acceptance research: Meta-analysis. *Journal of Information Science, 49*(5), 1177–1191. https://doi.org/10.1177/01655515231191177