

A Conceptual Framework of Customer Behavior in Software Public Training: Integrating TAM, TPB, and Sustainable Marketing in Vocational Higher Education

Fajar Lestari^{1*}, Usep Suhud², Setyo Ferry Wibowo³, Christian Wiradendi Wolor⁴

^{1,2,3,4} Faculty of Economics and Business, Universitas Negeri Jakarta, Indonesia

*Email: fajar_1717925005@mhs.unj.ac.id¹

Abstract

This conceptual paper presents an integrated framework to analyze customer behavior in Software Public Training (SPT) within vocational higher education in West Java, addressing a critical gap in understanding the adoption dynamics among external customer. As vocational institutions increasingly deploy software-based training to meet industry demands for digital competencies, this paper synthesizes three leading theoretical models Technology Acceptance Model (TAM), Theory of Planned Behavior (TPB), and Sustainable Marketing to propose a unified approach to predicting training adoption. Advancing beyond existing empirical models, the framework introduces perceived convenience, value, service quality, and subjective demonstration as key antecedents of trust and attitude, which in turn drive purchase intention. By embedding long-term ethical value creation into the TAM-TPB paradigm, this study offers a novel state-of-the-art perspective that aligns usability, social influence, and sustainability within training design. The resulting model not only enriches theoretical discourse but also provides vocational institutions with a future-ready strategy for designing effective, customer-centered, and ethically grounded training services.

Keywords

Customer Behavior, Sustainable Marketing, Customer Trust, Customer Attitude, Software Public Training

Introduction

In recent years, sustainable marketing has become crucial for vocational higher education institutions, particularly those seeking revenue from Industrial Services such as Public Training program. The goal is to create revenue from Public Training programs that meet market demand while positively contributing to society and the environment. The rising demand for software-based skills (e.g., HTML, BIM) reflects broader shifts in digital labor markets and workforce development strategies, confirming the need to expand Software Public Training (SPT) capability to meet external demand for practical digital competencies. Research shows that integrating digital platforms into vocational curricula boosts learners' employability and

Submission: 15 October 2025; **Acceptance:** 6 March 2026 **Available online:** March 2026



Copyright: © 2026. All the authors listed in this paper. The distribution, reproduction, and any other usage of the content of this paper is permitted, with credit given to all the author(s) and copyright owner(s) in accordance to common academic practice. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license, as stated in the web [site: https://creativecommons.org/licenses/by/4.0/](https://creativecommons.org/licenses/by/4.0/)

supports regional economic transformation through skill-focused human capital development (Syafruddin et al., 2025).

However, despite this growing trend, sales of industrial training services adopting SPT remain suboptimal. This gap suggests a need for a better understanding of the behavioral, institutional, and systemic drivers of training adoption and sales success. To address these issues, scholars are increasingly turning to integrated theoretical models such as the Technology Acceptance Model (TAM) and the Theory of Planned Behavior (TPB), which examine the psychological and contextual factors driving customer behavior behind service adoption (Iddrisu et al., 2025).

As state-of-the-art, contemporary research on customer behavior in SPT within vocational higher education reflects a multidimensional convergence of behavioral theory, technology acceptance, and sustainable marketing. The central TAM and TPB models have been extended to capture nuanced adoption drivers among external learners. Recent studies emphasize that constructs like perceived value, perceived convenience, and trust significantly mediate the relationship between system attributes and user intention in digital training contexts. TPB's components, attitude, subjective norms, and perceived behavioral control (PBC) continue to demonstrate predictive validity in explaining training uptake.

In parallel, the integration of sustainable marketing principles, including ethical alignment, institutional transparency, and long-term value creation, addresses the growing demand for trust-based and socially responsible education services. This integrated approach advances the current literature by offering a theoretically grounded and practically relevant model for understanding the antecedents of behavioral intention in SPT adoption. It further establishes a foundation for designing educational services that are not only technologically accessible but also aligned with sustainability imperatives and stakeholder expectations.

Conceptual Framework & Methodology

Figure 1 illustrates the proposed conceptual framework that integrates the Technology Acceptance Model (TAM), the Theory of Planned Behavior (TPB), and Sustainable Marketing principles to explain customer behavior in Software Public Training (SPT) within vocational higher education. The model positions *Perceived Convenience*, *Perceived Value*, *Service Quality*, and *Subjective demonstration* as exogenous variables influencing *Customer Trust* and *Customer Attitude*. These two mediating constructs are central to understanding students' *Purchase Intention* toward SPT programs. Trust reflects students' confidence in the quality and credibility of the service, while attitude captures their evaluative disposition toward adopting the training. By combining TAM's focus on perceived utility, TPB's emphasis on behavioral intention, and Sustainable Marketing's concern with long-term value and trust, the framework offers a holistic view of the factors that shape adoption decisions in educational service settings. This integrative model serves as both a theoretical lens and a practical guide for enhancing student-centered and future-ready training design.

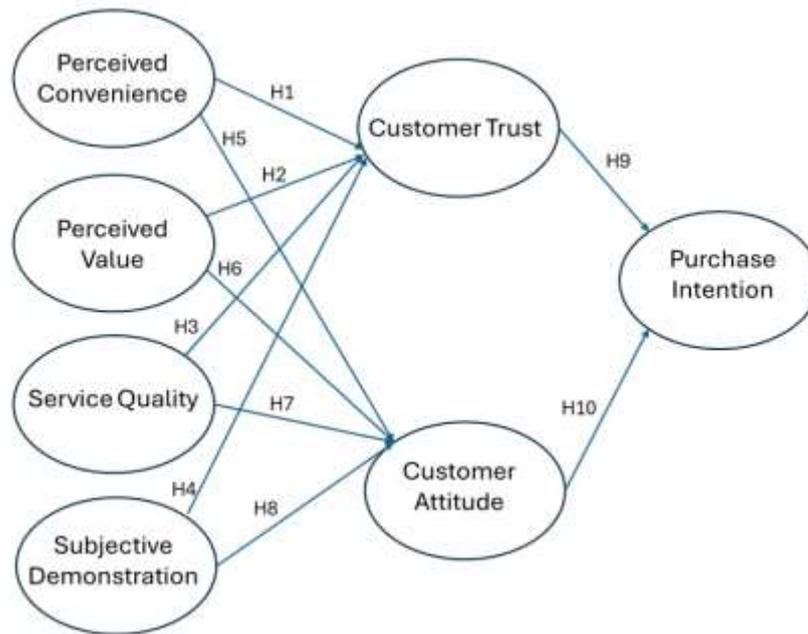


Figure 1: Conceptual Framework

Based on the conceptual framework, the following key propositions can be formulated by 10 testable hypotheses:

- H1: Perceived Convenience has a positive effect on Customer Trust
- H2: Perceived Value positively influences Customer Trust
- H3: Service Quality positively affects Customer Trust
- H4: Subjective Demonstration positively influences Customer Trust
- H5: Perceived Convenience has a positive effect on Customer Attitude
- H6: Perceived Value has a positive effect on Customer Attitude
- H7: Service Quality positively affects Customer Attitude
- H8: Subjective Demonstration positively influences Customer Attitude
- H9: Customer Trust positively influences Purchase Intention
- H10: Customer Attitude positively influences Purchase Intention

The ten hypotheses outlined above reflect a robust theoretical grounding in TAM, TPB, and Sustainable Marketing, focusing on perceived convenience, value, quality, social influence, trust, and attitude. Each hypothesis aligns with established models and recent findings, providing a rigorous base for empirical validation in future research on Software Public Training behavior.

This study employs a convergent mixed methods approach to explore the behavioral intentions of external customers toward Software Public Training (SPT) in vocational higher education. The approach integrates both quantitative and qualitative strands to provide a comprehensive understanding of how constructs from the Technology Acceptance Model (TAM), Theory of Planned Behavior (TPB), and Sustainable Marketing interact in real-world educational service settings, by using the table below:

Table 1: Mixed Method Research Design

Parameter	Quantitative	Qualitative	Integration
1. Design	Cross-sectional survey	Phenomenological qualitative inquiry	Confirm theoretical predictions from the conceptual model
2. Instrument	Standardized questionnaire using 6-point Likert scale	Semi-structured interviews and FGD	
3. Participant	External customers of vocational SPT programs, including industry professionals	15–20 participants, including SPT program attendees, vocational education marketers, and instructors	Contextualize unexpected quantitative results
4. Sampling	Stratified purposive sampling with a target sample size of at least 300 respondents	Maximum variation sampling to ensure diversity of roles and experiences	Enhance the explanatory power of trust, value perception, and sustainable behavior
5. Data Analysis	SEM using AMOS	Thematic analysis through open and axial coding using NVivo or similar software, guided by the constructs from the conceptual model	

Results and Discussion

The conceptual integration of the Technology Acceptance Model (TAM), Theory of Planned Behavior (TPB), and Sustainable Marketing in the study of Software Public Training (SPT) offers a notable academic contribution by bridging two often-separate domains: consumer behavior theory and educational service innovation. Historically, TAM and TPB have been applied predominantly in commercial or digital technology contexts. However, this study repurposes them to interpret the behavior of external customers in vocational education, thereby expanding the application boundaries of these models.

Lastly, the inclusion of sustainable marketing principles as part of the theoretical foundation represents a critical contribution. It links long-term customer trust with ethical service delivery and institutional integrity. As Chowdhury et al., (2025) highlight, marketing in industrial services should not only aim for enrolment growth but must also uphold social value and transparency to ensure enduring stakeholder trust.

Conclusion

Effective marketing of Software Public Training in vocational institutions must be built on three pillars: *trust*, *service quality*, and *sustainable messaging*. Trust increases adoption by reducing perceived risk; service quality serves as an observable indicator of value; and sustainable messaging communicates ethical alignment and social contribution. When rooted

in TAM, TPB, and sustainable marketing theory, these strategies enable institutions to reach and retain value-driven learners in a competitive education market.

To design effective and attractive SPT programs, vocational institutions must integrate TAM, TPB, and sustainable marketing into their service frameworks. This includes optimizing training systems for perceived value and usability, leveraging social norms and learner autonomy, and embedding sustainability and trust into marketing and service delivery. These strategies, when aligned with user expectations and institutional capabilities, will enhance the long-term impact and market appeal of public training programs.

Acknowledgements

There is no grant or funding bodies to be acknowledged for preparing this paper.

References

- Balaskas, S., Tsiantos, V., Chatzifotiou, S., & Rigou, M. (2025). Determinants of ChatGPT Adoption Intention in Higher Education: Expanding on TAM with the Mediating Roles of Trust and Risk. *Information*, 16(2), 82. <https://doi.org/10.3390/info16020082>
- Braga, L. D., Tardin, M. G., Perin, M. G., & Boaventura, P. (2024). Sustainability communication in marketing: A literature review. *RAUSP Management Journal*, 59(3), 293–311. <https://doi.org/10.1108/RAUSP-10-2023-0205>
- Chowdhury, N., Balaraman, P., Liu, J., Sirkeci, I., & Wilson, J. A. (2025). Ethics and Sustainability in B2B Marketing. In *Essential B2B Marketing Strategies: Theories, Cases and Concepts for a Contemporary World* (pp. 73–89). Springer. https://doi.org/10.1007/978-3-031-91104-0_5
- Guo, T., Li, T., & Qi, Z. (2024). Perceived school service quality and vocational students' learning satisfaction: Mediating role of conceptions of vocational education. *PloS One*, 19(8), e0307392. <https://doi.org/10.1371/journal.pone.0307392>
- Hsu, W., & Chen, P.-W. (2021). The influences of service quality and individual characteristics on vocational training effectiveness. *Sustainability*, 13(23), 13207. <https://doi.org/10.3390/su132313207>
- Ibrahim, M. Z., Rahman, M. N. A., & Yasin, R. M. (2012). Assessing Students Perceptions of Service Quality in Technical Educational and Vocational Training (TEVT) Institution in Malaysia. *Procedia - Social and Behavioral Sciences*, 56, 272–283. <https://doi.org/10.1016/j.sbspro.2012.09.655>
- Iddrisu, H. M., Iddrisu, S. A., & Aminu, B. (2025). Gender differences in the adoption, usage, and perceived effectiveness of AI writing tools: A study among university for development studies students. *International Journal of Educational Innovation and Research*, 4(1), 110–111. <https://doi.org/10.31949/ijeir.v4i1.11717>
- Naveen, H. (2025). Standard Operating Procedures (SOPs) for Implementation of National Credit Framework (NCrF) in Vocational Education, Training and Skilling (VETS). *International Journal of Scientific Research in Science and Technology*, 12(1), 140–156. <https://doi.org/10.32628/IJSRST25121167>
- Syafruddin, S., Syarif, E., Sukandar, E. R., & Kustiyono, K. (2025). Bridging the Skills Gap: The Role of Vocational Education in Developing Competent Human Resources for Sustainable Tourism. *The Journal of Academic Science*, 2(1), 290–299. <https://doi.org/10.59613/1b5r2w86>

Wen, Y., Sethakhajarn, S., Juichamlong, A., & Bangkheow, P. (2025). Strategies for the Sustainable Development of Industry-Education Integration in Higher Vocational Colleges in Guangdong Province. *Higher Education Studies*, 15(1), 245–260. <https://doi.org/10.5539/hes.v15n1p245>