

Theoretical Analysis of The Relationship Between Digital Marketing Activities and Sales Conversion In Business-To-Business E-Commerce Based on The Technology Acceptance Model (TAM)

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Abstract. This theoretical paper explores the linkage between digital marketing activities and sales conversion in business-to-business (B2B) e-commerce through the lens of the Technology Acceptance Model (TAM). Drawing on insights from 20 scholarly studies published between 2020 and 2025, the paper constructs a comprehensive conceptual framework explaining how perceived ease of use (PEOU) and perceived usefulness (PU) significantly influence user attitudes (attitude toward using, ATU), behavioral intentions (BI), and actual system use (AU) in digital marketing adoption. The discussion emphasizes that digital marketing technologies do not generate value merely through availability but through users' cognitive evaluations of usefulness and simplicity, which determine their willingness to engage with and fully utilize digital platforms. Furthermore, the paper underlines that positive user perceptions act as a mediating factor that enhances digital channel effectiveness by increasing engagement, optimizing interaction quality, and strengthening conversion probability in B2B environments. It also reaffirms TAM's continued relevance as a robust theoretical model for understanding technology acceptance in the rapidly evolving B2B marketing landscape, where decision-making processes are rational, strategic, and performance-oriented. Overall, this conceptual framework not only contributes to theoretical enrichment in digital marketing and technology adoption literature but also provides practical insights for practitioners seeking to design, implement, and refine technology-based marketing systems that support higher conversion rates, improved client experiences, and sustained competitive advantage in B2B e-commerce ecosystems.

Keywords: *Digital Marketing, Technology Acceptance Model, B2B E-Commerce, User Perception, Conversion*

INTRODUCTION

The digital revolution has changed the global marketing paradigm, including in business-to-business (B2B) transaction relationships (Liu et al., 2023; Ruvi, 2025). Companies now leverage digital channels to build long-term relationships, improve sales process efficiency, and expand market reach. However, the effectiveness of digital marketing strategies does not depend solely on technological sophistication but also on the level of user acceptance of the digital system. In this context, the Technology Acceptance Model (TAM) developed by Davis (1989) provides an important theoretical framework for understanding user behavior in adopting digital marketing technologies.

This study not only outlines the basic concepts of TAM but also explores its application in modern B2B digital marketing strategies. By referring to the latest research, this article emphasizes that perceived ease of use (PEOU) and perceived usefulness (PU) are the main determinants in forming user attitudes and behavioral intentions toward digital marketing technology. Through a conceptual approach, this article develops a model of the relationship between key TAM variables to understand how digital marketing activities can drive sales conversions in a digital business environment.

The Technology Acceptance Model (TAM) developed by Davis (1989) is one of the most widely used theoretical frameworks for explaining technology adoption behavior. In the context of digital marketing, TAM remains relevant for understanding the acceptance of e-commerce systems and modern digital platforms (Dwivedi et al., 2021; Verhoef et al., 2021).

This model posits that technology acceptance is influenced by two main factors: perceived usefulness (how useful the technology is) and perceived ease of use (how easy it is to use). If users believe a technology is useful and easy to use, they are more likely to adopt and use it.

TAM is a development of the Theory of Reasoned Action (TRA), a social psychology model that explains human behavior as a result of intentions influenced by attitudes toward the behavior and subjective norms (Ajzen & Fishbein, 1980). This theory assumes that humans behave rationally by considering available information before deciding on an action. TAM emphasizes two main constructs—PEOU and PU—which affect attitudes toward use, behavioral intention (BI), and ultimately actual use (AU) (Davis, 1989). It explains why individuals or organizations accept or reject new technologies based on perceptions of benefits and ease of use.

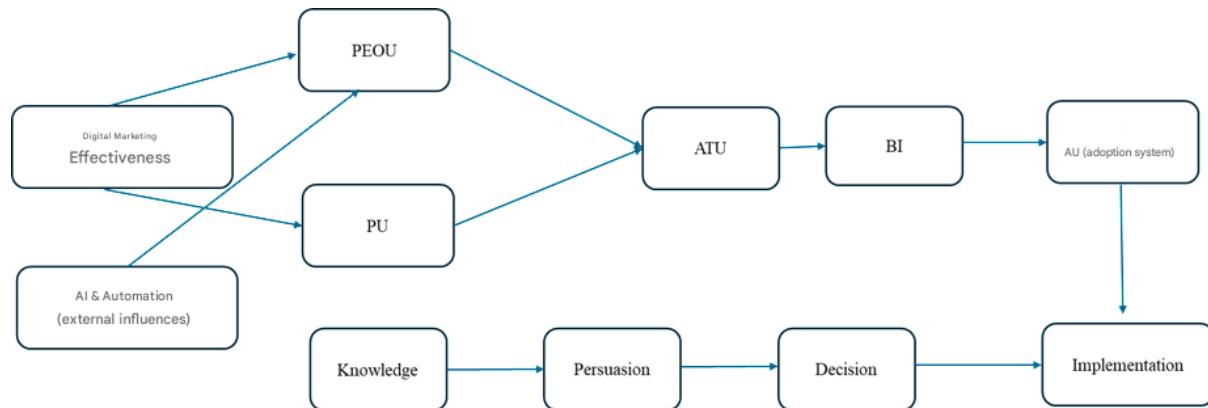
Developments of this model include TAM2 (Venkatesh & Davis, 2000), which adds external factors such as subjective norms, image, and job relevance. TAM3 (Venkatesh & Bala, 2008) further emphasizes variables like computer self-efficacy and perceived enjoyment. The Unified Theory of Acceptance and Use of Technology (UTAUT) integrates eight theories of technology adoption—including TAM, TPB (Theory of Planned Behavior), and TRA—with main constructs of performance expectancy, effort expectancy, social influence, and facilitating conditions (Venkatesh et al., 2003).

In the context of digital marketing, TAM has been used to understand the acceptance of technology-based marketing systems such as e-commerce, CRM, and social media. Dwivedi et al. (2021) assert that despite rapid digital technology development, PEOU and PU remain the main determinants of user acceptance. Research by Alalwan (2022) shows that perceived usefulness significantly affects customer engagement, while PEOU strengthens user intent to interact with digital platforms.

Kim (2024) expands the TAM model with trust and perceived risk variables, finding that trust in platform security and credibility mediates the relationship between PU and BI. Musa et al. (2024) state that digital literacy moderates the relationship between PEOU and PU, especially in SMEs. Hossain (2023) adds that social influence and organizational readiness also contribute to digital technology adoption in B2B companies.

In addition to internal factors, the theory of innovation diffusion (Rogers, 2003) explains technology adoption through stages of knowledge, persuasion, decision, implementation, and confirmation. This theory connects with TAM via perceptions of ease of use and usefulness that influence intention and behavior. By combining TAM and innovation diffusion theory, research can explain the adoption of modern marketing systems such as artificial intelligence (AI) and marketing automation, which are increasingly important in the digital age.

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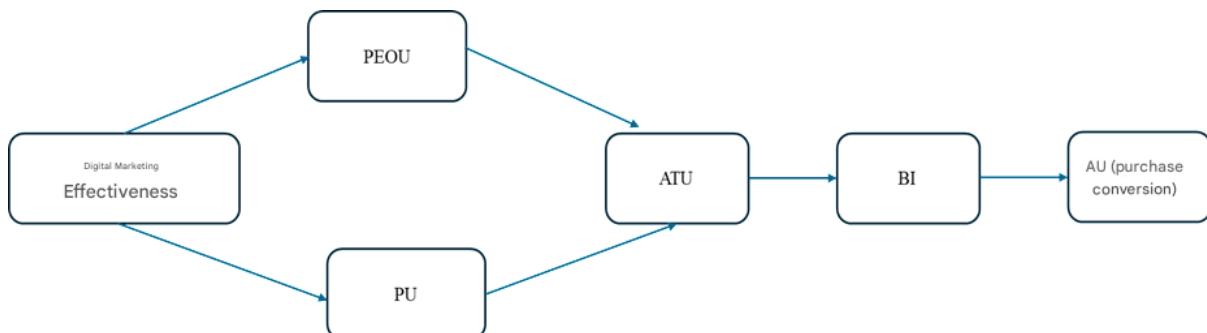


Keterangan :

PEOU = Perceived Ease of Use ; PU = Perceived Usefulness ; ATU = Attitude Toward Using; BI = Behavioral Intention; AU = Actual Use

Figure 1. Conceptual integration of TAM + innovation diffusion theory

The conceptual framework of this study describes the relationship between the main variables in TAM which is adjusted to the context of B2B digital marketing. The effectiveness of digital marketing channels is assumed to play an external variable that affects PEOU and PU. The two constructs then form attitudes (ATU), behavioral intentions (BI), and ultimately actual behaviors (AU) that reflect digital conversion.



Description:

PEOU = Perceived Ease of Use; PU = Perceived Usefulness; ATU = Attitude Toward Using; BI = Behavioral Intention; AU = Actual Use

Figure 1. Conceptual framework of the relationship between the effectiveness of digital marketing and purchase conversion through TAM analysis

This model emphasizes that the success of a digital marketing strategy in the B2B environment is not only determined by technological factors, but also by users' perception and acceptance of the convenience and benefits of the technology.

METHOD

This study used a qualitative approach with a theoretical review method that aimed to examine and synthesize concepts, models, and findings from previous research related to the relationship between digital marketing activities and sales conversion in business-to-business (B2B) e-commerce based on the Technology Acceptance Model (TAM) framework. This

approach was chosen because the research was not intended to test empirical hypotheses but rather to develop a comprehensive conceptual understanding and analytical framework.

The sources of research data were secondary data obtained from articles in reputable international journals, scientific proceedings, and textbooks relevant to technology adoption theory and digital marketing. The articles under review were limited to publications from 2020–2025 to ensure relevance to the latest developments in digital technology and B2B marketing practices. The literature selection criteria included: (1) the use of the Technology Acceptance Model or its developments, (2) relevance to digital marketing, e-commerce, or marketing information systems, and (3) relevance to organizational or B2B market contexts.

Data analysis techniques were carried out through content analysis and conceptual synthesis. The analysis stages included identification of the main TAM constructs, grouping of research findings based on intervariable relationship patterns, and integration of key concepts into a conceptual framework. The results of the analysis were used to systematically explain how acceptance of digital technology mediated the effectiveness of digital marketing activities in driving sales conversions in B2B e-commerce.

RESULT AND DISCUSSION

The discussion focused on the interpretation of the results of a literature review regarding the relevance of the Technology Acceptance Model (TAM) in explaining the effectiveness of digital marketing and its implications for sales conversion in the context of B2B e-commerce. The discussion was carried out analytically by highlighting the role of each of the main constructs of TAM in shaping technology adoption behavior.

Perceived Ease of Use (PEOU) in the Context of B2B Digital Marketing

The perception of ease of use plays an early determinant in the acceptance of digital technology (Davis, 1989; Musa et al., 2024). The complexity of business processes and decision-making in intercompany transactions demands digital systems that are easy to understand and operate. The perception of ease of use contributes to lowering users' cognitive barriers and improving the efficiency of interaction with digital platforms.

In addition to having a direct effect on user attitudes, PEOU also plays an indirect role in increasing perceived usefulness, as stated in the classic TAM model. Thus, ease of use is an important prerequisite for the benefits of technology to be optimally felt by B2B users.

Perceived Usefulness (PU) as a Determinant of Functional Value

In the context of B2B, perceived usefulness is the dominant factor because purchasing decisions are rational and value-oriented (Kim, 2024; Hossain, 2023). Digital marketing platforms are perceived as useful if they are able to increase productivity, speed up the transaction process, and support the achievement of organizational business goals. The literature reviewed shows that PU has a significant effect on the formation of user behavioral intentions to continue utilizing digital systems. This indicates that digital marketing activities that are able to provide measurable business value will be more effective in driving sales conversions.

Attitudes, Behavioral Intentions, and Digital Conversion

This discussion emphasizes that sales conversion in B2B e-commerce is the result of a gradual process that involves the formation of attitude toward using and behavioral intention. TAM provides a theoretical framework that explains that actual usage behavior does not occur directly, but is mediated by users' attitudes and intentions towards technology. Attitudes and behavioral intentions serve as a mediating mechanism between user perception and actual use of technology (Venkatesh & Davis, 2000; Li & Liang, 2024). In B2B digital marketing practices, increased digital interaction is not always directly proportional to sales conversions if it is not followed by a positive attitude and strong intention to use. Therefore, digital marketing strategies need to be directed not only at increasing visibility, but also at strengthening user experience and perception of the system.

Theoretical Implications of TAM Integration and Sales Conversion

The results of the literature synthesis show that the Technology Acceptance Model remains relevant as an analytical framework in explaining technology adoption behavior in the digital era. The integration of TAM with the concept of sales conversion expands the perspective that the success of digital marketing is not solely determined by promotional activities, but rather by the level of user acceptance of the technology used. Thus, digital sales conversion in the context of B2B can be understood as the final manifestation of the process of technology acceptance which is influenced by the perception of convenience, perception of usability, attitude, and intention of user behavior.

CONCLUSION

This theoretical study confirms that the Technology Acceptance Model (TAM) provides a comprehensive framework for understanding technology adoption behavior in B2B digital marketing, with perceived ease of use (PEOU) and perceived usefulness (PU) as decisive factors shaping users' attitudes, intentions, and actual behavior toward digital systems (Dwivedi et al., 2021; Verhoef et al., 2021). By integrating TAM with sales conversion concepts, it contributes to technology-based marketing theories and practical strategies for enhancing digital marketing effectiveness, viewing digital sales conversion as the final outcome of organizational users' technology acceptance (Yadav & Pavlou, 2020). TAM thus remains highly relevant for analyzing modern B2B digital marketing dynamics. For future research, empirical studies could test mediation and moderation effects of variables like trust, user experience, and digital service quality on the link between technology acceptance and marketing outcomes in diverse B2B contexts, such as SMEs adopting AI-driven platforms.

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