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Understanding cloud computing adoption in Jordanian SMEs through an integrated model

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A B S T R A C T

Cloud computing systems have been identified as an important technology that could increase the competitiveness and effectiveness of small and medium-sized enterprises (SMEs), but there has been less research focusing on examining their use from the perspective of their antecedents. The proposed study aims to explain the antecedent factors that influence the continued use of cloud computing systems in Jordanian SMEs by employing an integrated approach that combines the Technology-Organization-Environment (TOE) framework, the Fit-Viability Model (FVM), and the Expectation-Confirmation Theory (ECT). A structured questionnaire survey was conducted to examine opinions from 276 Jordanian SMEs, which showed that relative advantage, perceived benefit, simplicity, adaptability, and perceived security are major antecedent factors in defining perceived appropriateness. Characteristics related to organizations, involving the importance of reading and the role of senior management members in organizations, are major antecedent factors in defining viability. Mimetic forces exerted in organizations are major antecedent factors that have a positive association in defining viability in organizations. On the other hand, coercive forces are major antecedent factors that have negatively affected viability in organizations. The appropriateness and viability of technologies are major antecedent factors in defining an individual's desire to adopt cloud computing systems for an extended period of time in organizations. The proposed study suggests that the fitness of technologies is the most effective predictor of cloud computing system adoption in organizations. The proposed research study uses an integrated research theory that reflects on increasing the awareness needed to detail cloud computing systems. Cloud computing studies have never encountered such increased awareness before.

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1. Introduction

Cloud computing remains a revolutionary concept in the field of information technology, which lodge computing resources on internet-connected servers for storage, processing and management data remotely as oppose to local infrastructure (Amron et al., 2017). Advances in technology, including distributed computing systems, high throughput computing, and big data storage have facilitated this transition by reducing the previous constraints imposed on researchers by computation and resources (Sultan, 2013). Functionally, cloud computing integrates software, hardware, networking, and storage components to deliver shared computing capabilities and online services (Odeh, 2020). As such, being a relatively new development, it combines ease of use, a trusted framework, and fast processing. The theoretical basis of the model relies on the assumption that users prefer systems to be efficient, effective, and low in complexity (Al-Ramahi et al., 2022). Cloud computing may be implemented in any of a number of systems, public, private, hybrid, and community, each associated with different ownership and access models. Public cloud, provided by companies such as Amazon, Google, and IBM, is commonly used due to low cost and wide availability (Chou, 2015; Stein et al., 2013). However, data privacy remains a concern in public clouds (particularly if the user does not have authority over the infrastructure) (Sultan, 2013). Without incentives to provide premium service, the clients may face performance bottlenecks due to the sharing of computing resources (Al-Ramahi et al., 2022).

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However, private clouds offer Control: Experience the dedicated server 203 control of the physical infrastructure with internal ownership or dedicated leases. Although such environments help to enforce data security and compliance, especially in a public cloud (Linthicum, 2009), they can be more expensive as well. Hybrid Cloud Architectures are then developed to combine the advantages and mitigate drawbacks of both Public and Private configurations, delivering flexibility, cost effectiveness, and security (Al-Ramahi et al., 2022). Community clouds provide a common platform for organisations with similar security, compliance, or policy requirements.

Technically speaking, cloud computing is a combination of distributed, grid and parallel computing that provides an IT infrastructure where systemic limitations can be resolved (Alqahtani et al., 2022). This flexibility enables Small and medium-sized businesses (SME's) to scale digital resources based on demand, in a dynamic manner (Neicu et al., 2020). In addition, cloud computing has been attributed to enhanced organisational efficiency, responsiveness, and productivity, especially in SMEs (Sharma & Sehrawat, 2020). Due to their importance in the national economy, SMEs are considered vital actors in a country's developmental programmes (Nawaz & Thelijjagoda, 2025). Nevertheless, their development heightens market competition, and in most cases, it's counteracted by inadequate infrastructure provision, restricted access to capital accounts, and a lack of technological backing (Tharanga & Perera, 2018).

1.1 Practical Gap

Jordan's ranking in the global Network Readiness Index, 29th (Dutta & Lanvin, 2024), emphasizes its high level of digital readiness and its willingness to adopt new technologies (see Fig. 1). This performance is especially noteworthy, considering the relatively low level of gross domestic product (GDP) per capita in that country, particularly in comparison to other wealthier Arab economies (Fig. 2). According to (The World Bank, 2025), per capita GDP in Jordan was at USD 4,455.5 in 2023 – much lower than that of Oman (21,549.8), Bahrain (29,218.9), Saudi Arabia (32,094.0), Kuwait (33,729.8), the United Arab Emirates (49,040.7), and Qatar (80,195.9). Despite this economic divide, Jordan is ahead of a number of these higher income developing countries that are more advanced in network readiness like Oman (41st), Bahrain (57th) and Kuwait (99th) and not far from digital champions such as United Arab Emirates (3rd), Saudi Arabia (8th) and Qatar (19th) (Dutta & Lanvin, 2024).

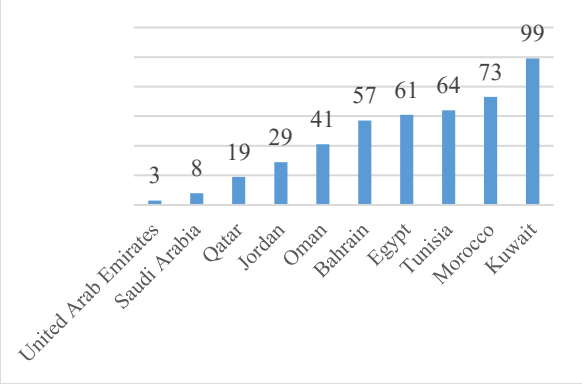

Fig. 1. Adoption of Emerging Technologies Readiness: Jordan vs. Arab Countries (Dutta & Lanvin, 2024).

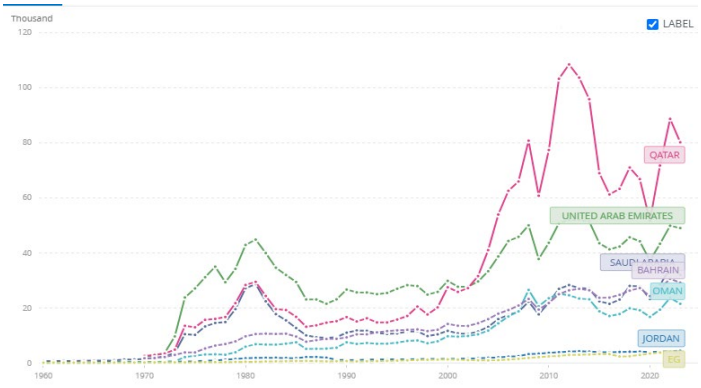

Fig. 2. GDP per capita: Jordan vs. neighboring Arab countries according to the last update on 04/05/2025 (The World Bank, 2025).

1.2 Knowledge and Theoretical Gaps

The scholarly attention to cloud computing has bloomed since 2009 and it grew consecutively for a while until the last three years when its growth was intensified. According to the Scopus database, a sum of 4,998 peer-reviewed papers comprising "Cloud Computing" in the title titles were published from 2009 through 6 September 2025. A bibliometric thesaurus term co-occurrence analysis performed using VOSviewer, "Cloud Computing" is the most frequent term with 4,211 occurrences. 125 of these articles have "Cloud Computing" and adoption related terms like "adoption," "intention to adopt," "usage" or "continuous intention" in their titles, thereby demonstrating continued academic interest around adoption themes. Despite this growing body of literature, a review of studies that used the Technology–Organization–Environment (TOE) framework indicates that there are several theoretical and context-missing nexuses. It should be noted that few empirical studies have been conducted in Jordan and in the wider Arab world, especially with regard to SMEs. A few studies extending this literature, namely Lutfi (2022), Qatawneh (2024) and Rawashdeh et al. (2023), have examined the adoption of cloud computing in Jordan. Nonetheless, these studies reveal limited theoretical coverage for instance Lutfi (2022) and Rawashdeh et al. (2023) do not include key environmental factors or post-adoption constructs such as the intention to continue using. Additionally, adjacent Arab countries (Saudi Arabia, Yemen, Palestine and Lebanon) studies often have incomplete theoretical consideration and are deficient in aspects of crucial individuals' behavior constructs predicting continued use. These findings reflect a lack of local knowledge, as there is little consideration has been given to the barriers and antecedents affecting cloud computing adoption in Arab SMEs between Jordanians firms.

In addition, few uses of other theoretical perspectives (FVM and ECT) are made in this field. Of the 24 reviewed studies none have really adopted an integrated perspective that combines understandings from TOE, FVM and ECT. Although, Fit–Viability has been partly used in a few research (Mohammed et al., 2017; Ochara et al., 2022), its application with TOE or ECT is still non-existent. Also, ECT—which is crucial in explaining the post-adoption behavior of users—has been neglected in previous research, including Jordan studies. Therefore, the present research has made a unique approach to bridge this theoretical gap and extend prior work by investigating the constructs of technological fit, organizational viability with continuous intention to use cloud computing in one integrated model. Further, although constructs like relative advantage, compatibility and top management support are often studied, others (e.g., perceived security) have not always received consistent attention. Similarly, as regards environmental factors (according to Institutional Theory) such as mimetic and coercive isomorphism, there is little empirical support available. Only a small number of recent studies (Aligarh et al., 2023; Chen et al., 2023; Rawashdeh et al., 2023) have considered these institutional facets, albeit in a limited way. The addition of these unexplored but theoretically relevant constructs in this study provides an expanded view on the technological, organizational, environmental and behavioral factors influencing sustained adoption. An abundant literature supports that technology adoption needs to be viewed by taking the application of several theoretical lenses (Alsafi & Fan, 2020). As emerging technologies are complex and dynamic, and organizations operate in multiple contexts, it is believed that the composition of different models would provide a more powerful explanation (Amron et al., 2017). The current study fills geographic, theoretical and construct voids in the literature by examining Jordanian SMEs, integrating TOE, FVM and ECT theories and operationalizing under-represented constructs. In so doing, it extends the regional knowledge and theoretical rigorousness of the studies on cloud computing adoption.

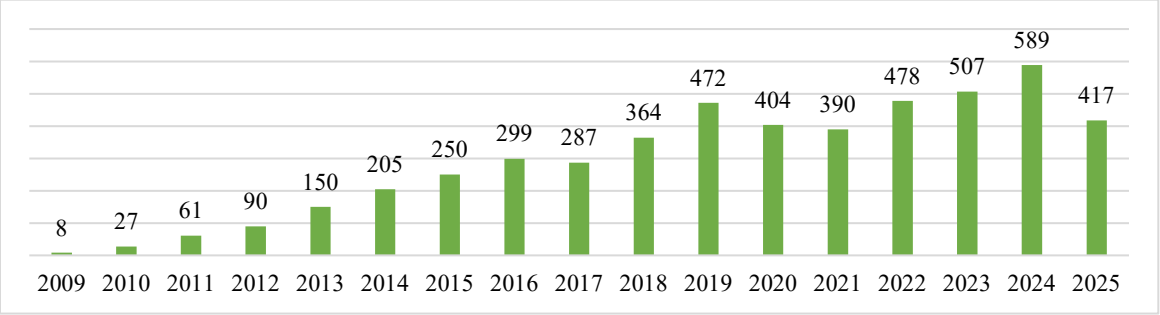

Fig. 3. The distribution of Cloud Computing publications across years till September 6, 2025 (Scopus Database).

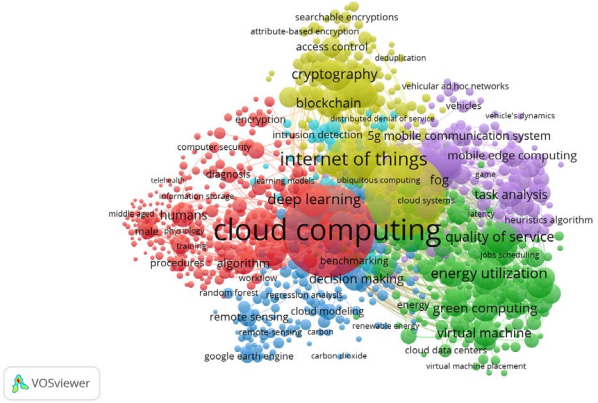

Fig. 4. The most used keywords

1.4 Contributions of the Study

The current study provides real practical implications in its examination of cloud computing adoption by Jordanian SMEs, somewhat opportunistic but nonetheless digital ambience. Through framing the research within this digital emerging yet resource constrained context, the study fills a significant practical gap: that of how SMEs in developing economies can utilize emerging digital technologies. The findings have significant implications for decision-makers such as policy makers, IT vendors and SME managers, who seek to stimulate digital transformation in comparably challenged but technological willing environments. Theoretically, the study provides an integrated model which combines three separate but interrelated frameworks seldom used together in previous cloud computing adoption research. More specifically, the Technology-Organization-Environment (TOE) framework provides a multi-dimensional architecture to study factors that determine adoption; the Fit-Viability Model helps understand alignment between technological capabilities and organizational readiness, and the Expectation-Confirmation Theory (ECT).extend this model beyond adoption to explain determinants of post-adoption use behavior. Integrating these models enables the consideration of multiple levels at the initiation and

continuation stage, an aspect that has been notably lacking in research in general but more so within the Jordanian and Arab SME context. Empirically, this study contributes to filling the gap by examining cloud technology adoption among Jordanian SMEs, which are underrepresented in the field of previous cloud technology research. To our knowledge, few empirical studies have been conducted in this environment and none has utilized a comprehensive or integrative theoretical framework. The study adds to knowledge about sectoral contexts, institutional pressures and regional influences shaping the adoption process in SMEs by offering context-specific evidence.

This study also extends the examination at the constructs level by including theoretically under-represented yet contextually relevant elements, namely perceived security and institutional pressures (i.e., mimetic and coercive pressure). Their addition broadens the explanatory capacity of the model, and thus contributes more complete insight into under what conditions adoption of cloud computing is only encouraged.

1.5 Aim and Research Questions

The purpose of this paper is to determine the antecedents of cloud computing continual intention to use among SMEs in Jordan. It attempts to do so by combining three theoretical perspectives: the Technology-Organization-Environment (TOE) framework, the Fit-Viability Model (FVM), and Expectation-Confirmation Theory (ECT).

Table 1
Research variable in prior studies of cloud computing adoption (n=24).

Author	Country	TOE Framework								Fit-Viability Model		Expectation-Confirmation Theory
		Technological Factors				Organizational Factors		Environmental Factors				
								Institutional Theory				
		RA	COM	COMX	PSP	TMS	OR	MCP	CPG	TF	VIB	CIUCC
(Alamri & Alzahrani, 2024)	Saudi Arabia	gap	gap	✓	✓	gap	gap	✓	gap	gap	gap	gap
(Aligarh et al., 2023)	Indonesia	✓	gap	✓	gap	✓	✓	✓	gap	gap	gap	gap
(Alismaili et al., 2020)	Australia	✓	✓	gap	✓	✓	gap	gap	✓	gap	gap	gap
(Ansong & Boateng, 2023)	Ghana	gap	gap	gap	gap	✓	gap	✓	gap	gap	gap	gap
(Athambawa et al., 2022)	Sri Lanka	✓	✓	✓	✓	✓	gap	gap	gap	gap	gap	gap
(Bounfour et al., 2022)	Europe, Asia, United States	gap	✓	✓	gap	✓	gap	✓	gap	gap	gap	gap
(Chen et al., 2023)	China	✓	✓	✓	✓	✓	gap	✓	gap	gap	gap	gap
(A. M. El Skafi et al., 2025)	MENA region	✓	✓	✓	✓	✓	gap	✓	✓	gap	gap	gap
(Gupta et al., 2022)	Canada, Asia, Europe, America, the United Kingdom, Australia	✓	✓	✓	✓	gap	gap	gap	gap	gap	gap	gap
(Homan & Beránek, 2023)	Czech Republic	✓	✓	gap	✓	✓	✓	✓	gap	gap	gap	gap
(Lutfi, 2022)	Jordan	gap	gap	gap	✓	✓	✓	✓	gap	gap	gap	gap
(Mousa et al., 2024)	Palestine	gap	gap	gap	gap	✓	gap	gap	gap	gap	gap	gap
(Mohammed et al., 2017)	Yemen	gap	gap	gap	gap	gap	gap	gap	gap	✓	✓	gap
(Nagahawatta et al., 2024)	Australia	gap	gap	gap	✓	gap	gap	gap	gap	gap	gap	gap
(Nawaz & Thelijjagoda, 2025)	Sri Lanka	✓	✓	✓	gap	✓	✓	✓	gap	gap	gap	gap
(Ochara et al., 2022)	South Africa	gap	gap	gap	gap	gap	gap	gap	gap	✓	✓	gap
(Qatawneh, 2024)	Jordan	✓	✓	✓	✓	✓	gap	gap	gap	gap	gap	gap
(Ramzul et al., 2024)	Malaysia	✓	gap	gap	✓	✓	gap	gap	gap	gap	gap	gap
(Rawashdeh et al., 2023)	Jordan	✓	✓	✓	gap	✓	✓	✓	gap	gap	gap	gap
(Sayginer & Ercan, 2020)	Turkey	✓	✓	✓	✓	✓	gap	✓	gap	gap	gap	gap
(Siddiqui & Liaquat, 2022)	Pakistan	gap	gap	gap	gap	✓	gap	gap	gap	gap	gap	gap
(M. Skafi et al., 2020)	Lebanon	✓	✓	✓	✓	✓	gap	✓	✓	gap	gap	gap
(Tongsuksai et al., 2023)	New Zealand	✓	✓	✓	gap	✓	✓	✓	✓	gap	gap	gap
(Yoo & Kim, 2019)	South Korea	gap	gap	gap	gap	gap	gap	gap	gap	✓	✓	gap
Current Study	Jordan	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Towards a theoretical model of using cloud computing in SMEs. The conceptual model investigates how technological, organizational and environmental dimensions influence perceptions of fit and capability for adopting cloud computing solutions. These perceptions are further investigated for their significance in terms of influencing the justification of continued use of cloud technologies. Thus, the study is driven by the following research questions:

RQ1: How do technological factors (relative advantage, compatibility, complexity, and perceived security) affect the perceived fit of cloud computing within Jordanian SMEs?
RQ2: To what extent do organizational factors (top management support and organizational readiness) influence the viability of adopting cloud computing within Jordanian SMEs?
RQ3: How do environmental pressures (mimetic and coercive forces) affect the perceived viability of cloud computing adoption within Jordanian SMEs?
RQ4: What is the role of Technology-Fit in shaping the continuous intention to use cloud computing within Jordanian SMEs?
RQ5: What is the role of Viability in shaping the continuous intention to use cloud computing within Jordanian SMEs?

2. Theoretical Foundations

2.1 Technology-Organization-Environment (TOE) Framework

The Technology–Organization–Environment (TOE) framework offers a structure which can be used to view the adoption of new technologies by organizations, taking into consideration technological, organizational and environmental conditions (Faasolo & Sumarliah, 2022). This trichotomous view is useful in addressing situational factors that influence business automation choices (Mousa et al., 2024). Originally proposed by (Tornatzky et al., 1990), TOE has been used expansively in technology diffusion as a meta-theory, for understanding organizational adoption of technologies at a macro level (Basloom et al., 2022). According to emerging evidence, which verifies the suitability of this model for cloud computing adoption research (Lutfi, 2022; Ongowarsito et al., 2022; Shetty & Panda, 2023; Zamzeer et al., 2020).

2.2 Fit-Viability Model

The Fit–Viability Model (FVM), initially proposed by (Tjan, 2001) to assess internet-related initiatives, it was later extended to explore broader technology adoption contexts (T. Liang et al., 2007). The model measures two core dimensions: fit, which relates to how well the technology fits with the goals and operational practices of an organization, and viability, which assesses whether an organization has the necessary resources and competencies to implement effectively. By covering both suitability and feasibility, the FVM allows the refinement of risk and to support decision-making. The FVM has been successfully adopted in various contexts such as e-government (Mohammed et al., 2017), e-learning (AlAjmi et al., 2021), media advertising (Zhang et al., 2020), and healthcare (Muhammad & Wickramasinghe, 2019), serving as a reliable framework for gauging the practicality of digital innovations.

2.3 Institutional Theory

Institutional theory offers a macro lens with which to examine technology adoption as a socially embedded process influenced by broader institutional pressures (AlKalbani et al., 2017). The theory highlights that organizational behavior is influenced by coercive, mimetic and normative forces, especially in an environment of high regulation and societal monitoring (Al Mudawi et al., 2019). These pressures often contribute to institutional isomorphism where firms conform and adopt similar technologies for legitimacy and competitive reasons (Cavusoglu et al., 2015). In this context, institutional theory has been particularly useful in theorizing cloud computing adoption in SMEs by considering the influence of societal expectations, regulations and industry norms at the organizational level (Al Mudawi et al., 2019; AlKalbani et al., 2017).

2.4 Expectation Confirmation Theory

Expectation Confirmation Theory (ECT) explains user behavior through the study of the psychological mechanisms that occur because of post-adoption. It suggests that people develop certain expectations toward a product or system prior to using it and when this is used, the expectations are either met or not met leading to satisfaction, neutrality or dissatisfaction (Ramadhan et al., 2022). ECT maintains that user appraisal procedures are pivotal to the formation of continued use intentions in technological environments (Ye et al., 2023). The theory has been used to study how system quality enhancements could enhance user's loyalty and long-run involvement (Jia et al., 2020). Through separating pre adoption expectation and postadoption perception, the ECT offers a strong model for analyzing continued technology use by stressing that the long-term success of an information system depends more on continual use than initial acceptance (Bhattacherjee, 2001).

3. Hypothesis Development

3.1 Technological Factors

The successful implementation of a technology is dependent upon its ability to prove clear and evident advantages over the current alternatives. Relative advantage is conceptualized as the degree to which an innovation is perceived as better than what it supersedes (Rogers, 2003). In the case of SMEs, technologies that value organizational productivity and revenue are more readily accepted. This factor has been extensively recognized as a major driver for adoption of cloud based enterprise resource planning (ERP) systems among both small and medium-sized enterprises (SMEs) and other larger businesses (AlBar & Hoque, 2019). In cloud services, cost efficiency is the most prominent relative advantage (reduction in infrastructure and maintenance), for example (Sandu & Gide, 2018). Hence, SMEs are more likely to embrace cloud services when they perceive concrete operational and cost advantages (Alqahtani et al., 2022).

Compatibility refers to the degree an innovation is consistent with existing values, past work, and perceived needs of potential adopters (Rogers, 2003). This concept includes the fit between an innovation and culture, structure, goals, and processes of an organization (Nawaz & Thelijjagoda, 2025). The chance of adoption increases when a technology is seen as congruent with contemporary practices and digital infrastructure (Omar et al., 2022). For cloud computing, interoperability with current web-based systems reduces employees' uncertainty and ensures its integration, in an easy way (Zamzeer et al., 2020).

The degree of complexity of an innovation is highly influential on whether organizations adopt it. Defined as the extent to which a technology is believed to be difficult to comprehend and use (Oliveira et al., 2014). Adoption is generally discouraged when perceiving the system as being too complex, and this perception increases when IT providers and users are faced with uncertainty during implementation (AlBar & Hoque, 2019). Over complexity can also cause operational inefficiencies as well as hindering uptake within the organization (Bag et al., 2023; Min, 2019). Technology adoption rates are lower if technologies are perceived to be difficult to learn or use, resulting in oppression (Park et al., 2022).

The embracing of a cloud computing strategy is frequently limited by security and privacy issues, partly because of the virtualized, multitenant nature (Suo et al., 2018). Although the shared responsibility model suggests that cloud service vendors bear a certain amount of security responsibility, such an assumption may hide inherent defects (Alsafi & Fan, 2020). Privacy, in particular, is a major issue and prior research has identified privacy being the biggest barrier for adoption (Bhuiyan et al., 2019; Suo et al., 2018). (Alsafi & Fan, 2020) also noted that these concerns weigh significantly in infrastructure design. Privacy assessments and privacy evaluation become even more important in particular domains, such as design of location-based services (Palos-Sanchez, 2017). Building trust between the service providers and the end-users requires context-aware, dynamic protections (Alsafi & Fan, 2020). (Heidt et al., 2019) found cloud security frameworks to often appear opaque and complex from the perspective of small and medium sized enterprises (SMEs). This deprives SME's of an ability to make informed adoption decisions. These concerns are buttressed by (Nagahawatta et al., 2019), who see privacy and security as critical barriers to cloud technology diffusion. thus, the proxy hypotheses are:

H_1: *Relative advantage positively influences technology fit.*

H_2: *Compatibility positively influences technology fit.*

H_3: *Complexity negatively influences technology fit.*

H_4: *Perceived security and privacy positively influence technology fit.*

3.2 Organizational Factors

Attitudes and behaviors of the senior managers toward adopting technology to improve organizational performance include top management support (Nawaz & Thelijjagoda, 2025). Previous research has validated the role of management in stimulating innovation adoption (Chittipaka et al., 2023). Executive support is a sign of intention and can help mobilize collective activities, as much of the decision-making power resides with the management. Although it is challenging to convince senior managers to accept and adopt new technologies, top management support can facilitate the successful implementation of reengineering projects (Alghamdi et al., 2021). Additionally, when the leadership strategically focuses on technology then it drives initiatives focused on innovation across the organization at a faster pace (Bag et al., 2023).
Organizational readiness refers here to a firm's structural and technological preparedness for pursuing strategic technology applications. Closely related to facilitating conditions, it embodies the belief that there is an adequate technical and organizational infrastructure for enabling successful system use (Venkatesh et al., 2003). It has been highlighted in previous literature that infrastructure readiness is key to successful technology integration (Khayer et al., 2021). Successful adoption

depends on the utilization of essential resources from the time of adoption until after post-adoption integration (Aboelmaged, 2014). Empirical research also indicated that when organizational readiness is combined with strong management support, technology adoption outcomes are increased significantly (Oliveira et al., 2019). Readiness is not only about tangible resources, but also knowledge, commitment, and governance mechanisms necessary to institutionalize innovation (J. Tan et al., 2007). Empirical indication is that greater organizational readiness increases innovation adoption directly (Kandil et al., 2018). As a result, the hypotheses are:

H_5: *Top management support positively influences viability.*

H_6: *Organizational readiness positively influences viability.*

3.3 Environmental Factors

Competitive mimetic pressure reflects organizations' tendency to imitate the strategies and actions of competing firms in the focal industry (Bazel et al., 2025). A key assumption of institutional theory is that organizations are pressured to copy the behavior of others in order not to be left behind or suffer material loss (Lagsten & Nordström, 2017). Such pressure is a key factor in forming perceptions of the cost-effectiveness of the adoption, as SMEs come under more and more pressing demands from service delivery models that are emerging (Ahmadi et al., 2017). As a result, SMEs may be pushed to adopt cloud computing services in order to maintain their competitiveness. In general, SMEs are late adopters of innovative technologies as they wait for the early adopters to take off their triggers and identify them at risk of failure (Chittipaka et al., 2023). Prior studies in domains such as accounting (Seshadrinathan & Chandra, 2021), supply chain (Chittipaka et al., 2023), construction (Wang et al., 2022), banking (Kulkarni & Patil, 2020), and manufacturing (Fernando et al., 2021) highlight that mimetic pressure acts as a catalyst for organizational decisions to embrace emerging technologies. Also, pressures imposed by governments include legislation, subsidies, incentives, and infrastructure support for organizations to adopt emerging technological innovations (Bazel et al., 2025). The government support, especially in areas related to infrastructure, inter-organizational collaboration, and risk management are critical factors for technology adoption (Farooque et al., 2020). Empirically, the regulatory pressures do drive the increase in acceptance rates of innovative technologies (Wamba et al., 2020). The leading role played by government regulations and incentives in the potential adoption of emerging technologies has been examined in multiple sectors (Kulkarni & Patil, 2020; Seshadrinathan & Chandra, 2021; Wang et al., 2022). Accordingly, the following hypotheses are proposed:

H_7: *Mimetic forces positively influence viability*.

H_8: *Coercive forces positively influence viability.*

3.4 Technology Fit

Technology fit: is the degree to which a given technology fits an organization's existing systems, business practices and operations (Goodhue et al., 2006). In this study, compatibility of cloud computing is perceived as a plan with which its unique features and functionalities would match SMEs', particularly in the area in connection with the security and management of data of their business. It will provide various benefits on a SME, when the cloud services are integrated well with the ISs of the firm such as data integrity, secureness of data, interoperation better and more efficient than ever at less cost (T.-P. Liang et al., 2021). Such benefits are likely to enhance SMEs' behavioral intentions of adopting the use of cloud computing services. The association between technology fit and intention to use technologies is positively reported in empirical studies across various settings (T.-P. Liang et al., 2021; Tirosh et al., 2022). Based on this assumption, the following hypothesis is made:

H_9: *Technology fit positively influences continuous intention to adopt cloud computing*.

3.5 Viability

The viability of a technology reflects its practical utility within an organization and the extent to which it influences the intention to adopt it. It captures the role of organizational and national conditions in shaping adoption decisions (Iacovou et al., 1995). In addition, viability is contingent upon the preparedness of the organization's infrastructure for implementation (Mcknight et al., 2011; Queiroz et al., 2021; Stafford & Treiblmaier, 2020; T. M. Tan et al., 2021). The feasibility of deploying cloud computing is therefore subject to a range of organizational and environmental constraints (Khezr et al., 2019). This includes assessing the readiness of SMEs to implement cloud computing and the added value such adoption can generate for SMEs. When SMEs perceive cloud computing as viable, their intention to adopt it is strengthened. Prior studies have consistently demonstrated a significant association between viability and the intention to embrace new technologies (Sciarelli et al., 2022; Sherer et al., 2016). Accordingly, the following hypothesis is proposed:
H_{10}: *Viability positively influences continuous intention to adopt cloud computing.*

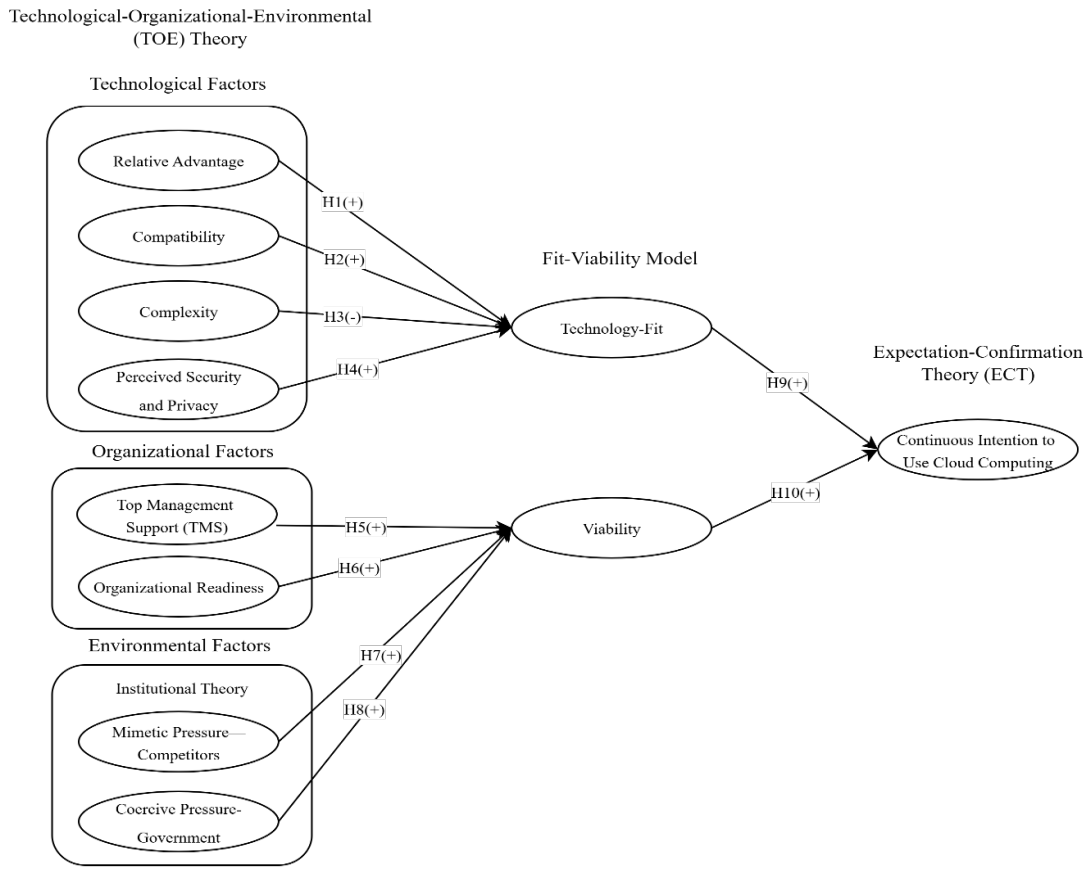

Fig. 5. Conceptual Research Model.

4. Methodology

4.1 Research Design and Methodological Approach

In this study, a quantitative cross-sectional research methodology has been employed in examining the factors that affect continuous adoption intentions of cloud computing in the SME market segment within the Jordanian market. The application of quantitative research methodology in this study is applicable as this type of research method aims at testing research hypotheses, which are theoretically grounded, as well as being able to examine causal links between various latent constructs within a comprehensive theoretical framework. Through applying a comprehensive theoretical framework of technology, composed of Technology Organization Environment theory, Fit Viability Model, and Expectation Confirmation Theory, it is now feasible to examine pre- as well as post-implementation factors within a comprehensive research methodology. In this research study, data were gathered by employing a structured research methodology via a research questionnaire. In addition, data analysis techniques, namely PLS-SEM analysis techniques, were employed as these techniques are effective in examining complex predictive models that involve mediating as well as non-normal data.

4.2 Population and Sampling Strategy

This research targets SMEs that use or have a plan to use cloud computing services. SMEs are selected as the research subject due to the importance of SMEs to the Jordanian economy and the rising interest of SMEs in cloud computing. The research targets those who use cloud computing services. This will ensure that those who have the relevant experiences and knowledge regarding cloud computing services are selected. Key research respondents are the owner, senior manager, IT manager, and decision maker of organizations who are responsible for the related technology decisions. The research adopts the use of a purposeful sampling technique. This will ensure that the needed information within the research has high relevance and quality. A total of 276 responses were collected. This degree of accuracy is much higher than what is needed to perform the PLS SEM analysis (Nyimbili & Nyimbili, 2024).

4.3 Pilot Study and Instrument Refinement

Before the commencement of the real data gathering procedure, there was a pilot test that was followed. This was done in order to evaluate the instrument used for measurement in terms of clarity, reliability, and relevance. This was particularly done among the respondents who came from the SMEs in Jordan and had experience in the application of the cloud computing solution in their operations. This procedure showed that the respondents would be able to grasp all the information required in the questionnaire, which had internal consistency reliability. There was a modification done in order to ensure that there

was a better understanding without a loss of relevance. To ensure that there was no bias, the findings of the pilot study had to be removed from the results.

4.4 Measurement of Constructs

The authors suitably adapted the measurement scales for the variables, using known empirical research on cloud computing adoption. This study was titled "Understanding Cloud Computing Adoption in Jordanian SMEs Through an Integrated Model. The technological variable was measured by multi-item measures. In measuring relative advantage, compatibility, and cloud computing complexity, there were three statements related to cloud computing benefit perception, existing practice alignment, and cloud computing ease of use perception, respectively. These statements have been derived from established studies, including Alamri and Alzahrani (2024), Ansong and Boateng (2023), Lutfi (2022), Mousa et al. (2024), Nagahawatta et al. (2024), Ramzul et al. (2024), and Yoo & Kim (2019). Four statements that measure top management's commitment to support were used to measure top management support. Organizational readiness was measured using four statements assessing the organization in terms of financial, technical, and human resource readiness. This framework has been adopted from established studies by Ansong & Boateng, 2023; Siddiqui & Liaquat, 2022; Nagahawatta et al., 2024; & Nawaz & Thelijjagoda, 2025. Environmental pressures are measured using institutional variables. In measuring mimetic pressures, there were five statements assessing mimetic competition pressures. While measuring coercive pressures, there were five statements assessing governmental influences. This protocol has been adopted from established studies (Aligarh et al., 2023; Chen et al., 2023; Rawashdeh et al., 2023; Qatawneh, 2024). Technology fit variables for measuring cloud computing adoption were measured using multi-item measures. In measuring technology fit, there are five statements assessing cloud computing functionalities' alignment with organizational operations. Viability variables assessing cloud computing adoption sustainability had four statements. The methodology employed in this study draws upon prior investigations, including those conducted by Mohammed et al. (2017) and Ochara et al. (2022). To gauge the sustained utilization of cloud computing, three statements served as continuous intention variables. This approach aligns with expectation-confirmation research, which evaluates post-adoption behavioral intentions.

4.5 Instrument Development and Prior Empirical Foundations

The study research tool was guided by a review that considered 24 empirical studies that included cloud computing adoption. A close examination of research studies within the focus region enables us to map constructs and basic ideas included in research variables in a table below. A review of done work ensures that research covers all aspects of both technology and environmental factors. However, there is a scarcity in research that jointly addresses fit and continuity in both technology and organizational viability in the proposed study that combines all basic ideas from TOE fit and Environment and Control Theory (Referenced in Table 1).

4.6 Data Analysis Procedures

The collected data were analyzed using a two-step process with PLS-SEM to assess both the measurement and structural models. The measurement model was evaluated to determine construct indicator reliability, internal consistency, convergent validity, and discriminant validity. All the construct reliability and validity values were above the required thresholds. Convergent validity was assessed using AVE ratios, while discriminant validity was assessed using Fornell-Larcker criteria and HTMT ratios. Assessment of the structural model allowed the testing of hypotheses involving relationships between constructs. Bootstrapping of the research hypotheses with 5,000 resamples for non-normal distributions indicated significant statistics for almost all hypotheses. Effects testing allowed the determination of the effect size of key predictor variables, while collinearity VIF statistics indicated the nonexistence of multicollinearity. Mediation testing using confidence intervals confirmed the significant mediating role of technology fit/viability in mediating relationships between antecedent variables and continuous intention. Findings of the research indicate the significance of fit and viability in understanding post-adoption cloud computing in SMEs (Sarstedt et al., 2022; Cheah et al., 2024).

5. Results

Table 2 shows the correlation matrix for the study's constructs, which reveals some interesting and statistically significant connections at the 0.01 level. There are moderate associations for compatibility (COMPT) with CINT ($r = 0.50$) and TF ($r = 0.31$), although these are weaker and positively significant for complexity (COMPX). Organizational readiness (OR) has moderate associations with viability ($r = 0.43$), as does perceived security (PS) with viability ($r = 0.48$). The negative associations for coercive forces (CPG) are generally small, which indicates the lack of strong direct linear relationships (Sarstedt et al., 2022).

Table 2
Correlation Matrix

	CINT	COMPT	COMPX	CPG	MCP	OR	PS	RA	TF	TMS	VIB
CINT	1.00										
COMPT	0.50**	1.00									
COMPX	0.24**	0.17**	1.00								
CPG	-0.03**	-0.13**	-0.08**	1.00							
MCP	0.15**	0.09**	0.38**	0.42**	1.00						
OR	0.36**	0.28**	0.09**	-0.06**	0.01**	1.00					
PS	0.27**	0.15**	0.13**	0.01**	0.09**	0.45**	1.00				
RA	0.19**	0.09**	0.15**	-0.09**	0.06**	0.30**	0.22**	1.00			
TF	0.51**	0.31**	0.28**	-0.08**	0.17**	0.36**	0.32**	0.31**	1.00		
TMS	0.35**	0.19**	0.14**	-0.02**	0.14**	0.13**	0.25**	0.09**	0.53**	1.00	
VIB	0.41**	0.29**	0.20**	-0.09**	0.13**	0.43**	0.48**	0.34**	0.60**	0.31**	1.00

Note(s): ** indicates significance at the 0.01 level (two-tailed).
CINT = Continuous Intention to Adopt Cloud Computing, COMPT = Compatibility, COMPX = Complexity, CPG = Coercive Forces, MCP = Mimetic Forces, OR = Organizational Readiness, RA = Relative Advantage, TF = Technology Fit, TMS = Top Management Support, VIB = Viability.

Table 3
Construct Reliability and Convergent Validity

Construct	No. of Items	Outer Loadings (Range)	Cronbach's Alpha	CR	AVE
CINT	3	0.82 – 0.90	0.84	0.90	0.75
COMPT	3	0.89 – 0.91	0.88	0.93	0.81
COMPX	3	0.80 – 0.90	0.84	0.90	0.74
CPG	5	0.74 – 0.84	0.88	0.91	0.66
MCP	5	0.92 – 0.93	0.96	0.97	0.85
OR	4	0.82 – 0.87	0.88	0.92	0.73
PS	4	0.90 – 0.94	0.94	0.96	0.85
RA	3	0.76 – 0.89	0.80	0.88	0.71
TF	5	0.78 – 0.83	0.87	0.91	0.66
TMS	4	0.85 – 0.88	0.89	0.93	0.76
VIB	4	0.88 – 0.90	0.91	0.94	0.78

CINT = Continuous Intention to Adopt Cloud Computing, COMPT = Compatibility, COMPX = Complexity, CPG = Coercive Forces, MCP = Mimetic Forces, OR = Organizational Readiness, RA = Relative Advantage, TF = Technology Fit, TMS = Top Management Support, VIB = Viability.

Table 3 shows the results of the reliability and convergent validity analysis for all constructs featured within the measurement model. The results show that the constructs are very reliable, with Cronbach's alphas ranging from 0.80 to 0.96 and composite reliability scores all above 0.70. The outer loadings for all constructs are within the acceptable limits, with values greater than 0.80, thereby ensuring high levels of indicator reliability. The convergent validity test has been confirmed, as the AVE values are all above the required threshold of 0.50, with a minimum of 0.66. High convergent validity is evident, particularly among constructs such as mimetic forces, with an AVE value of 0.85, as well as perceived security, with a value of 0.85 (Cheah et al., 2024).

Table 4
Discriminant Validity: Fornell–Larcker Criterion

	CINT	COMPT	COMPX	CPG	MCP	OR	PS	RA	TF	TMS	VIB
CINT	0.87										
COMPT	0.50	0.90									
COMPX	0.24	0.17	0.86								
CPG	-0.03	-0.13	-0.08	0.81							
MCP	0.15	0.09	0.38	0.42	0.92						
OR	0.36	0.28	0.09	-0.06	0.01	0.85					
PS	0.27	0.15	0.13	0.01	0.09	0.45	0.92				
RA	0.19	0.09	0.15	-0.09	0.06	0.30	0.22	0.84			
TF	0.51	0.31	0.28	-0.08	0.17	0.36	0.32	0.31	0.81		
TMS	0.35	0.19	0.14	-0.02	0.14	0.13	0.25	0.09	0.53	0.87	
VIB	0.41	0.29	0.20	-0.09	0.13	0.43	0.48	0.34	0.60	0.31	0.89

Note(s): Diagonal values represent √AVE.
CINT = Continuous Intention to Adopt Cloud Computing, COMPT = Compatibility, COMPX = Complexity, CPG = Coercive Forces, MCP = Mimetic Forces, OR = Organizational Readiness, RA = Relative Advantage, TF = Technology Fit, TMS = Top Management Support, VIB = Viability.

The discriminant validity is also confirmed in Table 4 using the Fornell and Larcker criteria. Here, the diagonal element of the table is compared to the corner element. A value of the square root of the AVE of every construct is always higher than the diagonal element of the constructs in the table. Take the technology fit construct with a square root AVE of 0.81 compared with the highest correlation of the construct with another construct of the viability of 0.60. Again, the continuous intention construct has a square root AVE of 0.87, which distinguishes it from other constructs related to compatibility and organizational readiness (Cheah et al., 2024). Table 5 below shows the HTMT ratios to serve as an additional check on the discriminant validity. All the HTMT values lie well below the conservative cut-off of 0.85. This reinforces the discriminant validity between the constructs. The highest HTMT value is between the technology fit and the viability construct and stands at 0.66. However, it is within the acceptable range since they belong to the same category (Cheah et al., 2024).

Table 5
Discriminant Validity: HTMT Ratios

Construct Pair	HTMT
COMPT – CINT	0.57
TF – CINT	0.58
TF – VIB	0.66
PS – VIB	0.51
OR – VIB	0.47

Table 6
Collinearity Assessment (VIF Values)

Structural Relationship	VIF
RA → TF	1.07
COMPT → TF	1.05
COMPX → TF	1.06
PS → TF	1.08
TMS → VIB	1.04
OR → VIB	1.02
MCP → VIB	1.25
CPG → VIB	1.23
TF → CINT	1.55
VIB → CINT	1.55

Note(s): All VIF values are below recommended thresholds.
CINT = Continuous Intention to Adopt Cloud Computing, COMPT = Compatibility, COMPX = Complexity, CPG = Coercive Forces, MCP = Mimetic Forces, OR = Organizational Readiness, RA = Relative Advantage, TF = Technology Fit, TMS = Top Management Support, VIB = Viability.

Variance Inflation Factors (VIF) are presented in Table 6 to test for possible multicollinearity among predictor constructs within the structural model. The VIF factors are all bounded between 1.02 and 1.55, which are below the acceptable threshold value of 5.00 indicated by Hair et al. (2017). The results are an assurance that multicollinearity does not exist within the structural model estimates. Although high values are recorded along the paths relating technology fit and viability to continuous intention, these are within acceptable levels, indicated by VIF values of 1.55 (Sarstedt et al., 2022; Cheah et al., 2024).

Table 7
Structural Model Results and Hypotheses Testing

Hypothesis	Structural Path	β	f^2	STDEV	t-value	p-value	Result
H1	RA → TF	0.22	0.06	0.05	4.19	0.00	Supported
H2	COMPT → TF	0.23	0.07	0.05	4.52	0.00	Supported
H3	COMPX → TF	0.18	0.04	0.05	3.50	0.00	Supported*
H4	PS → TF	0.22	0.06	0.06	3.86	0.00	Supported
H5	TMS → VIB	0.24	0.08	0.05	4.49	0.00	Supported
H6	OR → VIB	0.38	0.20	0.05	7.61	0.00	Supported
H7	MCP → VIB	0.15	0.02	0.06	2.61	0.01	Supported
H8	CPG → VIB	-0.13	0.02	0.07	1.71	0.04	Supported (Negative)
H9	TF → CINT	0.40	0.15	0.06	6.67	0.00	Supported
H10	VIB → CINT	0.17	0.03	0.06	2.73	0.00	Supported

CINT = Continuous Intention to Adopt Cloud Computing, COMPT = Compatibility, COMPX = Complexity, CPG = Coercive Forces, MCP = Mimetic Forces, OR = Organizational Readiness, RA = Relative Advantage, TF = Technology Fit, TMS = Top Management Support, VIB = Viability.

As evident in Table 7 and Fig. 6, the empirical evidence supports the integrated TOE-FVM-ECT model in relation to how technology, organization, and the environment influence the adoption and continuous usage of cloud computing among Jordanian SMEs. Complexity positively correlates with technology fit (β = 0.18), which means it could be considered functional expertise without posing a problem as long as support is adequately provided. Perceived security and privacy further support technology fit (β = 0.22). On a more organizational scale, top management support positively correlates with viability (β = 0.24), although the most important factor in making a business or an organization viable is the emergence of organizational readiness as a positive determinant of viability itself (β = 0.38). On an environmental dimension, mimetic pressures positively influence viability (β = 0.15) in a competitive imitation dimension; in contrast, coercive pressures negatively influence viability (β = -0.13), as it could be considered a constraint in the regulatory dimension. Notwithstanding the above considerations, technology fit has a large positive influence on continuous intention towards adopting cloud computing (β = 0.40); viability has a positive influence as well but is relatively minor in influence (β = 0.17) (Sarstedt et al., 2022; Cheah et al., 2024). Table 8 shows the bias-corrected confidence intervals for predicting direct effects in a structural model. Non-significant intervals on zero for all paths except H8 demonstrate that assumptions about structural connections are statistically significant and resilient to data mistakes and outliers. The broadest interval is for organizational readiness and viability, which ranges from 0.30 to 0.46, and the outcome is very consistent and statistically significant. However, variability is visible for coercive forces and viability, although the results are statistically significant due to their interval including zero (Sarstedt et al., 2022; Cheah et al., 2024).

Table 8

Confidence Intervals for Direct Effects (Bias-Corrected, 95%)

Hypothesis	Path	Sample Mean (M)	STDEV	5% CI	95% CI	Zero Included
H1	RA → TF	0.22	0.05	0.13	0.30	No
H2	COMPT → TF	0.23	0.05	0.15	0.31	No
H3	COMPX → TF	0.19	0.05	0.10	0.27	No
H4	PS → TF	0.22	0.06	0.12	0.31	No
H5	TMS → VIB	0.24	0.05	0.15	0.32	No
H6	OR → VIB	0.38	0.05	0.30	0.46	No
H7	MCP → VIB	0.15	0.06	0.05	0.23	No
H8	CPG → VIB	-0.13	0.07	-0.20	0.09	Yes
H9	TF → CINT	0.41	0.06	0.30	0.50	No
H10	VIB → CINT	0.17	0.06	0.07	0.28	No

Note(s): N = 276; standardized values.

CINT = Continuous Intention to Adopt Cloud Computing, COMPT = Compatibility, COMPX = Complexity, CPG = Coercive Forces, MCP = Mimetic Forces, OR = Organizational Readiness, RA = Relative Advantage, TF = Technology Fit, TMS = Top Management Support, VIB = Viability.

Table 9

Specific Indirect Effects on Continuous Intention

Indirect Path	Total Indirect Effect (β)
COMPT → TF → CINT	0.09
COMPX → TF → CINT	0.07
PS → TF → CINT	0.09
RA → TF → CINT	0.09
TMS → VIB → CINT	0.04
OR → VIB → CINT	0.07
MCP → VIB → CINT	0.03
CPG → VIB → CINT	- 0.02

CINT = Continuous Intention to Adopt Cloud Computing, COMPT = Compatibility, COMPX = Complexity, CPG = Coercive Forces, MCP = Mimetic Forces, OR = Organizational Readiness, RA = Relative Advantage, TF = Technology Fit, TMS = Top Management Support, VIB = Viability.

Table 9 shows the detailed indirect effects of various constructs on continuous intention to adopt cloud computing, focusing on the mediating roles of technology fit and viability. Compatibility, relative advantage, perceived security, and complexity all have significant indirect effects via technology fit, β = 0.07-0.09. Organizational readiness and top management support have indirect effects via viability, β = 0.07 and β = 0.04, respectively. Mimetic impacts have a positive indirect effect (β = 0.03), while coercive influences have a negative indirect effect (β = -0.02). These data support partial mediation, emphasizing the importance of technical fit and viability (Sarstedt et al., 2022; Cheah et al., 2024).

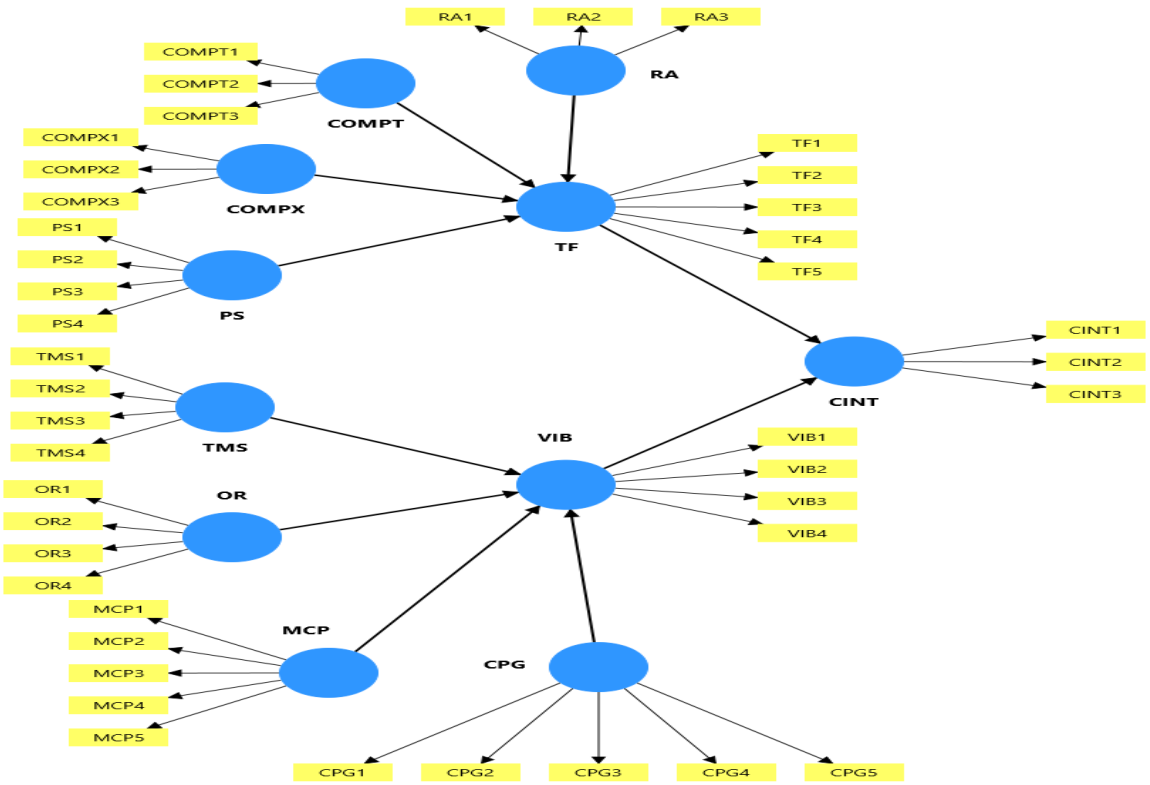

Fig. 6. Illustrates the conceptual structural model of understanding cloud-computing adoption in Jordanian SMEs through an integrated model.

6. Discussion

Objective of the study included examining the determinants of continuous intention to adopt cloud computing technology among Jordanian SMEs based on a comprehensive model encompassing TOE, FIT, Viability, and ECT concepts jointly. The results are highly supportive of the theoretical framework with a number of theoretical insights, leading to progressions within the constructs of present cloud computing models, specifically within the ME market. Insofar as technological antecedent variables are concerned, it has been supported that relative advantage has a strong and direct effect on technology fit, and this study serves to confirm H1. This finding bears out modern perspectives on cloud appropriateness that have continued to view cloud computing and related technologies in organizational contexts primarily from the point of view of performance and cost savings (Wahed et al., 2025). More recently, it has been suggested that modern organizations and organizations in general are no longer content simply to view cloud technologies from the point of view of cost savings but from that of agility and scalability. This study serves to affirm and extend this body of knowledge (Sweeney et al., 2024).

Another determinant that has great importance regarding the application of technology fit is that of compatibility, supporting hypothesis H2, as has been supported in earlier studies carried out on cloud computing adoption. Within an SME context, in which there is limited knowledge on new and emerging technologies in general and within an environment of an existing system that lacks technical knowledge, it is evident that ensuring that cloud technologies are compatible has great importance in being easily applied within an organization (Saatchi et al., 2025; Islam et al., 2024; Luo et al., 2025). Unlike the classical diffusion of innovation method, the findings establish the positive influence of technology fit on complexity, which partly supports H3 and H4. While the negative influence of complexity has previously been emphasized (Alka'awneh et al., 2025; Zhang, 2024), there is an emerging trend suggesting that firms may accept a certain level of complexity in technology if it is perceived to offer superior functionality (Hwang et al., 2025). There are intriguing leads as to where and how complexity might fit in the evolving cloud technology paradigm (Xu & Lu, 2022; Balland et al., 2022; Haag et al., 2025).

Turning to the organizational antecedents, the findings support H5 and H6. This suggests that both top management support and organizational readiness have a significant effect on perceived viability. Support from top management follows recent studies by serving as a legitimating mechanism that overcomes uncertainty (Lutfi, 2022; Liang et al., 2021). However, we demonstrate that organizational readiness is the most significant determinant of viability (Mogboh & Ene, 2025). This suggests that organizational support and capacity matter more than the opinions of the senior management (Sreenivasan & Suresh, 2023; Wang et al., 2023). This view addresses contemporary literature by suggesting that viability and the successful adoption of cloud computing require more than support from the upper echelons (Mohammed et al., 2024). The environment provides more intricate and context-dependent results. Mimetic forces have a positive impact on viability and corroborate both H7 and the institutional theory-based literature that focuses on the role of imitation in the technological legitimacy of innovations. Mimetic forces in the dynamic and competing environment of SMEs affect the adoption of innovations with a positive association with feasibility and may diminish risks due to the observance of rivals' success in adoption. But the magnitude of the impact is small (Sun et al., 2023; Li et al., 2023; Zhang et al., 2025).

Conversely, coercive forces have been found to have a strong but negative relationship to viability, offering a critical reformation of H8. Although the role of coercive forces is hypothesized as that of an encourager through regulation and incentives from the government, the findings from this study indicate that there is instead a negative influence of this factor, implying that SMEs in the context of Jordan might view the expectations from regulation regarding their activities as obstacles (Huang et al., 2023; Uribe, 2025; Postema, 2022). Lastly, the findings offer strong support for hypotheses H9 and H10, verifying the significance of technology fit and viability as determinants of continuous intention to adopt cloud computing. The findings show that technology fit has a significantly stronger impact on continuous intention than viability, suggesting that the dominant factor influencing continuous use is the alignment between cloud technology and organizational needs and processes (Chen et al., 2021; Cheng, 2021a, 2021b). Though its impact is small, viability has the ability to impact long-term intentions positively (AlAjmi et al., 2021; Qasem et al., 2021). This means that even though there is greater emphasis on the organizational attributes that include viability and others, they become less important in relation to the determinants of TTF; therefore, the application of expectation confirmation theory is applicable when studying the important organizational antecedents (Al-Sharafi et al., 2023; Qatawneh et al., 2025).

Generally, it can be thus claimed that the proposed research work presents significant contributions. In the context of the theoretical contribution, it is worth adding that it expands known models of cloud computing adoption by combining TOE, Fit-Viability, and ECT models within a single framework that illustrates pre- and post-adoption stages. In an empirical context, it presents particular knowledge that has been identified in the Jordanian SME community, which can be considered an uncharted area, especially if recent research is taken into account. More importantly, it overcomes simple concepts related to complexity and coercive power that have been widely applied in known models of adoption in favor of a differentiated perception process of SMEs.

7. Conclusion

The objective of this research work is to determine the influences that affect the long-term intentions of SMEs in Jordan towards adopting cloud computing services using an integrated framework that comprises the Technology-Organization-Environment (TOE) framework, the Fit-Viability Model (FVM), and the Expectation-Confirmation Theory. The research work provides an in-depth analysis of the phenomenon because it has been conducted to empirically validate the integrated framework. The research work has determined that the adoption of cloud computing is anything but a mere coincidence because the alignment of the cloud services with an organization's strategies and the viability of the successful execution of the service have significantly influenced the phenomenon. The research work emphasizes the importance of having a post-adoption approach that goes beyond mere acceptance or rejection.

7.1 Theoretical Contributions

This research combined the fundamentals of cloud computing and created information adoption theories. The current study uses an all-encompassing approach that encompasses the frameworks described by 'ToE,' 'FVM,' and 'ECT.' The current study has immensely contributed to the body of research on cloud computing. The frameworks developed in this context have strengthened the current study and its capability to shed light on its contextual characteristics (Al-Sharafi et al., 2023; Qatawneh, 2025). The synthesis between the foregoing theories enables an in-depth investigation of 'IS Research,' particularly focusing on the 'predictive' and 'behavioral' aspects of 'post-adoption' (Bustami et al., 2025; Alayed & Awamleh, 2025). This study extended 'FIT-VIABILITY' on 'cloud computing' and 'SMEs.' This research made an in-depth investigation into the 'models' of 'cloud computing' and 'SMEs' (Alka'awneh et al., 2025; Zhang, 2024).

In the pragmatic realm, it becomes clear that these implications carry several implications regarding decision-makers within the SME community. Taking into consideration the implications regarding decision-makers of the SME community (AlAjmi et al., 2021; Qasem et al., 2021), it becomes clear that these implications highlight the need for synchronizing cloud technology and the closely related processes. While the implication refers to the significance of organizational readiness, which is indicated by the stress on technical feasibility over administrative support, the implication highlights the need for the SME community to develop its readiness for technology on its own prior to the widespread adoption of cloud technology (Saatchi et al., 2025; Awamleh et al., 2025a). Findings regarding policymakers indicate that the impact of viability is negatively affected by coercive pressures, and these pressures should not be used to crush the struggling SME community further, but should be used carefully along with training, subsidies, and technology assistance (AbuAkel & Ibrahim, 2023; Sweeney et al., 2024; Awamleh et al., 2025b).

7.2 Limitations

However, this research is also vulnerable to several limitations that need to be recognized. First, being cross-sectional, this research is less capable of determining any form of causality and dynamics in user perceptions that could be evident in a quickly changing technological arena. Second, this research is specifically designed for SMEs in Jordan and cannot necessarily apply to other geographical locations with differing settings. Third, being based on survey research, this study is vulnerable to common method biases and subjective perceptual biases, despite other research approaches being employed. Finally, although this proposed model identifies the key driving forces for continuous adoption, other forces, like vendor lock-in, services, and organizational culture, are not examined for their impact.

7.3 Directions for Future Research

This study offers several possibilities to ensure that research could be further enhanced. Longitudinal research methodology could examine closely how the perceptions of fit, viability, and sustained intention of SMEs could vary as their familiarity with cloud computing technology gradually increases. Other research studies in other geographic regions could help to determine the generalizability of this study's findings on the robustness of the integrated framework of TOE-FVM-ECT. Variables such as user satisfaction, techno-trust, and intention to quit technology, which are related to post-adoption, could explore the usage of technology in a better way. Moreover, research methodology employing qualitative approaches could enable researchers to understand how SMEs view complexity, which could provide substantial insights to this study's findings.

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