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-RESEARCH ARTICLE-

TOP MANAGEMENT SUPPORT, ORGANISATIONAL READINESS AND COSTS ON THE DECISION TO ADOPT TECHNOLOGY: MEDIATING ROLE OF INTENTION TO ADOPT TECHNOLOGY

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─Abstract─

Technology adoption has emerged as a critical determinant of organisational success, warranting focused attention in contemporary academic discourse. Consequently, this study explores how organisational factors, namely top management support, organisational readiness, and initial costs, influence the decision to adopt technology within manufacturing firms in Vietnam. Furthermore, it investigates the mediating role of the intention to adopt technology in the relationship between these organisational factors and the actual decision to implement technological innovations. Data were collected through structured questionnaires administered to employees in Vietnam's manufacturing sector. The analysis employed Smart PLS to assess the interrelationships among the identified variables. The findings revealed that top management support, organisational readiness, and initial costs are positively linked to the decision to embrace technology in the manufacturing context. Additionally, the intention to adopt technology was found to significantly mediate the effect of these organisational factors on technology adoption decisions. These insights provide valuable guidance for policymakers in formulating strategies that facilitate technology adoption, emphasising the importance of managerial backing, adequate preparedness, and cost feasibility.

Keywords: Top Management Support, Organisational Readiness, Initial Costs, Decision to Adopt Technology, Intention to Adopt Technology.

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INTRODUCTION

The world is undergoing rapid transformation, presenting a markedly different landscape compared to earlier periods. In this evolving context, technological advancements have significantly altered modes of communication, lifestyles, professional operations, commerce, and consumer engagement. As a result, the expectations of consumers and other stakeholders have also evolved. Technology has assumed a central role in everyday life and has become indispensable to business operations (Ghobakhloo et al., 2022). Its integration enhances the performance across all business functions, improves service and product quality, and contributes positively to organisational image and profitability. Employing technological solutions in place of manual labour accelerates operations, increases system efficiency, and enhances the quality of output. It facilitates greater production volumes with superior quality while simultaneously shortening delivery times to customers. Additionally, by ensuring that both personnel and resources remain informed and up-to-date, technology enables organisations to effectively respond to dynamic consumer needs and maintain competitiveness in relation to industry rivals (Chavas & Nauges, 2020). The incorporation of innovative technologies strengthens communication and transparency with stakeholders, thereby reducing the likelihood of information being concealed, understated, or misrepresented. This fosters stakeholder trust and helps cultivate stronger relationships. Consequently, this leads to increased investments, regulatory support, governmental incentives, higher employee retention, and enhanced customer loyalty (Dissanayake et al., 2022). Given its critical contribution to business advancement, it is essential to investigate the determinants that influence decisions regarding the adoption of technology.

Decisions made by management concerning the adoption and implementation of specific technologies are typically influenced by a range of organisational factors, including top management support, organisational readiness, and the burden of initial costs. Top management comprises high-ranking executives who hold substantial responsibilities within an organisation. These individuals often carry titles such as Chief Executive Officer (CEO), Chief Operating Officer (COO), Chief Financial Officer (CFO), President, or Vice President. A supportive senior management demonstrates concern for the well-being of both administrative and operational staff, formulates strategic directives, and acknowledges employee contributions. Such leadership tends to invest resources, provide attention, and organise processes effectively to support operational functions. Consequently, supportive top management is more inclined to endorse decisions that promote technological integration. Organisational readiness refers to the extent to which an enterprise is prepared to undergo major changes or to embark on new initiatives.

To effectively respond to evolving conditions and initiate new projects, organisations often reconfigure their resource allocation to align with emerging demands. This

strategic adaptability strengthens organisational capacity to adopt relevant technologies that contribute to achieving targeted objectives (Sani et al., 2020). Initial costs encompass the preliminary investments incurred before business operations commence. These may include legal and incorporation fees, office rentals, installation charges, early-stage inventory, marketing expenditures, accounting services, and salary payments. Organisations that are financially capable of covering substantial initial costs are more likely to acquire necessary materials, prepare their workforce, and streamline resources to support effective operational execution. This financial preparedness provides the foundation for decisions in favour of technological adoption and implementation (Toufaily et al., 2021).

This study focuses on the adoption of technology within manufacturing firms located in Vietnam. As an emerging economy in Southeast Asia, Vietnam is projected to have a nominal GDP of approximately \$506.43 billion in 2025, with a purchasing power parity of \$1.80 trillion in the same year (Hung, 2025). Despite the challenges posed by the COVID-19 pandemic, the country has witnessed sustained economic growth, largely attributable to the manufacturing sector, which accounts for more than 20 percent of its economic output. Leading manufacturing enterprises in Vietnam include Hoa Phat Group, Procter & Gamble, Unilever, Abbott, CP Vietnam Corporation, DOJI Gold & Gems Group, Honda, Vietnam Dairy Products JSC, ENDO Vietnam, Samsung Electronics Vietnam Company Limited, Heineken N.V., and Daiwa Vietnam Limited (Do & Best, 2025). While this sector contributes significantly to national economic development and generates substantial foreign exchange, the individual performance of manufacturing firms often lacks consistency and long-term sustainability. The present investigation into technology adoption seeks to provide strategic support for these firms, enabling them to establish a stable foundation in a rapidly changing environment. The primary objective of this research is to assess the relationships among top management support, organisational readiness, and initial costs with both the intention and decision to adopt technological innovations.

The current study offers several noteworthy contributions to the academic literature. Firstly, although previous studies have explored the influence of top management support, organisational readiness, and initial costs on technology adoption, few have addressed these variables concurrently within a unified model. This study bridges that gap by simultaneously examining their combined effects on decision-making related to technology adoption, thereby expanding existing literature. Secondly, earlier research has often assessed the link between the intention to adopt technology and actual adoption decisions in isolation. This study builds upon that by introducing intention to adopt technology as a mediating variable between organisational factors and final adoption decisions, thereby offering a more nuanced understanding of the adoption process. Thirdly, the use of data collected specifically from Vietnamese manufacturing enterprises further distinguishes this research, adding a contextual contribution to the body of knowledge.

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The structure of this paper comprises five sections. The second section presents a review of the relevant literature to explore variable relationships and formulate hypotheses. The third section outlines the research methodology adopted. The fourth section discusses the empirical analysis based on the tested hypotheses and presents key findings. The fifth section offers a discussion of the results, compares them with prior studies, and examines the extent to which the findings are supported. This is followed by an outline of the study's practical implications, concluding remarks, and identified limitations.

LITERATURE REVIEW

With the progression of time and the increasing awareness among individuals, business environments have become significantly more competitive, while consumer expectations continue to evolve. In such circumstances, relying solely on human effort and conventional business practices is no longer sufficient. Integrating technology across various functional areas enhances both production and operational efficiency. This integration enables businesses to align their outputs with strategic objectives by effectively responding to market demands (Yang et al., 2021). Organisational decisions regarding technology adoption are shaped by factors such as top management support, organisational readiness, initial costs, and the intention to adopt technology. When these organisational elements are adequately addressed—specifically through supportive leadership, preparedness for change, and feasible initial costs—employees are more inclined to adopt technological innovations, and the implementation of such decisions becomes more achievable. The subsequent discussion synthesises the findings from previous research to support the development of hypotheses.

The conduct of senior executives towards middle managers and general staff plays a critical role in shaping their perspectives and behaviour. When upper management demonstrates supportive attitudes, their focus extends beyond organisational goals to include the well-being of their personnel. Such leaders often remain informed about emerging business technologies and authorise the implementation of solutions that enhance operational performance and outcomes. Thus, top management support plays a crucial role in fostering decisions favouring technological advancement. For instance, (Chatterjee et al., 2023) investigated the association between top management support and the decision to utilise technology. Using the PLS-SEM method to evaluate responses from 307 participants, the study found that when top-level executives demonstrate commitment to their social responsibilities and maintain positive engagement with employees, it encourages general managers to adopt similarly supportive behaviour. In such organisational settings, both managers and staff are more willing to expand their knowledge and improve their performance, particularly during periods of technological transformation. This type of environment facilitates smoother implementation of technology adoption decisions. Similarly, Kaushik and Agrawal (2021) examined the link between top management support and the decision to adopt new technology. Their findings indicate that supportive executives not only

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acknowledge the routine needs of the organisation but also prioritise employee development. Based on this discussion, the following hypothesis is proposed.

H1: *Top management support has a positive relationship with decision to adopt technology.*

Organisational readiness refers to the extent to which an enterprise is prepared across its various operational domains to manage unforeseen circumstances, accommodate change, and initiate new ventures. As part of this strategic approach, managers focus on stabilising the firm's financial structure and ensuring the availability of liquid assets. This financial flexibility enables them to adapt their business strategies and manage resources such as technological tools through implementation, replacement, or maintenance. Consequently, organisations that embrace the principle of readiness are more inclined to take and execute decisions regarding technology adoption.

In this context, Dube et al. (2020) conducted a study exploring the link between organisational readiness and the decision to adopt technology. Data for this research were gathered via an online questionnaire, and the analysis was performed using SEM-PLS. The findings revealed that the application of readiness strategies prompts managers to prioritise the development of human capital while remaining responsive to market fluctuations, unexpected scenarios, and competitive dynamics. Enhancing the competence of human resources equips management to make informed decisions about integrating advanced technologies that demand higher skill levels. This preparedness thus serves as a catalyst for technology adoption. Similarly, Kaushik and Agrawal (2021) examined the relationship between organisational readiness and technological adoption decisions. Their research demonstrated that managers committed to readiness policies consistently monitor developments in business practices, market trends, and the expectations of key stakeholders. Based on insights from the reviewed literature, the following hypothesis is proposed.

H2: *Organizational readiness has a positive relationship with decision to adopt technology.*

When establishing a new enterprise, an organisation must initially allocate financial resources to cover various foundational expenditures. These investments are essential for launching operations across different business functions and directly influence the capacity of departments to adapt to evolving needs. Substantial initial costs significantly enhance an organisation's capability to respond to change, particularly in terms of adopting and upgrading technological systems. As a result, the implementation of technology adoption decisions becomes more viable and effective (Barham et al., 2020). In this regard, Takahashi et al. (2020) investigated the relationship between initial costs and the decision to adopt technology. Their findings indicated a positive correlation, suggesting that organisations incurring considerable start-up expenditures are better positioned to support the adoption of innovative technologies. These

organisations typically benefit from enhanced operational capacity and a workforce equipped to manage technological advancements. Further, Masi et al. (2023) explored the influence of initial investment on the practical execution of technology adoption decisions. The study highlighted that enterprises with substantial initial funding tend to possess legal compliance, financial stability, advanced installation infrastructure, and skilled personnel, all of which facilitate the adoption process. Based on the aforementioned insights, the following hypothesis is proposed.

H3: *Initial costs has a positive relationship with decision to adopt technology.*

The conduct of top-level managers, who act as business owners or representatives thereof, significantly shapes the attitudes and emotional responses of general managers and employees. When senior leadership adopts a supportive stance and initiates various welfare programmes for staff, it fosters a sense of organisational commitment and strengthens employee confidence (Shamout et al., 2022). In such environments, employees are more inclined to go beyond their routine responsibilities and are motivated to embrace new technologies. With this cooperation and readiness among personnel, managers find it more feasible to substitute conventional methods with modern technological solutions. Therefore, the intention of employees to adopt technology functions as a critical link between top management support and the actual decision to adopt technology (Abed, 2020).

Using Importance–Performance Map Analysis (IMPA) within the PLS framework, the study analysed data collected from small and medium-sized enterprises. The findings indicated that, in organisations with supportive top management, initiatives such as training and dialogue sessions are implemented to enhance the cognitive and functional capabilities of employees. These initiatives are effective in cultivating a strong intention among employees to embrace technological change. When staff members responsible for operational execution demonstrate a willingness to engage with new technologies, management is more empowered to make decisions regarding technology adoption. Consequently, the intention to adopt technology serves as a mediating factor in the relationship between top management support and the decision to implement technological innovations. Based on this review of the literature, the following hypothesis is proposed.

H4: *Intention to adopt technology significantly plays a mediating role between top management support and decision to adopt technology.*

Enterprises that operate in accordance with organisational readiness principles often implement programmes such as employee performance evaluations and structured training aimed at learning and development. These initiatives promote a sense of responsibility among staff, enhance their knowledge base, improve cognitive capabilities, and refine physical skills. Consequently, employees become more adept at adapting to change while sustaining their performance levels. This growth in

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competence and self-assurance fosters a positive intention to embrace innovative technologies. When employees exhibit this readiness and willingness, they are more likely to support and contribute to the actual adoption of technological advancements. Therefore, the intention to adopt technology serves as an intermediary factor linking organisational readiness to the decision to adopt technology (Nasrollahi & Ramezani, 2020).

Similarly, Nair et al. (2019) explored the associations among top management support, the intention to adopt technology, and the decision to adopt technology. Based on interview data from SMEs located in Southern India, the study found that organisational readiness encourages employers or senior management to pursue sustainable practices and create a healthy, supportive working environment. Such practices cultivate organisational commitment among employees and motivate them to develop an intention to adopt technology for the benefit of the firm. Under these circumstances, the decision to adopt technological solutions becomes more viable and easier to implement. This view is further corroborated by Dube et al. (2020), who also concluded that the intention to adopt technology acts as a mediator between organisational readiness and the decision to adopt technology. Based on the above insights, the following hypothesis is proposed.

H5: *Intention to adopt technology significantly plays a mediating role between organizational readiness and decision to adopt technology.*

In organisations where, substantial initial costs are incurred, a comprehensive and effective research and development infrastructure is often established. This system enables the collection of high-quality information, enhances the knowledge base of both managerial and operational personnel, and facilitates sound decision-making processes. Managers who possess accurate insights into the nature, origin, and implementation of innovative technologies are then able to introduce these systems to employees, fostering their intention to engage with the new technologies. Consequently, the implementation of decisions related to technology adoption becomes more attainable (Lahiri et al., 2018).

Supporting this perspective, Hagspiel et al. (2020) conducted a study across 230 regional markets in sub-Saharan Africa, examining the interplay between initial costs, the intention to adopt technology, and the resulting decision to adopt it. The findings suggested that when organisations have the capacity to manage high initial expenditures, they tend to develop robust human resource management frameworks. These systems are not only designed to retain talent but also aim to expand employee knowledge, refine cognitive abilities, and increase overall work resilience. Through such mechanisms, employee intention to adopt technology is cultivated. When employees themselves demonstrate a readiness to embrace innovation, managerial decisions regarding the adoption of technology are more likely to be successfully enacted. Similarly, Porteous (2020) asserts that significant initial investments contribute

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positively to the development of employee intention toward technology adoption, which, in turn, supports the decision-making process. On the basis of these findings, the following hypothesis is proposed.

H6: *Intention to adopt technology significantly plays a mediating role between initial costs and decision to adopt technology.*

RESEARCH METHODS

This study investigates the influence of top management support, organisational readiness, and initial costs on the decision to adopt technology, while also assessing the mediating effect of the intention to adopt technology within these relationships in the context of manufacturing firms in Vietnam. Primary data were collected from employees working in the manufacturing sector through the administration of structured survey questionnaires. These instruments were designed to measure the study's core variables. Specifically, top management support was assessed using four items adapted from Chatterjee et al. (2022). Similarly, organisational readiness was evaluated using four items based on the work of McAlearney et al. (2021). The measurement of initial costs was carried out using four items from (Istaitih et al., 2023), while the intention to adopt technology was gauged through three items drawn from the same source. The decision to adopt technology was measured using four items developed by Ferri et al. (2021). The specific measurement items employed in the survey are presented in Table 1.

The present study identified employees from Vietnam's manufacturing sector as its target respondents, utilising purposive sampling to ensure the selection of participants with relevant experience and insight. Survey questionnaires were delivered directly to the selected individuals through on-site visits to their respective organisations. A total of 703 questionnaires were distributed, and after a designated response period, 500 valid responses were retrieved, reflecting a response rate of approximately 71.12 percent. To analyse the relationships among the variables, the study employed Smart-PLS, a widely accepted analytical tool recognised for its effectiveness in handling complex structural models and large datasets (Hair et al., 2020). The analytical framework of the research included three independent variables: top management support (TMS), organisational readiness (OR), and initial costs (IC). In addition, the model incorporated one mediating variable, intention to adopt technology (IAT), and one dependent variable, decision to adopt technology (DAT). These constructs and their relationships are visually represented in Figure 1.

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Table 1: Measurements and Variables

Items	Statements	Sources
Top Management Support		
TMS1	Senior managers are ready to implement new technologies.	(Chatterjee et al., 2023)
TMS2	Senior managers are considering continuing new technologies as a critical strategy for the business.	
TMS3	Senior managers view the continuation of new technologies as crucial for maintaining a competitive edge.	
TMS4	Senior managers are knowledgeable and proficient in implementing new technologies.	
Organisational Readiness		
OR1	Our business has the human resources to support new technologies.	(McAlearney et al., 2021)
OR2	Our business has the technological resources to continue new technologies.	
OR3	Our business has the financial resources to support the continuation of new technologies.	
OR4	Our business has management systems and operational mechanisms ready to quickly initiate changes when implementing new technologies.	
Initial Cost		
IC1	The initial investment cost for breakthrough technology in retail is high.	(Istaitih et al., 2023)
IC2	The company incurs additional costs to upgrade infrastructure compatible with new technology.	
IC3	The company incurs additional operating costs at retail (IT personnel, training costs, maintenance, etc.).	
IC4	The company faces difficulties in assessing the effectiveness of the investment.	
Intention to Adopt Technology		
IAT1	We are considering new technologies at our retail.	(Istaitih et al., 2023)
IAT2	We plan to new technologies at our business due to the effectiveness it brings to retail.	
IAT3	We are sure to invest in new technologies in our business in the near future.	
Decision to Adopt Technology		
DAT1	We decide to new technologies because it is effective for our business.	(Ferri et al., 2021)
DAT2	We are satisfied with the effects that new technologies brings.	
DAT3	We will regularly new technologies at our business.	
DAT4	We will continue new technologies in the future.	

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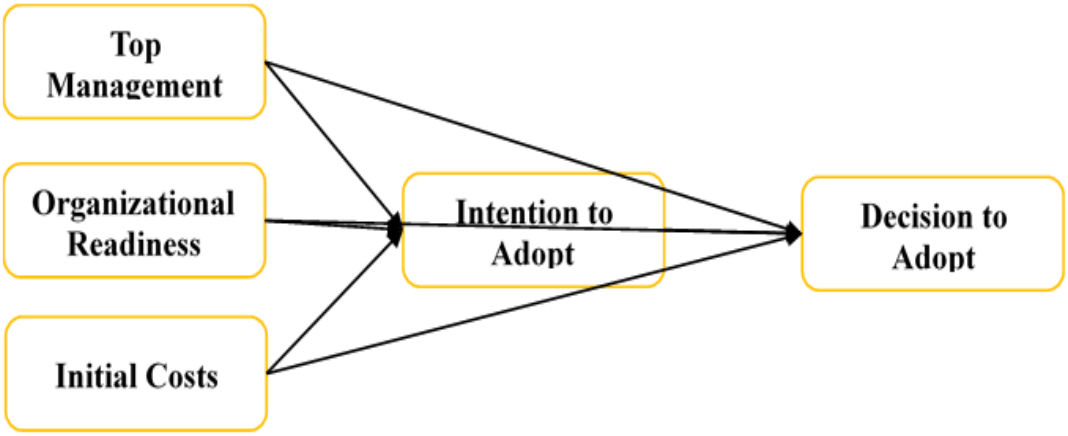

Figure 1: Theoretical Model

RESEARCH FINDINGS

The results confirmed convergent validity, as indicated by strong inter-item correlations. Cronbach's Alpha and Composite Reliability exceeded 0.70, while all factor loadings and AVE values were above 0.50, reflecting solid internal consistency. Detailed metrics appear in Table 2 and Figure 2.

Table 2: Convergent Validity

Constructs	Items	Loadings	Alpha	CR	AVE
Decision to Adopt Technology	DAT1	0.795	0.791	0.863	0.613
	DAT2	0.811			
	DAT3	0.776			
	DAT4	0.747			
Intention to Adopt Technology	IAT1	0.847	0.736	0.851	0.657
	IAT2	0.838			
	IAT3	0.742			
Initial Cost	IC1	0.796	0.880	0.918	0.737
	IC2	0.853			
	IC3	0.927			
	IC4	0.853			
Organizational Readiness	OR1	0.866	0.836	0.891	0.672
	OR2	0.854			
	OR3	0.826			
	OR4	0.726			
Top Management Support	TMS2	0.914	0.898	0.929	0.767
	TMS3	0.830			
	TMS4	0.826			
	TMS1	0.929			

The findings also confirmed the presence of discriminant validity, which assesses the extent to which the constructs are distinct from one another. This was evaluated using

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cross-loadings and the Fornell-Larcker criterion. The results demonstrated that the correlations of each construct with its own indicators were consistently higher than those with indicators of other constructs.

Table 3: Fornell Larcker

	DAT	IAT	IC	OR	TMS
DAT	0.783				
IAT	0.710	0.810			
IC	0.651	0.499	0.858		
OR	0.610	0.570	0.558	0.820	
TMS	0.588	0.512	0.511	0.488	0.876

These outcomes indicate a low level of correlation between different constructs, affirming their distinctiveness. The detailed values supporting this assessment are presented in Table 3 and Table 4.

Table 4: Cross-Loadings

	DAT	IAT	IC	OR	TMS
DAT1	**0.795**	0.587	0.542	0.503	0.427
DAT2	**0.811**	0.695	0.559	0.434	0.436
DAT3	**0.776**	0.472	0.461	0.497	0.535
DAT4	**0.747**	0.436	0.465	0.487	0.455
IAT1	0.613	**0.847**	0.435	0.512	0.382
IAT2	0.568	**0.838**	0.332	0.395	0.384
IAT3	0.539	**0.742**	0.437	0.469	0.477
IC1	0.474	0.340	**0.796**	0.473	0.462
IC2	0.619	0.427	**0.853**	0.493	0.430
IC3	0.587	0.489	**0.927**	0.509	0.483
IC4	0.539	0.442	**0.853**	0.440	0.387
OR1	0.593	0.506	0.588	**0.866**	0.439
OR2	0.513	0.439	0.492	**0.854**	0.437
OR3	0.423	0.499	0.367	**0.826**	0.362
OR4	0.457	0.420	0.354	**0.726**	0.355
TMS2	0.526	0.478	0.439	0.431	**0.914**
TMS3	0.525	0.431	0.429	0.408	**0.830**
TMS4	0.470	0.417	0.465	0.447	**0.826**
TMS1	0.535	0.465	0.461	0.426	**0.929**

In addition to this, the results further confirmed discriminant validity through the application of the Heterotrait-Monotrait (HTMT) ratio. This method evaluates the degree of correlation between constructs, and the analysis revealed that all HTMT values were below the threshold of 0.90. These findings indicate limited correlation among the constructs, thereby supporting their distinctiveness. The corresponding values are reported in Table 5.

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Table 5: Heterotrait Monotrait Ratio

	DAT	IAT	IC	OR	TMS
DAT					
IAT	0.814				
IC	0.771	0.612			
OR	0.749	0.721	0.642		
TMS	0.701	0.630	0.579	0.563	

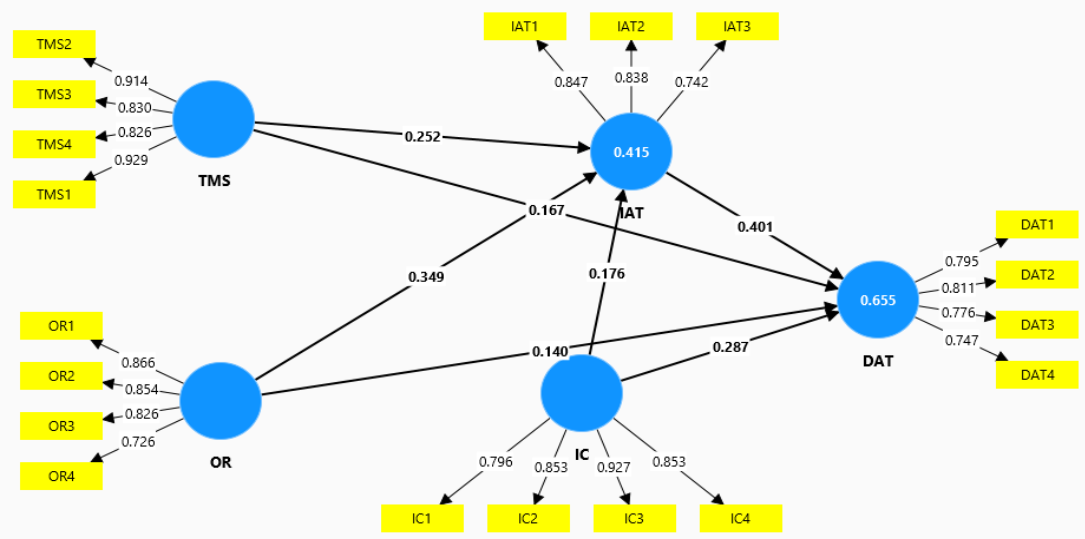

Figure 2: Measurement Assessment Model

The analysis of the direct paths revealed significant relationships among the variables under investigation. The results demonstrated that top management support, organisational readiness, and initial costs each exhibited a positive and statistically significant association with the decision to adopt technology within manufacturing firms in Vietnam. Based on these findings, hypotheses H1, H2, and H3 were supported. The detailed results of these associations are presented in Table 6 and illustrated in Figure 3. Moreover, the analysis of indirect paths revealed statistically significant mediating effects among the study variables.

Table 6: Direct Path Analysis

Relationships	Beta	Standard Deviation	T Statistics	P Values
IAT -> DAT	0.401	0.043	9.252	0.000
IC -> DAT	0.287	0.036	7.945	0.000
IC -> IAT	0.176	0.044	3.950	0.000
OR -> DAT	0.140	0.045	3.150	0.002
OR -> IAT	0.349	0.052	6.765	0.000
TMS -> DAT	0.167	0.033	5.126	0.000
TMS -> IAT	0.252	0.045	5.544	0.000

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The findings indicated that the intention to adopt technology plays a substantial mediating role in the relationships between top management support, organisational readiness, initial costs, and the decision to adopt technology within manufacturing firms in Vietnam. As a result, hypotheses H4, H5, and H6 were supported. The details of these indirect relationships are presented in Table 7 and visually depicted in Figure 3.

Table 7: Indirect Path Analysis

Relationships	Beta	Standard Deviation	T Statistics	P Values
IC -> IAT -> DAT	0.070	0.021	3.427	0.001
OR -> IAT -> DAT	0.140	0.027	5.153	0.000
TMS -> IAT -> DAT	0.101	0.021	4.793	0.000

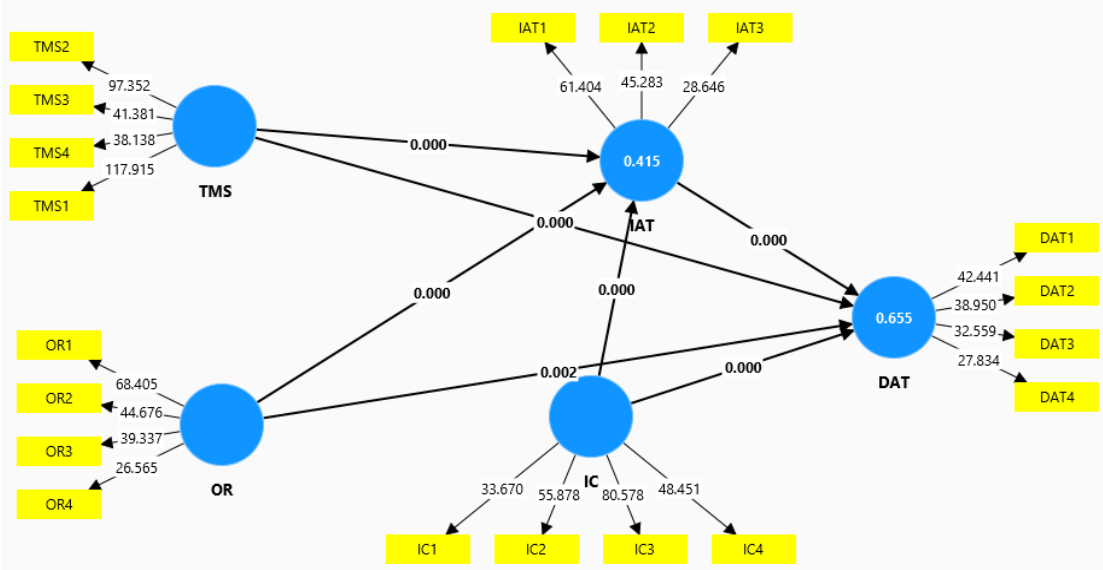

Figure 3: Structural Assessment Model

DISCUSSION

The findings of this study revealed a significant positive relationship between top management support and the decision to adopt technology. These results are consistent with the work of Ali et al. (2021), who observed that organisations in which senior management actively supports employees across departments tend to demonstrate a strong commitment to facilitating their work. Under such circumstances, decisions to adopt innovative technologies are more likely to be made. Similarly, Agostini and Nosella (2020) highlighted that supportive leadership fosters a culture where change is embraced and employee creativity is encouraged, thereby reinforcing the conditions necessary for adopting technological solutions. The study also identified a significant positive association between organisational readiness and the decision to adopt technology. This aligns with the findings of Hradecky et al. (2022), who assessed the influence of organisational readiness on technology adoption. They concluded that

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when readiness policies are prioritised, managerial efforts are directed towards enhancing information systems, research and development capabilities, and employee training to align with market dynamics, thereby supporting adoption decisions. These findings are further supported by Wang et al. (2021), who found that organisational readiness enables employees to remain informed about technological advancements, which in turn facilitates decisions related to innovation implementation.

Additionally, the results demonstrated that initial costs have a positive impact on the decision to adopt technology. This outcome is supported by (Wang et al., 2021), who emphasised that firms with substantial initial expenditures possess enhanced organisational capabilities, which enable them to operate effectively under contemporary conditions. These financial capabilities motivate decision-makers to invest in advanced technologies. Similarly, Lakhwani et al. (2020) asserted that higher initial costs increase the likelihood of making decisions to adopt technology by strengthening the firm's overall readiness and operational capacity. The findings further confirmed that the intention to adopt technology serves as a significant mediating factor in the relationship between top management support and the decision to adopt technology. This result concurs with the study by Pillai and Sivathanu (2020), which indicated that when top-level managers are supportive, they contribute to the development of employees' intention to engage with technology. Once employees demonstrate such intention, the implementation of adoption decisions becomes more feasible. Alzoubi and Aziz (2021) also supported this view, noting that support from top management fosters intention to adopt technology, thereby facilitating decision-making processes related to technology adoption.

Moreover, the results showed that intention to adopt technology significantly mediates the relationship between organisational readiness and the decision to adopt technology. These findings are in line with those of Urbani et al. (2024), who observed that implementing readiness policies cultivates employees' intention to use technology. This increased intention strengthens their capacity to support and enact adoption decisions. Similar findings were reported by Rudsada (2024), who argued that organisational readiness encourages intention to adopt technology, thereby enabling the successful execution of adoption-related decisions. Finally, the study revealed that intention to adopt technology significantly mediates the relationship between initial costs and the decision to adopt technology. This conclusion is consistent with the research of Wu et al. (2023), who indicated that higher initial investments create an environment where employees are motivated to adopt technology. These motivated individuals, in turn, assist management in translating adoption intentions into action. This perspective is further reinforced by (Sobhanmanesh et al., 2023), who suggested that elevated initial costs not only foster support from top management but also promote employees' intention to adopt technology, thereby contributing to effective adoption decisions.

STUDY IMPLICATIONS

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The present study holds considerable relevance for developing economies such as Vietnam, as it highlights the strategic importance of adopting modern technologies that align business operations with evolving market demands. It offers practical insights for organisational leadership on structuring and implementing decisions related to technology adoption. Specifically, the findings underscore the need for top management to exhibit supportive behaviour and adjust their leadership practices in a manner that facilitates the effective implementation of technological initiatives. Moreover, the study recommends that organisational leaders adopt a readiness-oriented approach, which enhances the capacity to make informed and timely decisions regarding the integration of new technologies. It also emphasises the necessity for business leaders and decision-makers to commit adequate financial resources towards initial costs, recognising that such investments are critical to the successful adoption of technological innovations. This research provides strategic guidance, indicating that a supportive leadership climate within the organisation encourages employee intention to engage with technology, which in turn enables the execution of sound adoption decisions. Furthermore, the study advises that the implementation of organisational readiness policies contributes to fostering a proactive employee mindset toward technological change, thereby strengthening the adoption process. Finally, it stresses the importance of effectively managing initial costs, as this supports the development of employee readiness and facilitates the operationalisation of decisions to adopt technology.

CONCLUSION

This study was undertaken to examine the influence of top management support, organisational readiness, and initial costs on the decision to adopt technology, while also exploring the mediating role of the intention to adopt technology within these relationships. Quantitative data were collected through structured questionnaires distributed to organisations operating within Vietnam's manufacturing sector. The analysis revealed that top management support, organisational readiness, and initial costs each have a significant and positive relationship with the decision to adopt technology. Specifically, the findings indicated that when senior management actively supports employees, it leads to the development and effective execution of technology adoption decisions aimed at enhancing organisational efficiency. Furthermore, the study established that organisational readiness, reflected through the preparation of techniques, resources, and human capital to respond to evolving market dynamics, increases the likelihood of implementing technological adoption decisions. In addition, the results suggested that allocating sufficient initial costs contributes to the deployment of high-quality resources at the early stages of business operations, thereby facilitating the adoption of relevant technologies. The study also confirmed that the intention to adopt technology functions as a critical mediating variable in the relationship between top management support, organisational readiness, initial costs, and the decision to adopt technology. When managerial support is evident, readiness strategies are in place,

and financial resources are appropriately allocated, employee intention to adopt technology is strengthened, making the implementation of technology adoption decisions more feasible and effective.

LIMITATIONS

Despite its contributions, the present study is subject to several limitations. Firstly, the scope of the research is constrained by its focus on a limited number of organisational factors, namely top management support, organisational readiness, and initial costs, in relation to the decision to adopt technology. Future investigations should consider incorporating a broader range of variables that may influence technology adoption decisions within organisations. Secondly, the current model incorporates only one mediating variable, namely the intention to adopt technology. Subsequent studies are encouraged to explore the inclusion of potential moderating variables that may alter the strength or direction of the relationships among top management support, organisational readiness, initial costs, and the decision to adopt technology. Thirdly, the empirical analysis was confined to manufacturing firms operating within Vietnam. To enhance the generalisability of the findings, future research should aim to collect and compare data across multiple national contexts, enabling a more comprehensive understanding of how these relationships may vary across different economic or cultural settings.

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