

“Determinants of employee digital transformation readiness and job performance: A case of SMEs in Vietnam”

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DETERMINANTS OF EMPLOYEE DIGITAL TRANSFORMATION READINESS AND JOB PERFORMANCE: A CASE OF SMES IN VIETNAM

Abstract

The subject of stimulating employees toward digital transformation has always been one of the most significant topics, attracting the interests of scientists and decision-makers. This study analyzes the impact of critical factors, including self-efficacy, attitude, leadership, and employee characteristics on employee readiness for digital transformation and job performance. The variables were selected based on the extended theory of planned behavior and personal resource adaption models. To achieve the research objective, partial least squares structural equation modeling was employed. Data were collected from a survey of 302 employees of SMEs in Vietnam. Research findings showed that employees attitude ($\beta = 0.1148$; $p < 0.05$), self-efficacy ($\beta = 0.3737$; $p < 0.05$), and characteristics ($\beta = 0.3328$; $p < 0.05$) affected their readiness for digital transformation. Employees self-efficacy and characteristics also demonstrated direct impacts on job performance. Meanwhile, leadership showed no direct impact ($p = 0.6430$) but an indirect impact on job performance through readiness ($\beta = 0.1360$, $p < 0.05$). Additionally, among the factors, employee readiness is the most substantial predictor of job performance ($\beta = 0.5152$). The findings can benefit Vietnamese SME managers and policymakers, as they can better understand employees and develop effective strategies and measures to promote employee readiness and job performance in a digital transformation context.

Keywords

digital transformation, employee, readiness, job performance, SMEs, Vietnam

JEL Classification

O14, O15, M12, M15

INTRODUCTION

Digital transformation plays a significant role for SMEs, helping these businesses discover and develop new products and services, find more effective ways to do business (Tatarkanov et al., 2020; Olejnik et al., 2020), and shorten the gap with larger enterprises. Hence, the issue of how to support SMEs' digital transformation is a constant focus for researchers and decision-makers.

For digital transformation to be successful, SMEs require concerted efforts, with employees being particularly crucial (Davletova et al., 2019; Nurbekova et al., 2018). Employees play a pivotal role by effectively utilizing new technologies, actively engaging in continuous improvement initiatives, and generating substantial value for enterprises (Vasiljeva et al., 2023; Sassin, 2020).

Readiness relates to employees' initial support for digital transformation from perception to action. Since then, employee readiness has been considered an essential capability for establishing a sustainable and impactful digital transformation (Soekamto et al., 2022; Kurniady

et al., 2022). However, a noticeable dearth of research delves into employees' readiness for digital transformation, leaving a research gap in the digital transformation literature. In addition, enterprises can only achieve their digital transformation goals through the performance of their employees. Thus, integrating job performance as a target variable will enable recommendations for organizations to be more practical and relevant.

This study is positioned within the context of SMEs in Vietnam, where the overall preparedness of the enterprise cohort for digital transformation remains relatively low compared to many countries within the region and globally (USAID, 2023).

1. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

The subject of digital transformation has been thoroughly examined by numerous academic researchers, mostly centered on the technological process, strategic aspects (Berghaus & Back, 2016), and organizational aspects of digital transformation (Nadkarni & Prügl, 2021; Zein et al., 2022). The existing body of studies pertaining to employee-related factors remains rather limited despite those factors recognized as a strategic lever for the organization to have a competitive advantage over other organizations (Mukataeva et al., 2023; Dwijendra et al., 2021).

Employee-related literature on digital transformation, albeit small, focuses on the requirements for employees to adapt to digital transformation and the impacts of digital transformation on the working environment and relationships. For instance, Kohli and Johnson (2011) pointed out some challenges with the digital work environment, such as cultural conflicts and growing gaps in digital disparity. Also crucial are requirements for employees' soft skills, lifelong learning, knowledge acquisition, and problem-solving (Foerster-Metz et al., 2018; Börner et al., 2018; Grundke et al., 2018).

Therefore, it is evident that there needs to be more evaluations about the readiness of employees for digital transformation and its influence on job performance, even within the existing body of employee-related research. However, from previous studies, some of the following factors have been mentioned when studying employees' readiness and job performance in the context of digital transformation.

The readiness for digital transformation can be conceptualized as the extent to which employees are willing to allocate their energy and exertion toward the process, thereby influencing their behavior (Höyng & Lau, 2023). In order for change to happen in the direction that the leader wants, there must be a similarity between the leader's beliefs and perceptions about the change and the employee's thoughts, known as the dialectical change of van de Ven and Poole (1995). In essence, a ready state must be created. Readiness is believed to be one of the key elements influencing employees' first support for change (Armenakis et al., 2000). Weiner (2009) considers organizational readiness as a shared group asset, where team members feel committed to performance and confident in their collective ability to perform. This view is most relevant when "collective, coordinated behavior change is needed to effectively implement the change and, in some cases, for the change to produce the intended benefits." Similarly, a higher willingness to change affects organizational members who are more likely to start change and exhibit greater resistance and cooperation, resulting in better implementation.

Narbariya et al. (2022) study the link between high-performance work systems and willingness to change by assessing mediators of favorable employee results, partly showing the connection between readiness for change and performance in a manufacturing context. Silva et al. (2022) develop an approachable model that helps SMEs evaluate their platforms for digital transformation from an employee perspective and confirm the close link between readiness and employee performance as well as the company's successful growth. Alqudah et al. (2022) demonstrate how several theories can be used to support the analysis of the causes and effects of employees' willingness to change. In addition, the study assesses the role of willingness

to change in enhancing employee performance. Thus, willingness to change positively impacts job performance.

Self-efficacy is the first antecedent influencing whether employees are ready for the digital transformation. Self-efficacy refers to an individual's perception of his or her capacity to perform specific tasks (Ormrod, 2006) or efficiently use technology advancements. In other words, digital transformation self-efficacy refers to an individual's subjective belief that digital technology can be utilized easily (Oh et al., 2022), giving employees confidence that they and the company can do digital transformation. Self-efficacy is especially important for enterprises transitioning from traditional methods to digital transformation-based development. Low self-efficacy will cause employees to focus on their shortcomings and exaggerate the severity and difficulty of the change. In contrast, high self-efficacy will direct one's focus to the situation's demands and motivate one to exert greater efforts to overcome obstacles (Bernierth, 2004). Consequently, self-efficacy is also positively associated with job performance (Matsunaga, 2021).

The second important factor to consider is employees' attitude toward digital transformation because any enterprise change process requires an appreciation of the employees' attitudes toward the change (Fugate et al., 2008; Frick et al., 2021). Digital technology plays a big part in the shift scenario known as "digital transformation." As a result, it can be seen as an operationalization of change preparedness that considers particular technological difficulties, attitudes, and abilities (Gfrerer et al., 2021). Meanwhile, attitude is the expression of words, gestures, and actions about things, phenomena, and people with valuable evaluations and comments, including perception, influence, and behavior. Therefore, employees' attitude in the context of digital transformation illustrates believing in, evaluating, or feeling about digital transformation (Altmann, 2008). Attitudes may be either positive or resistant to change through the external manifestations of the person giving the attitude. If employees have a positive attitude toward digital transformation, they tend to be more receptive to the forthcoming change, and this will increase their digital engagement and readiness (Muehlburger et al., 2022).

Leadership has been designated as a crucial component for the implementation of innovations (Ahmad et al., 2020), mainly digital transformation (Baptista et al., 2020), as well as for ensuring the readiness of employees for a coming transition through communication, coordination, and management of the transition (Oreg & Berson, 2019; Frick et al., 2021). Leaders can also promote self-leadership by encouraging employees to consider and act independently (Abdel-Ghany, 2014). Heim and Sardar-Drenda (2021) indicated that employees are receptive to digital change when they perceive control based on collaboration with their leader and trust in leadership. Furthermore, leaders serve as models for their subordinates, exerting a significant influence on their behavior, effectively motivating and inspiring their employees by imbuing their work with purpose and presenting them with challenging opportunities; they also encourage their employees to think creatively and generate innovative solutions to emerging issues (López-Cabarcos et al., 2022), then enhance their performance. Especially in the context of digital transformation, leaders have a more positive influence on the readiness of employees for digital transformation. Enterprises undergoing digital transformation benefit greatly from the contribution of their human resources to both the process and results of the transformation (Osmundsen et al., 2018). For the successful integration of digital transformation and the adoption of new technologies within their respective domains, managers must prioritize the consideration of employee issues and actively include employees in the transition process (Mueller & Renken, 2017), such as by informing, engaging, consulting, or working with the relevant stakeholders.

The individual attributes of employees have a crucial role in their readiness for digital transformation and subsequent job performance. Park et al. (2022) discovered that several psychological elements associated with individuals, including personal inventiveness, self-esteem, intrinsic motivation, and readiness to use, can impact the use of information technology by employees during the digital transformation process. Characteristics in this study are understood as the innovativeness of employees. Individual innovativeness is the quality of liking, using, and generally accepting new technology or items before others (Rogers, 2003). It is a factor that explains individual innovation,

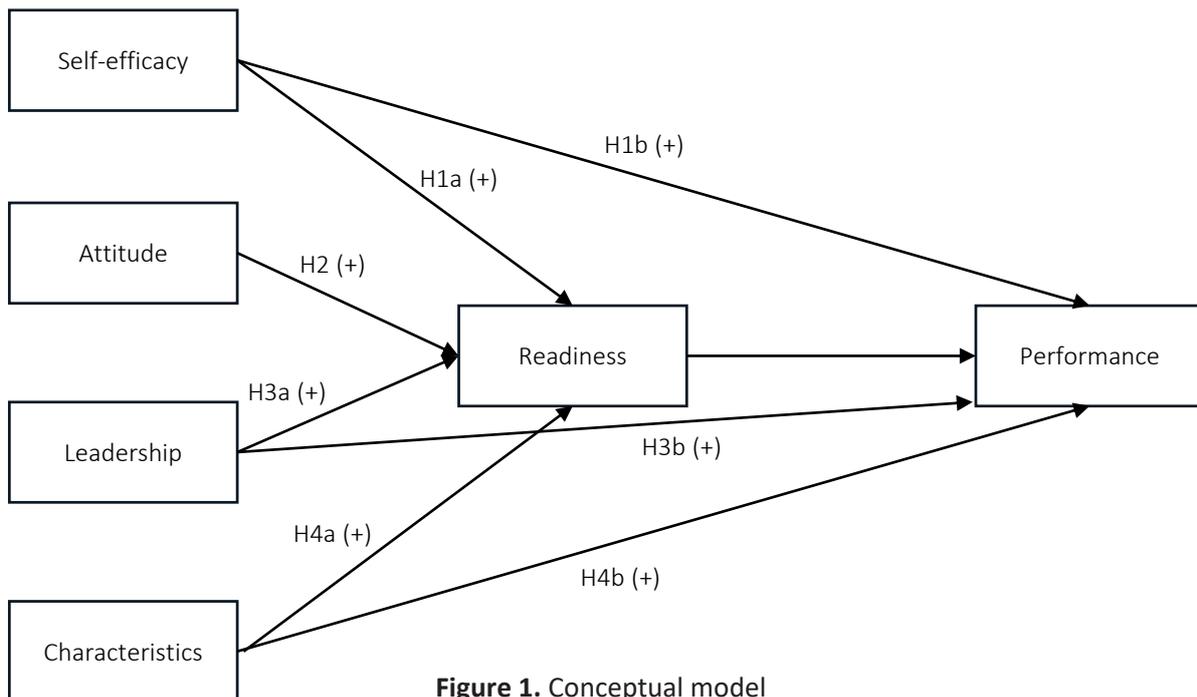


Figure 1. Conceptual model

which is required for innovation. The essential component of digital transformation is technological innovation, and as people innovate more, they become more receptive to new technologies, and those who innovate more personally tend to adopt new technologies more quickly than others (Agarwal & Prasad, 1998). In other words, a person's innovativeness is a trait of their belief that they are innovators or adopters (Rogers, 2003).

Summarily, based on prior research, employees' readiness for digital transformation and job performance depends on factors belonging to the employees themselves and also factors related to the job context and working environment. In some models, this crucial external factor is job resources and is represented by leadership. The theoretical basis for this study includes theories that cover both groups of factors mentioned above. Partly inheriting the approach of Höyng and Lau (2023), the research model (Figure 1) is integrated from the personal resource adaption model and extended theory of planned behavior. In light of this, this study aims to investigate the critical factors influencing the readiness for digital transformation and the job performance of employees in SMEs. Accordingly, seven hypotheses are drawn up to analyze the association between self-efficacy, attitude, leadership, employee characteristics, employee readiness, and job performance:

H1a: Self-efficacy has a positive effect on readiness.

H1b: Self-efficacy has a positive effect on job performance.

H2: Attitude has a positive effect on readiness.

H3a: Leadership has a positive effect on readiness.

H3b: Leadership has a positive effect on job performance.

H4a: Employee characteristics have a positive effect on readiness.

H4b: Employee characteristics have a positive effect on job performance.

H5: Employee readiness for digital transformation has a positive effect on job performance.

2. METHOD

The study used quantitative research, through conducting surveys of 302 employees working in different SMEs. To ensure the representativeness of the sample, respondents were gathered from three sectors of the economy, including the agriculture, manufacturing, and service industries. However, re-

cent reports on digital transformation in Vietnamese enterprises have indicated that digital transformation in enterprises in service and manufacturing has taken place quite vibrantly. These are, therefore, the areas that need examination the most. In addition, to ensure that employees really feel, understand, and have a complete and objective assessment of digital transformation at the enterprise, only employees who have worked for five years or more and employees who have worked in their current job for at least 18 months were selected. The study was conducted by submitting an online survey on Google form for each survey subject working in SMEs. After finishing the survey, the study conducted screening and processed the data using SmartPLS software.

A pilot test was conducted to validate the constructs and scales on a sample of 20 individuals on each occasion. In the preliminary investigation, individuals who had not been employed for a minimum duration of two years, with a weekly commitment of at least 30 hours, were disqualified as potential participants. The pilot phase, as well as the main survey, were both executed in collabo-

ration with an online and panel supplier. A mixed sample strategy was utilized for the primary poll. Initially, a delineation was established for the cohort of individuals capable of responding to the query, specifically those with a substantial level of expertise, while excluding individuals with limited experience. This observation underscores the necessity of possessing work experience to effectively address inquiries and give expertise on digital transformation readiness and job performance. Subsequently, the sample was established by incorporating additional demographic data and professional status criteria, to ensure equal representation of all possible combinations of factors.

2.1. Measures

All validated measures utilized a 5-point Likert scale spanning from “strongly disagree” (1) to “strongly agree” (5). All queries were modified to include explicit references to the leader and work environment. For some items, the original scale’s term “change” was replaced with “digitization” (Table 1).

Table 1. Construct definition and measurement scales

Construct	Definition	Scale	Code
Self-efficacy (SE)	It is a degree or quality of belief in one’s own ability to fulfill responsibilities and achieve goals with digital transformation (Ormrod, 2006).	I can achieve most of the goals I have set for myself using digital technologies.	SE1
		When faced with difficult tasks, I make sure to complete them using digital technologies.	SE2
		I think I can achieve results that are important to me by using digital technologies.	SE3
		I am confident that I can effectively perform a variety of tasks using digital technologies.	SE4
		I believe I can master the problems of digital transformation.	SE5
Attitude (AT)	It is a state of believing in, evaluating, or feeling about digital transformation, influencing action or behavior, and participating in change readiness (Altmann, 2008).	I think digital transformation is a good idea.	AT1
		I think argument passing is a trend that matches the development of the times.	AT2
		I feel proud to be a part of the digital transformation.	AT3
		I always support digital transformation.	AT4
Leadership (LD)	In this study, the leader’s role is to influence employees’ readiness for digital transformation by motivating and inspiring employees to innovate and be creative (Nguyen & Broekhuizen, 2022).	Managers are very consistent with digital transformation.	LD1
		Managers fully and clearly communicate about the enterprise’s digital transformation.	LD2
		My managers always encourage me to participate in digital transformation.	LD3
Characteristics (CE)	It refers to employees’ attitudes and reactions to change. Usually, they are innovators or adaptors (Rogers, 2003).	I am eager to acquire new knowledge.	CE1
		I am not afraid to ask for help or admit to needing help adapting to digital transformation.	CE2
		I am open-minded, ready to adapt and change.	CE3
		I am someone who wants to experience new technology at least once.	CE4

Table 1 (cont.). Construct definition and measurement scales

Construct	Definition	Scale	Code
Readiness (RT)	It is expressed in a number of characteristics, such as beliefs, attitudes, and intentions about the level of change needed by the individual and the ability of the organization to successfully implement those changes (Armenakis et al., 1993).	I am excited about digital transformation activities.	RT1
		I am ready to face difficulties.	RT2
		I have the knowledge and other resources to adapt to digital transformation.	RT3
		I believe I am ready for digital transformation.	RT4
Job performance (JP)	It is characterized as a collection of employee actions that collectively have some anticipated benefit for enterprises (Chernyshenko & Stark, 2005).	I do my job with more focus.	JP1
		I overcame difficulties at work.	JP2
		I make good use of the resources provided.	JP3
		I make work easier.	JP4

3. RESULTS

3.1. Demographic profile

The demographic profile is presented in Table 2.

Table 2. Demographic profile of the respondents (N = 302)

Demographic Variables	Categories	Frequency	Ratio (%)
Work experience	5-9 years	108	35.8
	10-15 years	92	30.5
	16-20 years	70	23.2
	>=21 years	32	10.6
Gender	Female	146	48.3
	Male	156	51.7
Age	18-24 years old	61	20.2
	25-34 years old	134	44.4
	35-44 years old	64	21.2
	45-60 years old	43	14.2
Industry	Manufacturing	102	33.8
	Service	123	40.7
	Agriculture	77	25.5

3.2. Validity and credibility

The data analysis process follows the steps of reflective model analysis (Hair Jr. et al., 2016). The candidate variables for removal are the variables with an outer loading load factor less than 0.4, the variables with a load factor greater than 0.4 and less than 0.7, and if removed, the statistical criteria are improved. Accordingly, the outer loading values of the factors' indexes are all values from 0.7 or more.

Table 3 presents the data reliability parameters. Cronbach's Alpha is a traditional reliability indicator; the composite reliability index is more com-

monly used for analysis by the PLS-SEM method; the average variance extracted (AVE) index is also an important indicator to evaluate data. Data are reliable when Cronbach's Alpha and Composite Reliability is greater than 0.7, and AVE is greater than 0.5, so the data analyzed here are to ensure the necessary reliability. Other analytical parameters of the model also ensure the following statistical requirements (Hair Jr. et al., 2016) (Table 4).

Table 3. Reliability and validity

Construct	Composite Reliability	AVE	Cronbach's Alpha
Attitude	0.9180	0.7368	0.8807
Characteristics	0.9179	0.7366	0.8806
Leadership	0.8780	0.7060	0.7913
Readiness	0.9181	0.7371	0.8811
Self-Efficacy	0.9458	0.7772	0.9283
Performance	0.9419	0.8021	0.9177

The discriminant validity of the model (Table 5) is guaranteed when all values in a column are less than the value on the corresponding diagonal (Fornell & Larcker, 1981) (or all values in the corresponding diagonal). Values of hetero-trait-monotrait ratio (HTMT) have no value greater than 0.9 (Henseler et al., 2015).

According to Henseler and Chin (2010), the scale's validity is also expressed by the convergent and discriminant validity. The study found that AVEs of attitude, perceived benefits, self-efficacy, leadership, employee characteristics, readiness, and job performance are all greater than 0.5. Thus, the scale has ensured the requirement of convergence value, according to Fornell and Larcker (1981). In addition, Fornell and Larcker (1981) also made a requirement to ensure the discriminant of the factors that the square root of the variance extracted

Table 4. Reliability of scales

Indicator	Self-efficacy	Attitude	Leadership	Characteristics	Readiness	Job performance
SE1	0.8902					
SE2	0.8636					
SE3	0.8981					
SE4	0.8989					
SE5	0.8565					
AT1		0.8219				
AT2		0.8742				
AT3		0.8821				
AT4		0.8541				
LD1			0.8041			
LD2			0.8596			
LD3			0.8559			
CE1				0.8770		
CE2				0.8555		
CE3				0.8219		
CE4				0.8773		
RT1					0.8725	
RT2					0.8443	
RT3					0.8601	
RT4					0.8572	
JP1						0.8824
JP2						0.9152
JP3						0.8926
JP4						0.8919

Table 5. Discriminant validity, according to Fornell-Larcker

Construct	Attitude	Characteristics	Leadership	Readiness	Self-Efficacy	Performance
Attitude	0.8584					
Characteristics	0.4767	0.8582				
Leadership	0.5594	0.5469	0.8402			
Readiness	0.5457	0.6826	0.5694	0.8586		
Self-Efficacy	0.5161	0.5838	0.4963	0.6942	0.8816	
Performance	0.4904	0.6512	0.5173	0.8035	0.7152	0.8956

for each individual factor must be greater than all the coefficients of correlation with other factors. The results show that the square root of the variance extracted for each factor is greater than all the correlation coefficients of that factor (expressed in the same column or row), proven to ensure the discriminant validity of the scale. Discriminant validity is guaranteed when all values in a column

are less than the value on the corresponding diagonal (Fornell & Larker, 1981). The values in Table 5 ensure the conditions set forth.

Table 6 presents the VIF values of the variables of the PLS-SEM model. The VIF values need to be less than 5 to ensure that the problem of multicollinearity does not occur.

Table 6. VIF values of variables

Construct	Attitude	Characteristics	Leadership	Readiness	Self-Efficacy	Performance
Attitude				1.6597		
Characteristics				1.7765		2.0739
Leadership				1.7450		1.6144
Readiness						2.6278
Self-Efficacy					1.7434	2.0493
Performance						

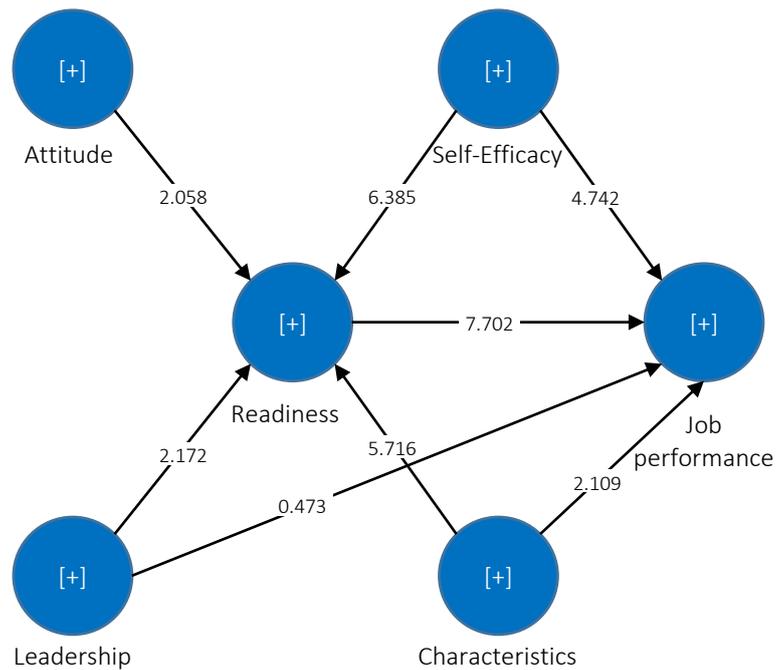


Figure 2. SEM results

3.3. Structural equation modeling (SEM)

The SEM analysis method by SmartPLS software was used to test the research model. The values in Figure 2 are the result of model estimation using Bootstrapping analysis in SmartPLS (Hair Jr. et al., 2016). This analysis allows to test the links in the linear structural model.

Table 7 presents the results of Bootstrapping test with p-values to determine the statistical significance of the relationships. The p-value corresponds to the relationships of attitude*readiness, perception of benefits*attitude, characteristics*readiness, employee characteristics image*work performance work, leadership*readiness, readiness*work performance results, self-efficacy*readiness, and self-efficacy*job

performance; all less than 0.05. It can be confirmed that these relationships are all positive and significant at the 5% level. However, the relationship between leadership and job performance is insignificant at the 5% statistical level.

The results show that self-efficacy positively and significantly affects employees' readiness for digital transformation ($\beta = 0.3737$; $t = 6.3552$; $p < 0.05$). And self-efficacy also affects the employee's job performance ($\beta = 0.2763$, $t = 5.0356$; $p < 0.05$). Therefore, H1a and H1b are accepted.

The findings evidence is supported by Malodia et al. (2023), who indicated that the digital transformation path of the businesses and the employees' openness to change are substantially influenced by the digital self-efficacy of SME entrepreneurs and that SMEs

Table 7. Path coefficients

Hypothesis	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values	Conclusion
Attitude → Readiness	0.1148	0.0598	1.9891	0.0472	Supported
Characteristics → Readiness	0.3328	0.0553	6.0785	0.0000	Supported
Characteristics → Job performance	0.1279	0.0564	2.3241	0.0205	Supported
Leadership → Readiness	0.1360	0.0565	2.4027	0.0166	Supported
Leadership → Job performance	0.0148	0.0366	0.4638	0.6430	Rejected
Readiness → Job performance	0.5152	0.0638	8.0772	0.0000	Supported
Self-Efficacy → Readiness	0.3737	0.0581	6.3552	0.0000	Supported
Self-Efficacy → Job performance	0.2763	0.0542	5.0356	0.0000	Supported

managed by qualified executives will perform better during the digital transformation process. In addition, digital self-efficacy has a varied effect on technical readiness before and during a crisis (Durst et al., 2023).

H2 assumes that attitude positively affects the readiness of employees for digital transformation ($\beta = 0.1148$; $t = 1.9891$; $p < 0.05$). Therefore, H2 is accepted. The research results show that leadership influences employees' readiness to digital transformation ($\beta = 0.1360$; $t = 2.4027$, $p < 0.05$). However, in this study, leadership did not impact the employee's work results ($\beta = 0.0366$; $t = 0.4638$; $p > 0.05$). This result, to some extent, both agrees and disagrees with previous findings. For instance, Weber et al. (2022) and Oreg and Berson (2019) identified a negative influence of leadership behavior on employees in the setting of organizational change. A persuasive explanation for this is that digital transformation-oriented leadership behavior intimidates employees and makes them feel very unsure as a result of a company's digital transition. This intimidation appears to further exacerbate organizational resistance. Therefore, communicating a complex digital vision may result in increased employee stress and generally unfavorable attitudes toward the change of the enterprise, lowering affective confidence and inhibiting inventive job performance while also increasing resistance to organizational change.

Regarding the influence of employee characteristics on job readiness and performance, research results have shown that they have a positive relationship with coefficient β equal to 0.3328 and 0.1279, $p < 0.05$, respectively. Therefore, H4a and H4b are accepted.

The research results show that readiness has a great positive influence on employees' work results in digital transformation with the coefficient $\beta = 0.5152$; $t = 8.0772$; $p < 0.05$. Therefore, H5 is accepted. A significant association between digital transformation and firm performance has been evidenced by Malodia et al. (2023), helping policymakers promote digitalization in the SME sector.

4. DISCUSSION

The findings of the study provided support for seven out of the eight research hypotheses while also revealing both parallels and contrasts in compari-

son to prior research. In this study, employees' attitudes toward changes positively impact their digital transformation readiness. The result is similar to what Alas et al. (2012) confirmed on employee attitudes and readiness to change.

The positive and significant impact of characteristics on the readiness and job performance of workers is in line with Höyng and Lau's (2023) findings, which emphasize that employees' proactive personalities as a coping mechanism for personal control influence how they perceive digitalization. Also, when the issue is placed in a context that requires adaptation, specific characteristics of employees can be beneficial for reaching technological readiness in enterprises (Durst et al., 2023).

Self-efficacy holds significant importance within the paradigm, assuming a function similar to that of the perceived behavior control factor in the theory of planned behavior. This factor is result-based; it affects both the readiness and the job performance of the employees. This result is similar to Armenakis et al. (1993) and Zainalabidin and Ma'rof (2021). Besides, self-efficacy is developed from external experience and self-perception, so it is influential in determining the outcome of many events, including actual outcomes.

Readiness positively influences job performance, supporting Alqudah et al. (2022). Readiness is one of the critical factors contributing to employees' change intention and behavior, affecting their work results.

The one variable that did not exhibit the anticipated influence and necessitated additional elucidation was leadership. The leadership factor in the research model impacts employee readiness; this is similar to the analysis on leadership style with employee readiness by Rodić and Marić (2020). This can be easily explained because leaders in the business are responsible for orienting, supporting, and motivating employees to be ready to adapt to digital transformation. However, if that support and motivation are not in the right way and at the wrong time, it becomes pressure and barriers, affecting the performance of employees. That is one of the reasons why leadership does not affect job performance. So, for leaders, there needs to be a certain level of support and encouragement. The

fact that leadership does not affect job results also partially matches the actual situation in many enterprises. Employees are pretty responsive to digital transformation in the business they are working with, thanks to the leadership's orientation on digital transformation. However, it comes with the pressures they face when they want to meet leadership requirements. Therefore, studying the impact of leadership factors on employees' work results is still a research direction that needs to be verified

in other fields. The leadership factor is the most distinctive of all the results received. This factor has a positive effect on the readiness of employees but has a negative effect on their work results. This is both an advantage and a challenge when superior support can make employees lose their sense of autonomy, thereby reducing work efficiency. Therefore, studying the impact of leadership factors on employees' work results is still a research direction that needs to be verified in other fields.

CONCLUSION

This study seeks to estimate the influence of attitude, leadership, characteristics, and self-efficacy on employee digital transformation readiness and job performance. The factors are determined on the theoretical basis of the extended theory of planned behavior and personal resource adaption model, which ensures capturing both factors pertinent to employees and job resources. The study was conducted with employees working in small and medium-sized enterprises in Vietnam.

Research results show that attitude has a positive influence on employee readiness. In addition, both self-efficacy and characteristics have a positive and significant impact on employees' digital transformation readiness and job performance. Notably, even though leadership has a substantial positive effect on employees' readiness for digital transformation, this factor has not been shown to influence job performance. Thus, it is evident that while self-efficacy and characteristics directly and indirectly affect job performance via employees' readiness for digital transformation, leadership has only an indirect effect. Additionally, among the factors affecting work performance, employees' readiness for digital transformation is the most critical factor determining job performance.

The research results propose some implications for Vietnamese small and medium-sized enterprises. Firstly, enterprises must clearly realize the importance of motivating workers to be ready for digital transformation. Secondly, to promote readiness for digital transformation and job performance, businesses must focus on increasing employee awareness and positive attitudes toward digital transformation while simultaneously fostering employees' learning spirit, creativity, and innovativeness. Thirdly, from the unexpected influence of the leadership factor, the actual supporting role of leaders with workers may not have achieved practical effects. Therefore, enterprise leaders should be more determined, communicate more effectively about digital transformation, and motivate employees to participate through more specific and effective measures. This will also increase employees' confidence in the digital transformation process, helping them be more proactive in capturing and reaping the benefits and minimizing the risks associated with this transformation process. In particular, enterprise leaders can promote employee autonomy and digital capabilities to improve their readiness and performance. Enterprises should, therefore, continually evolve their digital workplace tools while considering employee perspectives and expectations.

For future research, the following areas may be the subject of more research: adding extra variables that are appropriate for each study context's characteristics; analyzing how demographic factors are mediated or regulated; investigating the leadership variable, which is acting in the model in an unexpected way; researching companies of various types or sizes.

AUTHOR CONTRIBUTIONS

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