Original Researcher Article

Solutions to Promote the Intention to Apply Marketing 4.0 in Small and Medium-Sized Service Enterprises in the Private Sector

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ABSTRACT

In the context of strong digital transformation, the application of Marketing 4.0 has become an inevitable trend to help businesses improve their competitiveness and flexibly adapt to market changes. This study aims to identify the factors influencing the intention to apply Marketing 4.0 in small and medium-sized service enterprises. The research model is built on the Technology Acceptance Model and the Theory of Planned Behavior. Through 284 survey samples with analytical methods including Cronbach's Alpha reliability test, discovery factor analysis (EFA), correlation analysis and multivariate linear regression on SPSS 26 software. The results show that Perceived Usefulness, Attitude, Compatibility, Perceived Barriers, and Subjective Norm are 5 factors that have a direct impact on the intention to apply Marketing 4.0 in small and medium-sized service enterprises in the private sector. From this result, the study proposes management implications to help businesses build effective digital transformation strategies, promoting the application of Marketing 4.0 in a sustainable way.

Keywords: Marketing 4.0, small and medium-sized service enterprises, private sector.

INTRODUCTION:

The Industrial Revolution 4.0 and digital transformation are fundamentally transforming the way we produce, do business and interact with customers globally. In the field of marketing, the shift from traditional methods to Marketing 4.0 combining digital technologies, big data, artificial intelligence (AI) and focusing on customer experience is no longer an option but has become a mandatory requirement for businesses to survive and develop in the digital environment. Marketing 4.0 not only helps optimize marketing costs but also increases the ability to personalize, continuously interact and measure effectiveness on each "touchpoint" of customers. In Vietnam, small and medium-sized enterprises (SMEs), especially service enterprises in the private sector, play an important role in the economy. According to the Vietnam Business White Paper 2024, by the end of 2024, the country will have about 940,078 operating enterprises, of which SMEs account for nearly 98% of the total number of enterprises and contribute significantly to GDP and employment. This shows the scale and strategic importance of the SME sector in the process of economic restructuring and integration. On the other hand, the potential for Marketing 4.0 development in Vietnam is being supported by the explosion of digital users and connectivity infrastructure. The Digital Report (We Are Social / DCCA) and recent analyses show that the Internet penetration rate in Vietnam has reached about 79% of the population (early 2024), with tens of millions of Internet users active daily; at the same time, smart mobile devices and Internet access speed continuously improve and expand the ability to reach customers in the digital environment. These changes create a very favorable premise for applying Marketing 4.0 in promotion, customer care and retention activities.

Although the potential for Marketing 4.0 application in Vietnamese small and medium-sized enterprises is huge, the implementation practice in the service business group shows a significant gap between the available technological capacity and the actual level of application. A survey by Vietnam Insiders (2024) also shows that only about 44% of small businesses in Vietnam will invest in artificial intelligence (AI) or marketing automation technologies in 2023, although this group is expected to be the main driver of private sector digital economic growth. The main reason comes from limited financial resources, human resource capacity, and strategic awareness in digital transformation marketing. In addition, according to the OECD (2023), Vietnamese SMEs still lack a support mechanism and an appropriate technology connection ecosystem, making the application of modern marketing tools not bring the expected effectiveness. That fact shows that, although Marketing 4.0 has been widely acknowledged as an inevitable trend, the transformation of SMEs in Vietnam is still slow, lacking long-term orientation and strategy. In addition, many service businesses still consider Marketing 4.0 as a "communication trend" instead of an integrated marketing management model based on data and digital technology. Many businesses have not taken advantage of the core technologies of Marketing 4.0 such as big data analysis, artificial intelligence (AI), or marketing automation to better understand customer behavior.

personalize experiences, and optimize communication effectiveness. As a result, the competitiveness and market expansion of service SMEs in the private sector is limited, especially in the context of customers increasingly shifting to digital platforms and having complex consumer behaviors, requiring a consistent omnichannel experience (Kotler & Armstrong, 2017). These issues are posing an urgent requirement to find solutions to promote the intention to apply Marketing 4.0 strategically, systematically and in accordance with the characteristics of Vietnamese SMEs in order to improve the competitiveness and sustainable development of service enterprises in the private sector. 2. Theoretical basis and proposed research model

Marketing 4.0 is an inevitable shift of marketing activities in the context of a highly connected digital economy and society. According to Kotler and Armstrong (2017), Marketing 4.0 is understood as a marketing approach that harmoniously combines online and face-to-face interactions, between businesses and consumers, blending brand style and actual values. At the core of this model is the complementarity of machine-to-machine (M2M) connectivity through digital platforms and human-to-human interaction (H2H) to reinforce customers' commitment to the brand. Different from the previous stages (traditional marketing 1.0 - 3.0), Marketing 4.0 is people-centered, not just focusing on single products or customers. As Lung Thi Kieu Oanh et al. (2021) argue, Marketing 4.0 is an inheritance and blend of traditional marketing and digital marketing, not a replacement. Businesses both take advantage of digital platforms (social networks, CRM, Internet, AI, etc.) to enhance accessibility and personalize customer experience, while maintaining traditional marketing methods (direct point of sale, events, word of mouth, etc.) to build trust, credibility and emotional attachment. According to Venkatesh (1999), the development of information technology has not only expanded marketing channels but also changed consumer behavior - from passively receiving information to actively interacting, responding and sharing experiences. In the Marketing 4.0 model, customers are not only the recipients of the message but also become two-way interactive subjects capable of creating, spreading and shaping public awareness of the brand. Relying on big data and digital technology, businesses can analyze consumer behavior, identify potential demands, optimize content strategies and promote products and services quickly, accurately and with multi-channel coverage. At the same time, consumers can interact, respond, and share experiences directly on online platforms, making the marketing process more flexible, personalized and effective. Thus, Marketing 4.0 is a two-way interactive marketing model where digital technology and human factors are integrated synchronously, in order to optimize efficiency, communication improve customer experience and enhance competitiveness for businesses. The application of Marketing 4.0 is essentially the process of businesses integrating digital technologies into marketing and management systems, thus being strongly influenced by the level of acceptance and use of technology by organizations and individuals in the business. In this field, international researchers have developed many foundational theories to explain the mechanism of intent formation and behavior of technology application, the most prominent of which are the TAM and TPB models. First of all, the Technology Acceptance Model proposed by Davis (1989) is one of the most influential models in the study of technology acceptance behavior. TAM believes that the intention to use a technology system is directly influenced by two factors: (1) The perception of usefulness represents the degree to which an individual believes that the use of the system will improve work performance; and (2) The perception of ease of use indicates the degree to which an individual believes the system is easy to operate and does not require much effort. When users rate technology as useful and easy to use, they form a positive attitude and increase their ability to accept and use that technology (Jara et al., 2012). In addition, the Theory of Planned Behavior developed by Ajzen (1991) also plays an important role in explaining behavioral intentions. TPB believes that the intention to perform the behavior is influenced by three components: (1) Attitude toward behavior (positive or negative feelings when performing the behavior), (2) Subjective norms (social pressure or expectations from the surrounding environment), and (3) Perceived behavior control (belief in the ability to control and perform behavior). When these factors are high, the intention to perform the behavior – in this case, the application of Marketing 4.0 technology - also increases accordingly. The combination of TAM and TPB helps to create a more comprehensive theoretical framework for predicting technological behavior, as this combined model not only explains intention based on personal cognition factors (TAMs) but also considers the influence of social factors and behavioral control (TPB) (Chen et al., 2010) In the world, the research of Suwanno et al. (2014) has looked at the factors influencing the intention to use Emarketing of small and medium-sized enterprises based on the theoretical foundation of the Technology Adoption Model (TAM) and the Theory of Innovation Spillover (Rogers, 1983). Accordingly, E-marketing is understood as the use of electronic means to transmit information, introduce, promote products and services of businesses to consumers, and at the same time persuade them to perform shopping behaviors. This form plays an important role in increasing brand coverage, optimizing marketing costs and expanding the market to reach customers. However, along with the strong development of digital platforms, the concept of Marketing has entered the 4.0 stage. Marketing 4.0 is an integrated marketing strategy, combining online and offline interaction throughout the customer experience journey. Unlike E-marketing that only focuses on online spaces, Marketing 4.0 aims to create a seamless, synchronous and personalized experience, helping businesses build sustainable relationships customers and improve brand loyalty. In essence, Emarketing is an important component of the overall structure of Marketing 4.0, serving as a foundation for businesses to move towards deeper levels of digital transformation. The research of Suwanno et al. (2014)

also shows that both E-marketing and Marketing 4.0 are based on the exploitation of the Internet and digital technology to enhance marketing efficiency and build the competitiveness of businesses, especially for small and medium-sized enterprises with limited resources. In Vietnam, in the context of a highly communal business environment and greatly influenced by social pressures, prevailing norms in the industry or in the business community have become one of the strongly governing factors of corporate behavior. Based on the theoretical basis, the proposed research model is as follows:

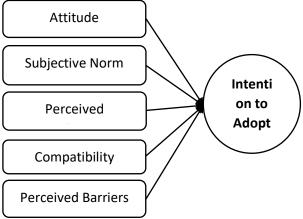


Figure 1. Proposed research model

Source: Proposed Author

With the following research hypotheses:

According to Ajen and Fishbein (1975) attitudes are measured by the perception of the attributes of the product. Businesses will pay attention to attributes that provide the necessary benefits and have different levels of importance. When businesses have high confidence in the effectiveness of marketing 4.0 tools, they are likely to intend to use it in their business activities and users will only use the product when they believe that the transaction will take place safely, that is, they have confidence in that service. Therefore, the study proposes the hypothesis:

Q1: Attitudes have a positive impact on the intention to apply Marketing 4.0 in small and medium-sized service enterprises

According to Ajzen (1991), subjective norms reflect an individual's or organization's perception of whether influential people or groups of people think they should or should not perform a particular behavior. Objects such as partners, competitors, industry associations, or market trends are the sources of subjective standards that affect the decision to apply Marketing 4.0 of businesses. The level of impact of subjective standard factors on the trend of using marketing 4.0 of businesses depends: the level of support/opposition to the use of businesses and the motivation of businesses to follow the wishes of influencers. Therefore, the study proposes the hypothesis:

H2: Subjective standards have a positive impact on the intention to apply Marketing 4.0 in small and medium-sized service enterprises.

Perception of usefulness is a factor in the TAM model and is widely inherited in the application of new technologies. Perceived usefulness is understood as the degree to which a business believes that the use of a particular system will enhance the performance of their work (Davis, 1989). Businesses will appreciate the 4.0 marketing tool when they realize its usefulness can replace traditional marketing. Therefore, the study proposes the hypothesis:

H3: Perceived usefulness has a positive impact on the intention to apply Marketing 4.0 in small and medium-sized service enterprises

A prominent advantage of digital platforms is their flexible compatibility, which makes it easy for marketing tools to integrate with a variety of systems and devices. When a tool is able to work reliably on multiple platforms, it increases the level of convenience and reduces technical risks for users. According to Thanh Nga Doan et al. (2023), consumers' intention to use commercial services will increase if consumers are aware that the service is highly flexible. And a highly compatible marketing tool, which can be used on many devices with different operating systems, any network operator without errors or malfunctions, will create convenience for all users. Therefore, the study proposes the hypothesis:

H4: Compatibility has a positive impact on the intention to adopt Marketing 4.0 in small and medium-sized service enterprises

According to Thanh Nga Doan et al. (2023), the barriers that slow businesses to adopt new technologies include: cognitive, financial, information, institutional, and management barriers. In particular, financial barriers often have the strongest impact on the decision to apply. When businesses feel that the risk or investment cost is too great, they tend to delay or abandon the intention to implement Marketing 4.0. Therefore, the study proposes the hypothesis:

H5: Barrier awareness has an impact on the intention to apply Marketing 4.0 in small and medium-sized service enterprises.

RESEARCH METHODS

In order to develop a set of official scales for the research, the author selectively inherits scales from domestic and foreign works on the intention to apply technology and Marketing 4.0, especially the applied studies of the Technology Acceptance Model (TAM) and the Theory of Planned Behavior (TPB) by Davis (1989) and Ajzen (1991). In addition, the empirical studies of Suwanno (2014), Thanh Nga Doan et al. (2023) were also referenced to identify groups of observed variables suitable for the context of small and medium-sized service enterprises (SMEs). In parallel

with the process of compiling documents, the author conducted expert consultations through in-depth interviews with 6 managers and experts in the field of digital marketing, digital transformation and SME management, in order to ensure that the observed variables are in line with the practice of Marketing 4.0 application in Vietnam. At the same time, the study conducted mock interviews with 10 business owners and marketing personnel to review the language of the questionnaire, ensure clarity, understandability, and avoid interference with information during the survey process.

The official scale uses a 5-level Likert scale, from 1 (Strongly disagree) to 5 (Strongly agree). The scale consists of 24 observed variables, corresponding to 5 independent factors (Attitude; Subjective standards; Perceived usefulness; Compatibility; Barrier awareness) and 1 dependent factor (Marketing 4.0 Application Intention). The study applies a convenient non-probabilistic sample selection method, focusing on small and medium-sized service enterprises in the private economic sector in Hanoi. The survey is

streamed via email and online platforms to managers, business owners, and marketing staff. A total of 300 survey panels were issued, collecting 284 valid panels in the period from February 2025 to March 2025. The data collected was processed using SPSS version 26 with a statistical significance of 5%. The analysis steps include: Descriptive statistics to characterize the survey sample; Scale reliability test using Cronbach's Alpha coefficient, which excludes variables with a variablesum correlation coefficient of less than 0.3; Discovery factor analysis (EFA) aims to determine the structure of potential groups of variables and test convergence values; Pearson correlation analysis to determine the extent and direction of relationships between variables; Multivariate linear regression analysis aims to measure the extent to which independent factors affect the intention of businesses to adopt Marketing 4.0. The sample size was formulated according to the recommendation of Hair et al. (2010), ensuring a minimum ratio of 5:1 and an optimal 10:1 between the number of samples and the number of observed variables.

RESEARCH RESULTS

The total number of questionnaires issued was 300, the number of questionnaires collected was 291, of which 284 were valid, reaching a rate of 94.7%. Of the 284 enterprises participating in the survey, the descriptive statistical results show that:

Table 1. Descriptive Statistics of the Survey Sample

Sample Characteristics	Category	Frequency (n)	Percentage (%)
Towns of automotion	Private enterprise	112	39.4
Type of enterprise	Limited liability company	136	47.9
	Joint-stock company	36	12.7
N1	Fewer than 10 employees	98	34.5
Number of employees	10–50 employees	143	50.4
	More than 50 employees	43	15.1
	Trade and commercial services	123	43.3
Business sector	Tourism and hospitality services	67	23.6
	Education and training services	51	18.0
	Other services	43	15.1
Vacantina	Less than 3 years	64	22.5
Years of operation	3–10 years	156	54.9
	More than 10 years	64	22.5
D	Owner / Director	119	41.9
Respondent's position	Department Head / Deputy Head	95	33.5
	Staff	70	24.6

Source: Results of data processing by the author

The survey results show that most of the participating enterprises are limited liability companies (47.9%), operating mainly in the trade and commercial services sector (43.3%). More than half of the businesses have been in operation for 3–10 years (54.9%) and employ 10–50 people (50.4%). Regarding respondents, the majority hold managerial positions such as owners or department heads (75.4%), ensuring the reliability and relevance of the collected data.

Table 1. Results of scale reliability testing

Scale	Sign	Items	Cronbach's Alpha	Corrected Item – Total Correlation
	Att1	Businesses believe that marketing tools 4.0 will bring opportunities to increase profits		0.643
Attitude	Att2	Using marketing tools 4.0, businesses are confident that they will find many new customers	0.807	0.598

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		Using marketing tools 4.0, businesses		
	Att3	believe that they will strengthen their		0.612
		brand in the market		
		Businesses believe that marketing 4.0 will		
	Att4	bring more benefits than traditional		0.573
		marketing		
	0.11	The use of a company's marketing strategy		0.520
	Sub1	is influenced by competitors		0.538
		The marketing activities of businesses are		
	Sub2	also influenced by businesses in other		0.515
	5402	industries		0.515
Subjective		The marketing activities of businesses are	0.826	
Norm	Sub3	also influenced by experts and managers in	0.020	0.604
	Subs	the industry		0.004
			-	
	0.14	The marketing strategy of the business is		0.577
	Sub4	influenced by the consumer tastes of		0.577
		customers		
		Using marketing tools 4.0 helps businesses		0.100
	Use1	seize many opportunities to increase		0.639
		profits		
	Use2	Using marketing tools 4.0 helps businesses		0.661
Perceived	USEZ	save a lot of time	0.818	0.001
Usefulness	Hag2	Using 4.0 marketing tools to help	0.010	0.612
	Use3	businesses improve brand value		0.613
	Use4	Using 4.0 marketing tools helps businesses		
		easily reach many customers on digital		0.678
		platforms		
		Marketing Tools 4.0 is compatible across		
	Com1	a wide range of devices		0.681
		Marketing Tools 4.0 is compatible with	-	
		multiple operating systems		0.652
Compatibility	Com3	Marketing 4.0 tools don't stop working	0.809	
Companionity			0.009	0.606
		when network providers change	-	
	G 4	Marketing 4.0 tools have the ability to		0.614
	Com4	integrate with social networks and		0.614
		business websites		
		The use of marketing 4.0 tools in		
	Bar1	businesses will be difficult because they		0.596
	Dall	have to consider the financial benefits		0.370
		brought by the cost of implementation		
		The use of marketing 4.0 tools in		
	Bar2	businesses will be difficult because of the		0.578
Perceived		lack of specific action strategies	0.831	
Barriers		The use of marketing 4.0 tools in	0.051	
	D 0	businesses will be difficult because of the		0.612
	Bar3	lack of professional knowledge by human		0.612
		resources		
		Using marketing 4.0 tools is not necessary	-	
	Bar4	because traditional marketing has brought		0.637
	Dur	maximum benefits to businesses		0.037
		Businesses already plan to use marketing		
	Int1	tools 4.0 in the future		0.651
			1	
Intention to	IntO	Businesses should use marketing 4.0 tools		0.629
Adopt	Int2	that are more common in marketing	0.820	0.638
Marketing 4.0	T :0	activities	-	0.670
	Int3	Businesses will use marketing tools 4.0		0.672
	Int4	Businesses will continue to learn and		0.699
		update information about marketing 4.0		15.5

Nguồn: Kết quả xử lý số liệu của tác giả

The results of the Cronbach's Alpha analysis indicate that all measurement scales meet the reliability requirements. Specifically, the Cronbach's Alpha coefficients of all variables are greater than 0.7, demonstrating good internal

consistency. In addition, the corrected item—total correlations of all observed variables are above 0.3, proving that each item contributes meaningfully to its corresponding construct. Therefore, no items were eliminated, and all scales are considered reliable for further Exploratory Factor Analysis (EFA). This confirms that the measurement instruments used in the study are appropriate and stable for assessing factors influencing the intention to adopt Marketing 4.0 among small and medium-sized service enterprises.

Table 2. Factor analysis explores independent factors

KMO F	KMO Factor = 0.787									
			Approxi	Approximate value of Ex squared				6795.811		
Bartlett's Accreditation			df	df						
				Sig.						
Factor										
Group 1	l	Group 2		Group 3		Group 4		Group 5	Group 5	
Sub1	0.811	Bar2	0.835	Att1	0.827	Use3	0.784	Com1	0.816	
Sub4	0.807	Bar4	0.814	Att3	0.801	Use2	0.765	Com4	0.803	
Sub3	0.789	Bar3	0.806	Att2	0.775	Use1	0.752	Com2	0.780	
Sub2 0.757 Bar1			0.793	Att4	0.764	Use4	0.749	Com3	0.772	
Eigenvalue min = 1.186										
Total va	ariance extra	acted = 74.3	821%			•				

Source: Results of data processing by the author

The results of the Exploratory Factor Analysis (EFA) for the independent variables indicate that the KMO value of 0.787 and the significance level of 0.000 meet the statistical requirements for factor analysis, confirming the suitability of the data. At the minimum eigenvalue of 1.186, five factors were successfully extracted, with a total variance explained of 74.821%, exceeding the commonly accepted threshold of 50%. This demonstrates that the model captures a large proportion of the data's variability. In addition, all factor loadings are above 0.5, showing strong correlations between observed variables and their respective factors. These results provide solid evidence of the convergent validity and internal consistency of the measurement scales, ensuring a sound foundation for subsequent regression and hypothesis testing.

Table 3. Factor analysis explores dependencies

KMO Factor = 0.804						
	Approximate value of Ex squared	237.548				
Bartlett's Accreditation	df	4				
	Sig.	0,000				
Factor						
1						
Int1	0.803					
Int2	Int2 0.797					
Int3	0.765					
Int4 0.748						
Eigenvalue = 1.827						
Total variance extracted $= 73$	3.526 %					

Source: Results of data processing by the author

The results of the Exploratory Factor Analysis (EFA) for the dependent variable show that the KMO value of 0.804 and the significance level of 0.000 indicate that the data is highly suitable for factor analysis. At an eigenvalue of 1.827, only one factor was extracted, with a total variance explained of 73.526%, which is well above the acceptable threshold of 50%. This demonstrates that the observed variables strongly converge on a single underlying construct. Furthermore, all factor loadings exceed 0.5, confirming strong correlations between the variables and the extracted factor. These results provide strong evidence of unidimensionality, convergent validity, and reliability of the measurement scale for the dependent variable, creating a solid foundation for further regression analysis.

Table 5. Correlation analysis

	Int	Att	Sub	Use	Com	Bar
Int	1					
Att	0.716**	1				
Sub	0.690**	0.236**	1			
Use	0.723**	0.198*	0.214**	1		
Com	0.742**	0.204**	0.181**	0.258**	1	
Bar	-0.659**	0.211*	0.250*	0.203*	0.182**	1

Source: Results of data processing by the author

The results of the correlation analysis indicate that the dependent variable "Intention to Adopt Marketing 4.0" has a positive and statistically significant correlation with all independent variables, including "Attitude," "Subjective Norm," "Perceived Usefulness," and "Compatibility," while showing a negative but significant correlation with "Perceived Barriers." All correlation coefficients are significant at the 0.01 level, confirming the linear relationships among the variables. Additionally, the correlation coefficients between the independent variables are moderate and do not exceed the commonly accepted threshold (r < 0.8), suggesting no signs of multicollinearity. This provides a solid basis for proceeding with multiple linear regression analysis to further examine the impact of each independent variable on the dependent variable.

Table 4: Results of regression analysis

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0.784	0.779	0.752	0.395	1.836

ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1 Regression		75.513	5	14.947	126.587	0.000
	Residual	36.281	278	0.858		
	Total	113.794	283			

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients		a.	Collinearity Statistics	
		В	Std. Error	Beta	t	Sig.	Tolerance	VIF
	(Constant)	0.257	0.021		5.035	0.001		
1	Att	0.312	0.019	0.338	5.116	0.000	0.723	1.920
	Sub	0.263	0.027	0.274	3.247	0.032	0.690	2.091
	Use	0.349	0.020	0.365	4.013	0.006	0.567	1.891
	Com	0.296	0.024	0.307	3.291	0.020	0.741	2.129
	Bar	-0.275	0.023	-0.291	-5.792	0.005	0.711	2.001
a. Dependent Variable: Int								

Source: Results of data processing by the author

The findings from the multiple linear regression analysis using the Enter method indicate that the proposed model achieves a strong level of fit and statistical significance. Specifically, the correlation coefficient (R) of 0.784 reflects a strong association between the independent and dependent variables. The coefficient of determination (R²) is 0.779, and the adjusted R² reaches 0.752, suggesting that the independent variables in the model account for approximately 75.2% of the variance in the dependent variable. The Durbin–Watson statistic of 1.836 falls within the acceptable range of 1.5 to 2.5, confirming the absence of autocorrelation in the residuals. Furthermore, the ANOVA and F-test results show a significance level (Sig.) of 0.000, indicating that the regression model fits the dataset well and can be used for hypothesis testing. All independent variables have Sig. values less than 0.05, demonstrating their statistically significant impact on the dependent variable. The variance inflation factor (VIF) values are all below 2, suggesting no multicollinearity issues among the predictors. Diagnostic checks also confirm that the model satisfies key regression assumptions. The scatterplot of residuals versus predicted values shows a random distribution of points around the zero line, verifying linearity and homoscedasticity. The histogram of residuals approximates a normal distribution, with a mean close to 0 and a standard deviation near 1. The P–P plot of standardized residuals further confirms normality, as the data points closely follow the 45-degree reference line. Overall, these results affirm that the regression model is robust, reliable, and suitable for explaining the factors influencing the intention to adopt Marketing 4.0.

Int = 0.365*Use + 0.338*Att + 0.307*Com - 0.291*Bar + 0.274*Sub

All factors have positive standardized coefficients, indicating that the greater the perceived usefulness, positive attitude, compatibility, ability to handle barriers, and external social pressure, the stronger the intention of SMEs to adopt Marketing 4.0. Among these, perceived usefulness and attitude are the most critical drivers, suggesting that managers should focus on demonstrating practical benefits and fostering a positive internal culture toward digital transformation. Perceived Usefulness ($\beta = 0.365$) là yếu tố có tác động

mạnh nhất đến ý định áp dụng. Điều này phản ánh rằng khi doanh nghiệp đánh giá cao lợi ích của Marketing 4.0 (ví dụ như tiếp cận khách hàng nhanh hơn, tối ưu chi phí và tăng hiệu quả kinh doanh), họ sẽ có xu hướng ra quyết định triển khai sớm hơn và mạnh mẽ hơn. Đây là yếu tố nền tảng thúc đẩy sự chuyển đổi số trong hoạt động tiếp thị. Attitude (β = 0.338) is the second most influential factor, indicating that a more positive organizational mindset and willingness to embrace new technologies strongly enhance adoption intention. Compatibility (β =

0.307) also exerts a meaningful effect. When Marketing 4.0 solutions are perceived as compatible with existing systems and processes, enterprises are more likely to adopt them. Perceived Barriers ($\beta = 0.291$) has a negative impact, proving that when businesses encounter difficulties such as lack of investment capital, lack of qualified human resources, limited technology infrastructure or concerns about security risks, the intention to apply will decrease. This is a major obstacle that needs to be addressed by businesses. A higher readiness to overcome barriers (such as financial or technological constraints) is associated with stronger adoption intention. Subjective Norm ($\beta = 0.274$) has the smallest but still significant impact. External pressures and expectations from partners, competitors, and the market environment still play an important role in shaping adoption behavior.

HÀM Ý QUẢN TRỊ

First, to raise awareness and capacity to apply Marketing 4.0 through practical actions. Businesses need to proactively present practical demonstrations of the effectiveness of digital marketing campaigns to convince internally, especially leaders and frontline employees who are directly involved in business activities. These examples can include: customer conversion rates, lower cost of reach, increased brand awareness, or the ability to expand the target market thanks to digital platforms. At the same time, businesses need to organize periodic training courses on digital tools such as marketing automation systems, customer behavior analysis tools, and the application of artificial intelligence (AI) in personalizing customer experience. The goal is to help employees understand and be able to operate these tools in a practical way. In particular, businesses should integrate marketing platforms with core operating systems (sales, customer care, inventory management, CRM, etc.) to create a seamless chain of processes, minimize information latency, improve customer experience and overall operational efficiency. Second, build a culture of innovation and willingness for change throughout the organization. Marketing 4.0 is not only a tool but also a new management mindset and operating model. Therefore, businesses need to culture of innovation, experimentation, dare to make mistakes and improve continuously. The Board of Directors needs to clearly communicate internally about the benefits and goals of digital transformation so that all employees understand and accompany them. In particular, the leadership role of leaders is a decisive factor: commitment, support resources, create an open environment and associate digital transformation with the long-term development goals of the business.

Third, choose a digital marketing solution that is suitable for the characteristics of the operation. Small and medium-sized businesses should prioritize marketing platforms that are flexible, highly scalable, and easily connected to existing systems. This saves initial investment costs while ensuring future development. At the same time, it is necessary to build a clear digital transformation roadmap in each stage:

from awareness – testing – expansion – optimization. Each stage needs specific goals, resources, timelines, and measurement results to ensure feasibility.

Fourth, allocate budget and optimize financial resources reasonably. Digital transformation in general and the implementation of Marketing 4.0 in particular require methodical financial investment. Businesses need to make an appropriate budget allocation plan, prioritizing items that bring direct value such as customer management platforms, digital advertising, and effective measurement tools. In addition, it is recommended to take advantage of support programs from the state, financial institutions or technology partners to reduce financial pressure. The phased implementation will help businesses control risks and optimize initial costs, avoiding spreading investment without efficiency.

Fifth, strengthen cooperation and learn from the business ecosystem. In a digital environment, businesses cannot grow alone. Close connections with industry associations, partners and business networks will help businesses quickly update new trends, support policies, as well as opportunities to collaborate in joint marketing campaigns. In addition, businesses should observe and learn from competitors who have been ahead of the curve in the digital transformation journey to shorten testing time, avoid repeating mistakes, and improve competitiveness. When applying Marketing 4.0 effectively, businesses not only increase their reputation and brand image but also strengthen their position in the market.

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