

## Research on Factors Affecting Digital Marketing Investment Activities in Small and Medium Enterprises in Hanoi City

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### **Abstract**

*In the ever-evolving technology landscape, digital marketing has been thriving globally. Investing in digital marketing activities is crucial for businesses in general and SMEs in particular. The study selects the scope of small and medium enterprises (SMEs) in Hanoi city to evaluate factors affecting digital marketing investment activities in small and medium enterprises. The study uses both qualitative and quantitative methods. The research results identify five factors affecting digital marketing investment in small and medium enterprises (including leadership capacity, quality of human resources, financial ability, corporate culture and scientific and technological capacity). The research results can serve as a basis for solutions to improve digital marketing investment activities in small and medium enterprises, as well as valuable information for reference for small and medium enterprises in Hanoi in making investment decisions.*

**Keywords:** Investment, Marketing, Digital Marketing, Small And Medium Enterprises.

### **INTRODUCTION**

In the two years since the Covid-19 pandemic began, technology has rapidly advanced and impacted every aspect of life. It's undeniable that these technological developments have also helped businesses promote their products, thanks to the shift in consumer shopping behavior towards online shopping [1]. With the rise of the internet, we are entering a new digital era, leading to gradual changes in consumer behavior that are reshaping the way businesses worldwide market their products. This radical change is evident in the shift towards digital marketing methods [2].

The Vietnam E-Commerce Association (VECOM) reports that digital marketing in Vietnam is growing at a rate of 25-30% per year with total spending at about 2.5 billion USD and a growth rate of 19%. This means that Vietnam spends approximately 50,000-60,000 billion VND on online marketing per year. Small and medium-sized enterprises (SMEs) play a significant role in Vietnam's economy, accounting for about 98% of the total number of enterprises, contributing up to 45% of GDP, 31% to the total budget revenue, and employing over 5 million workers. Hanoi city is the capital of the country, has a high economic growth rate, contributing greatly to the total budget revenue of the country, of which small and medium enterprises account for about 97.2% of the total number of registered enterprises [3].

Recognizing the importance of investing in digital marketing for businesses, especially small and medium enterprises in Hanoi city, the authors have chosen to conduct research on the topic of "Factors impacting digital marketing investment activities in small and medium enterprises in Hanoi city."

### **THEORETICAL FRAMEWORK**

Digital marketing involves marketing activities for products or services with clear, measurable goals. It is highly interactive and utilizes digital technology to reach and retain customers. The primary goal of digital marketing is to increase brand awareness, build trust, and boost sales (Simin Kingsnorth, 2019). Small and medium enterprises (SMEs) are classified based on their size, which can be defined by the number of employees less than 100 or 200 or the amount of sales revenue less than 100 million or 300 million Vietnamese Dong, respectively. (Degree No 80/2021/NĐ-CP, 2021).

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Digital marketing encompasses a range of online activities aimed at establishing brand awareness through digital channels and direct interaction with the target audience [4]. This form of marketing allows immediate feedback and measurement at a cheap cost, although it requires specialized skills for effective management (Margherita Corniani, 2006). The integration of digital marketing strategies has become crucial for small and medium-sized enterprises (SMEs) with limited budgets in today's competitive business environment. Leveraging platforms such as social media and websites is essential to increase brand awareness, customer engagement, sales, and loyalty [5].

"Digital marketing is vital for the growth and success of small and medium-sized enterprises (SMEs) as it boosts their visibility, market access, and competitiveness. Research from Pakistan, Ghana, Indonesia, and a global perspective emphasizes the substantial influence of adopting digital marketing on the sustainable growth and performance of SMEs[6][7][8]. Factors such as owner/manager support, information technology skills of employees' employees, financial costs, and social influences influence SMEs' adoption of digital marketing, ultimately leading to improved performance [9].

Research by Chaffey & Ellis–Chadwick (2019) emphasizes the importance of possessing technological competence and digital marketing understanding to be highly effective in online campaigns [6]. At the same time, Beck, Demircuc-Kunt & Levine (2005) have shown that SMEs often face difficulties in terms of resources and financial capabilities [7], this directly affects your ability to invest in digital marketing activities. Digital marketing creates many opportunities and brings a lot of potential to enhance the brand of the business [8]. Digital marketing allows direct advertising to customers and helps customers identify products or brands quickly [9], significant impact on purchase intent [10].

"The importance of investing in digital marketing activities for businesses, particularly small and medium enterprises, cannot be overstated. While domestic and international studies have acknowledged the significance of digital marketing, they either emphasize its importance in general or only analyze individual factors, without delving into specific research on the factors that affect digital marketing investment activities in small and medium enterprises in Hanoi. This represents a significant research gap.

## **RESEARCH METHODOLOGY**

### **Research model**

The theoretical model is constructed by identifying the primary factors that may influence the digital marketing investment activities of small and medium enterprises in Hanoi city. To build a suitable model, the authors have relied on the research of both domestic and foreign authors, as well as an in-depth interview process.

**Leadership capacity:** The change in leadership actions and mindsets greatly affects the digital transformation ability of businesses. Those changes include rapidly optimizing leadership decision-making processes with instant access to information and open data [11] and changes in leadership learning and development [12].

*H1: Leadership has a positive impact on digital marketing investment in small and medium enterprises in Hanoi*

**Quality of human resources:** For employees or managers, it is necessary to have a process to carry out activities at a faster, more accurate, and efficient pace when moving toward digital transformation. Therefore, employees must be competent and ready to access, develop, and apply new technologies in work improvement and execution. Moreover, depending on business conditions, employees as well as managers must develop the ability to sense and flexibly deploy network systems and interconnectedness in a digital environment [13].

*H2: The quality of human resources has a positive impact on digital marketing investment activities in small and medium enterprises in Hanoi.*

**Financial viability:** The financial viability of a business affects the resources available for digital marketing. A sizable marketing budget enables the implementation of more complex and diverse digital marketing

strategies, including online channels such as social media advertising, email marketing, and content marketing. It is crucial to assess financial competence, apply financial knowledge, participate in beneficial financial activities, and utilize available financial opportunities to achieve goals [14].

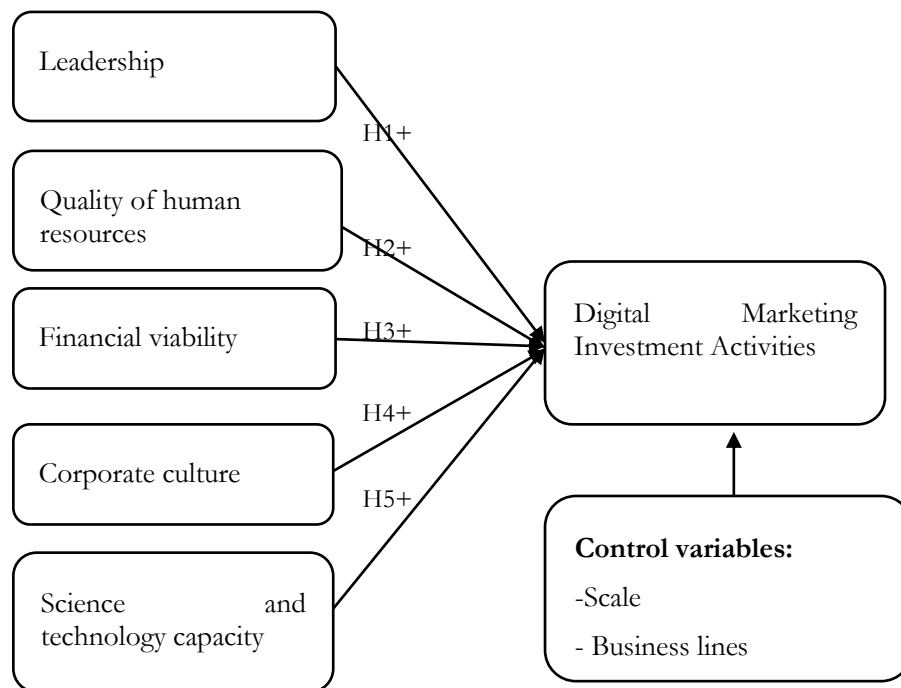
*H3: Financial viability has a positive impact on digital marketing investment activities in small and medium enterprises in Hanoi.*

**Corporate culture:** Digital transformation requires a corporate culture that is always verifiable and data sharing [15]. This will require high transparency in work and business processes as well as thinking about data among employees. In addition, digital transformation can cause a cultural conflict between young employees who are digitally savvy but inexperienced and older employees who have a long track record in traditional business but lag behind in technology [16].

*H4: Corporate culture has a positive impact on digital marketing investment activities in small and medium enterprises in Hanoi.*

**Science and technology competence:** Digital interconnectedness enables the emergence of cross-location groups across the entire enterprise. In this context, the traditional hierarchical work structure gradually disappears and new opportunities emerge beyond the enterprise [17]. According to White (2012), a digital workplace must be relevant, principal, imaginative, and independent of the location [18].

*H5 : Science and technology capacity has a positive impact on digital marketing investment activities in small and medium enterprises in Hanoi.*



### Proposed Research Model

#### Qualitative research

Based on previous research findings and the theoretical framework, as well as in-depth interviews, synthesize the factors that researchers believe have an impact on digital marketing investment in small and medium enterprises. Additionally, analyzes the digital marketing infrastructure investment practices of small and medium enterprises to propose the addition of new factors that may impact digital marketing investment in these enterprises.

## Quantitative research

### Questionnaire design

The questionnaire consists of three main sections: Introductory information (introduction to research and screening of respondents), Personal information (recording interpersonal information), Statement information (recording the level of agreement about observed variables)

The scale used is a scale of 5 degrees ( 1. Very disagreeable; 2. Disagree; 3. Neutrality; 4. Consent; 5. Strongly agree)

### Template design

The data was collected from 300 HR respondents with work experience ranging from less than one year to more than three years in small and medium enterprises in Hanoi city. The survey was conducted from March 18, 2024, to April 16, 2024. A convenient sampling method, a type of non-probability sampling, was used in this study. This method allowed for easy access to the subjects under study, saving time and costs. However, one of the disadvantages of this method is the inability to determine the sampling error. In various studies, researchers and experts have sought to determine the ideal sample size for different analysis methods. For instance, Hair, Anderson, Hair, Tatham, and Black (1998) suggested that the sample size should be at least five times the total number of observed variables. In a specific study where the number of observed variables was 25, the recommended sample size was at least  $5 \times 25 = 125$  samples. However, the author opted for a sample size of 300 to ensure that it met the sample size conditions outlined by Hair et al. (2020).

## RESEARCH RESULTS

### Statistics describing the study sample

The research team used face-to-face and online sampling methods to survey small and medium enterprises in Hanoi city. A total of 300 valid questionnaires were collected for data processing:

**Table 1. Statistics describing the study sample**

Criteria		Frequency	Frequency (%)
Position	Director/Deputy Director	65	22%
	Manager/Deputy	95	31%
	Other personnel	140	47%
Business activities	Agriculture, forestry and fishery	53	18%
	Industry & construction	82	27%
	Trade & Services	165	55%
Enterprise Size	Small Business	123	41%
	Medium enterprises	177	59%

(Source: Author Collected)

### Cronbach's Alpha Analysis

After gathering the data, the authors assessed the reliability of the scales in the model using Cronbach's Alpha coefficient. The selection criterion was a scale with a Cronbach's Alpha of 0.6 or higher. Variables with a total variable correlation coefficient lower than 0.3 were gradually removed from the analysis.

**Table 2. Cronbach's Alpha Test**

Number	Factor	Number of observed variables	Cronbach's Alpha	Number of observed variables eliminated
1	Leadership	5	0.791	0
2	Quality of human resources	4	0.857	0
3	Financial viability	4	0.770	0
4	Corporate culture	4	0.807	0
5	Scientific and technological capacity	4	0.795	0
6	Investment activities	4	0.764	0

Source: Author Collected

The results of the Cronbach's Alpha scale reliability test indicate that all Cronbach's Alpha coefficients for the observed groups of variables were above 0.6 and less than 1. The variable "Human Resource Quality" had the highest Cronbach's Alpha coefficient of 0.857, while the variable "Investment Activity" had the lowest with a Cronbach's Alpha coefficient of 0.764. All total variable correlation coefficients were above 0.3, and removing any variable would reduce the scale's reliability. In summary, the observed variables ensure the reliability necessary for conducting the study's analyses, so all observed variables will be used in the next steps.

### EFA Analysis

The results of the factor analysis indicate that the independent variables have factor loadings all greater than 0.5, which means that the observed variables are important in the factors. The Kaiser-Meyer-Olkin (KMO) coefficient is 0.849, exceeding the threshold of 0.5, indicating that the data is suitable for factor analysis. Barlett's test shows a significance level of 0.000, less than 0.05, suggesting that the observed variables are correlated overall. The eigenvalue is 1.524, satisfying the criterion of being greater than 1, and 21 observed variables are grouped into five factors. The variance extracted, at 62.958%, indicates that these five factors explain 62.958% of the variation in the study data. Furthermore, all five factors obtained after the exploratory factor analysis (EFA) have Cronbach's alpha values greater than 0.6, indicating that these five scales are satisfactory for subsequent analysis.

The factor analysis results indicate that the dependent variable has a loading factor greater than 0.5. The KMO coefficient is 0.772, which should be considered in the data analysis. Barlett's Test has a level of meaning  $0.000 < 0.05$ , so the observed variables are correlated on an overall scale. Eigenvalue value = 2.351  $> 1$  satisfactory, four observed variables converge into 1 group. The variance extracted by 58.766% indicates that the dependent factor explains 58.766% of the variation of the study data.

The results of the factor analysis indicate that both the independent and dependent variables in the study model demonstrate acceptable differentiation values. The exploratory factor analysis (EFA) is suitable for the study data. The observed variables within the factors all accurately measured the concepts of the research model through EFA factor analysis. Five factors were identified, all of which met the criteria for testing the reliability and accuracy of the scale. Therefore, 21 observed variables of independent factors and four observed variables of dependent factors from the original proposed research model were retained.

Table 3. EFA analysis for independent and dependent variables

Criteria	Independent variables	Dependent variables	Meaning
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.849	.772	KMO coefficients between (0.5-1) and sig. = 0.000 $< 0.05$ indicates that the observed variables in the population are correlated with each other and that EFA factor analysis is appropriate
Sig.	0,000	0,000	
Extraction variance	62,958%	58.766%	Eigenvalues $> 1$ and the extraction variance $\geq 50\%$ , resulting in a scale of satisfactory components

Source: Author Collected

### Regression Analysis

The results of multiple regression analysis using the multivariate regression method in Table 3 show that there are 05 factors affecting the HDDT-dependent variable:

**Table 4. Regression analysis**

Coefficients <sup>a</sup>								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-.168	.166		-1.010	.313		
	NLLD	.257	.039	.268	6.682	.000	.756	1.323
	NNL	.248	.035	.289	6.996	.000	.716	1.396
	KNTC	.247	.037	.263	6.710	.000	.796	1.257
	VHDN	.196	.032	.230	6.053	.000	.845	1.183
	KHCN	.110	.034	.130	3.214	.001	.748	1.337

a. Dependent Variable: HDDT

Source: Author's calculations

The regression results indicate that the significance values (Sig) of the factors are all less than 0.05, thereby leading to the acceptance of the five initial hypotheses: H1, H2, H3, H4, and H5. This suggests that the independent variables have a positive impact on digital marketing investment activities in Hanoi city.

The regression of no factor removed by the Sig test of each independent variable is less than 0.05. The VIF coefficients of the independent variables are all less than 10, so there is no linear multi-additiveness occurring. The Durbin-Watson coefficient (d) = 2.012, there is no similar phenomenon between the residuals in the model, and the studied model is statistically significant. At the same time, the Beta coefficients are all greater than 0, proving that the independent variables impact in the same direction as the dependent variable.

Normalized regression equation:

$$HDDT = 0,268 * NLLD + 0,289 * NNL + 0,263 * KNTC + 0,230 * VHDN + 0,130 * KHCN$$

Based on the magnitude of the Beta regression coefficient, the order of impact from strongest to weakest of independent variables to HDDT-dependent variables is: NNL (0.289) > NLLD (0.268) > KNTC (0.263) > VHDN (0.230) > KHCN (0.130).

Corresponds to:

The variable of human resource quality has the strongest impact on Digital Marketing investment activities in small and medium enterprises.

Make Leadership 2nd Impact on Digital Marketing Investment in Small and Medium Enterprises.

The variable Financial ability has the third strongest impact on Digital Marketing investment activities in small and medium enterprises.

Turning Corporate Culture 4th Strongest Impact on Digital Marketing Investment in Small and Medium Enterprises.

Turning science and technology capacity has the weakest impact on Digital Marketing investment activities in small and medium enterprises.

## DISCUSSION AND IMPLICATIONS

Research results show that there are 5 factors affecting digital marketing investment activities in small and medium enterprises in Hanoi including: (1) Leadership; (2) Quality of human resources; (3) Financial viability; (4) Corporate culture; (5) Scientific-technological capacity. So với các nghiên cứu trước đây, nghiên cứu này cung cấp một cái nhìn toàn diện và cụ thể hơn. Previously, research such as Katsikeas et al. (2016) demonstrated that leadership significantly impacts the effectiveness of digital marketing strategies. However, current studies also emphasize the leadership's role in adopting and implementing new technologies. Similarly, Taiminen and Karjaluo (2015) emphasized the importance of human resource skills, while this study

focuses on the specific skills and knowledge needed for digital marketing. Some previous studies [19] [20] mainly focused on one or two factors or only analyzed at a general level, but now all five factors have been integrated and detailed in their importance.

Based on the research results, the authors believe that digital marketing investment in small and medium enterprises in Hanoi should focus on the following groups of solutions:

Firstly, it is important to build a team of digital marketing personnel with high-quality qualifications and professionalism. Enterprises should carefully prepare for recruiting and selecting high-quality candidates. In addition, employees should be encouraged to actively participate in workshops and activities that invite experts in the field of digital marketing to teach

*Secondly*, the management board must also constantly learn and update trends, be knowledgeable about technology improvement and consider digital marketing as a mandatory requirement in implementing marketing plans of businesses, not only at the level of encouragement but also to require thorough implementation, serious, detailed requirements with output efficiency.

*Third*, a detailed assessment of your financial situation, analysis of resources and financial needs for digital marketing investments. Know how to operate reasonably to maximize business resources, know how to use financial leverage and market investment tools

Fourthly, it is essential to establish a healthy work environment. Management should conduct research, create suitable conditions, and cultivate the right working atmosphere for employees. It will help maximize the potential of personnel in the company and promote active knowledge exchange among them.

*Fifth*, create a digital platform to help customers learn about your business. Stay updated on market trends and keep your content fresh. Establish a consistent brand identity using elements like images, logos, slogans, and colors associated with your products. It will improve customer recognition of your brand.

The team recognized certain limitations despite the results obtained. These limitations include: (1) The study's sample size was relatively small and not highly representative; (2) The research primarily focuses on internal factors within the enterprise; (3) Limited availability of secondary data for the study. In future studies, the team plans to increase the sample size, incorporate more external factors, and utilize additional relevant secondary data to enhance the study's data and provide a more objective reflection on the research problem

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