

## **Factor Affecting the Application of Sem Marketing at Small and Medium Enterprises in Hanoi**



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**ABSTRACT:** In the context of the volatile market economy, especially the increasing of competition, Marketing is considered as an indispensable tool in production and business activities, along with the strong development of technological techniques, the explosion of the Internet, Digital Marketing is becoming more and more developed. Nowadays, Digital Marketing is an effective advertising channel for businesses, including the application of SEM Marketing in small and medium enterprises (SMEs). Based on the analysis of 433 survey samples from SMEs in Hanoi, the research team gives an academic perspective on the factors affecting the application of SEM in SMEs in the area and propose recommendations towards improving the quality of SEM use in Hanoi in the coming time.

**KEYWORDS:** Hanoi, Intention, SEM Marketing, SMEs, usage behavior.

### **I. INTRODUCTION**

SEM stands for the term: Search Engine Marketing. Understanding exactly, SEM is a form of online marketing, applied to search engines like Google, Bing, Yahoo... As more and more people using internet, the behavior of shoppers also changes - people online more at the same time means they have more search demand. When people have interest in a certain item they will search, and this is the time and place to do SEM. According to FTA research, internet users in both 17-34 and 25-30 year old groups have tendency to use a search engine in the past three months, of which more than 50% have used it at least once a day. Currently, Hanoi is the economic, political, cultural and social center of Vietnam and it is also a place with a high number of people accessing Internet and having a high demand for shopping on social networks. Therefore, small and medium enterprises in Hanoi city have a high awareness of accessing a huge source of customer data on social networking sites. SEM Marketing has been and is becoming a topic of great interest to foreign scientists, but when learning about SEM Marketing in the country, this is still a new category that has not been studied deeply. Therefore, in-depth research and analysis on the decision to use SEM Marketing of enterprises, especially small and medium enterprises in Hanoi is still a topic of interest.

### **II. THEORETICAL FOUNDATIONS AND RESEARCH MODELS**

#### **A. Theoretical foundations**

Danny Sullivan - who founded Search Engine Watch in 1997 is credited with popularizing the term "SEM Marketing" and has been described as the father of search engine marketing. By definition, the concept of SEM Marketing is a comprehensive set of studies such as performance analysis, search engine optimization, Internet advertising to reach consumers directly, allowing websites to save store products or content that reach the target audience through search engines.

Tapan (2013) defined SEM Marketing as a form of Internet marketing that seeks to promote web pages to increase their visibility on Search Engine Results Pages (SERPs) through using Search Engine Optimization (SEO), P4P paid placements, paid contextual advertising.

According to Michael and Salter (2003) SEM Marketing is the process of making internet content more accessible in search engines and referring websites, capturing the attention of visitors. In the process, it's about preparing content, improving visibility with search engine optimization (SEO), increasing traffic to paid-per-click (PPC) content.

Research on behavior using SEM Marketing is a new topic and has not been studied in depth, so the research team has studied previous studies from two aspects: One is a study on advantages and disadvantages. score of SEM. The second is a study on the decisions to apply technological innovation in Vietnam's small and medium enterprises.

Firas et al. (2021) have shown that when run with the most relevant and important axioms and terms, a search engine maximizes the amount of traffic to company's website. According to Kareem (2009), compared to all other types of marketing, search engine optimization will increase a company's sales and earnings. Boris and Eugene (2007) stated that businesses can easily set budgets

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And specify the execution speed of their campaigns when using SEM Marketing. Besides the above advantages, SEM Marketing also has some disadvantages. ReemaAswania et al. (2017) indicate that about 32% of all discussions tend to be negative indicating that SEM is not as profitable as it seems. It shows a high percentage of dissatisfied customers.

Research on decisions to apply technological innovation in Vietnam's small and medium enterprises, there are 7 factors that are: (1) Main characteristics Ownership, (2) Firm size, (3) Competitiveness, (4) Quality certification, (5) Government, (6) Exportability, and (7) Innovation. Mai et al. (2018) gave two internal factors including: (1) Investment capital for innovation technology and (2) Human resources for technological innovation, two external factors include (1) Cooperation in technological innovation and (2) Institutions and policies to support technological innovation.

### B. Research model and research hypothesis

Summarizing from previous studies and adding new groups of factors, the research team comes up with a proposed research model as follows:

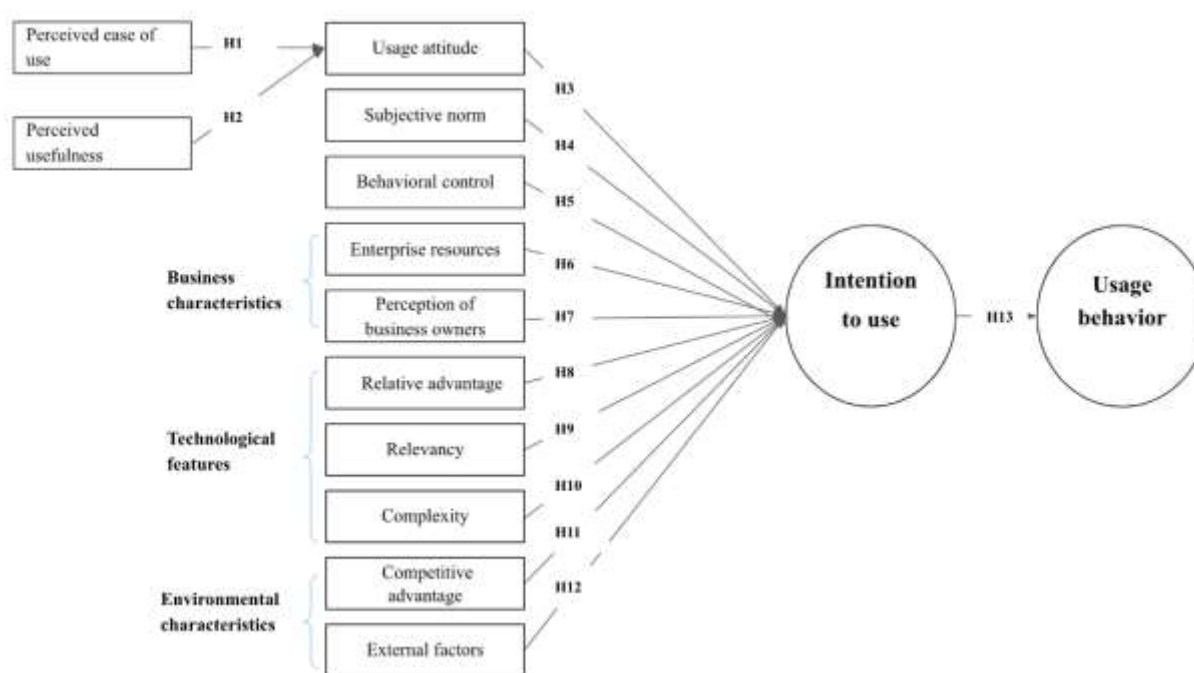


Fig. 1. Research model

#### H1: Perceived ease of use has a positive influence on attitude towards using SEM marketing

Davis (1989) defines ease of use as the degree to which an individual perceives a technological device that they believe that using the technology will be effortless. Adams (1992) showed that individuals are more likely to interact with technology platforms if they perceive a negligible loss of cognitive energy during interaction. This shows a significant relationship between the relationship of social networks with intuitive, easy-to-use interfaces and the level of use of businesses with that platform. When there is a connection between the user, the technology, and the task, the user experiences the process in a smoother, more seamless way. On the contrary, having a hard time dealing with search engine marketing will cause confusion for users or technology, reducing confidence in technology adoption decision-making.

#### H2: Perceived usefulness positively affects intention to use SEM Marketing

Davis (1989) writes that perceived usefulness is the degree to which users believe that using a technology model improves their job performance. Perceived usefulness has received great attention from researchers in all fields. According to Yang et al. (2021), potential businesses of SEM Marketing consider their decisions about whether to adopt such technology based on perceived usefulness and ease of use of the technology itself. Perceived usefulness is a potential user's subjective assessment of Information Technology utility.

#### H3: Attitude has a positive influence on intention to use SEM Marketing

Research by Ajzen (1985) shows that attitude is one of the factors affecting behavior. Attitude is defined as a mental readiness resulting from experience that directly affects an individual's response to objects or situations to which he or she is exposed. According to Duc et al. (2020), attitude is the factor that has the strongest impact on intention and thereby indirectly affects behavior.

#### H4: Subjective norm positively affects intention to use SEM Marketing

According to Karahanna et al. (1999), subjective norm and behavioral intention have a positive relationship. The Theory of Reasoned Action (TRA) posits that one's normative beliefs influence subjective norms - the important influence that others have on the

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decision to accept. Other significant people can be family members, relatives, friends, classmates, and co-workers. If society expects a person to engage in a behavior, the individual is more likely to do so. Subjective norms are expected to play an important role in determining SME's intention to use SEM Marketing, as their customers' online behavior, including posting, commenting, etc. Comments or clicking the "Like" or "Share" buttons tend to have a big impact on other users of the social network.

### **H5: Behavioral control positively affects the intention to use SEM Marketing**

The perceived behavioral control factor was added by Ajzen (1985) to adjust the TRA model. Perceived behavioral control is as important as an individual's self-assessment of the difficulty or ease of performing a behavior. People believe that the more resources and opportunities, the fewer obstacles there will be and the greater the perceived control over behavior will be. According to Ajzen (1991), this perceived control factor comes from the confidence of the individual who intends to perform the behavior and the easy and favorable conditions for performing the behavior. Taylor and Todd (1995) argue that the fact that the person intending to perform the behavior has all the information necessary for his decision and the assertiveness of the individual who intends to perform the behavior is the perceived behavioral control. client's micro. Through these studies, perceived behavioral control has been shown to have a positive effect on behavioral intention.

### **H6+H7: Business characteristics positively affect the intention to use SEM Marketing**

#### **H6: Enterprise resources positively affect the intention to use SEM Marketing**

Enterprise resources are one of the necessary factors to evaluate the feasibility of that business in applying new technology platforms. Jay (2016) pointed out four empirical indicators of the potential of resources on the firm's side, including rarity, imitability, and substitutability. More specifically in the organizational structure of the enterprise, these indicators are evaluated based on financial resources and human resources as well as infrastructure and material resources. The size and resources of the business also have an influence on the franchising to apply new technology.

#### **H7: Perception of business owners positively affects the intention to use SEM Marketing**

In small and medium enterprises, the decision to apply innovative strategies, methods or even tools is almost always through the leadership. Cloete et al. (2002) have shown that the e-commerce of enterprises is largely determined by business management. In another study by Nguyen and Waring (2013), they also stated that the management or individual business owners carry a great responsibility in making decisions on technology adoption from the business side. In addition, Morteza et al. (2010) also demonstrate that the level of technology knowledge and skills of management staff will also be one of the factors affecting the speed of decision-making to apply the technology application more quickly. The reason can be explained by the support and suggestions from the subordinates to the management.

### **H8+H9+H10: Technological features positively affect the intention to use SEM Marketing**

#### **H8: Relative advantage positively affects intention to use SEM Marketing**

Rogers (2003) defined relative advantage as a scale for a new technology that is used for the purpose of assessing how useful it is compared to the old form of technology it replaces. Under the current 4.0 technology era, SEM is becoming an indispensable tool for suppliers, traders as well as businesses. Tobias (2013) argues that SEM is increasingly proving itself to be an important factor in the market share of the lucrative advertising pie as well as a significant support tool for the development of the online shopping market (McCoy et al. 2007). Therefore, SEM Marketing brings a relatively large advantage for businesses to apply.

Duc et al. (2020) argues that relative advantage is an extremely important factor that appears when businesses consider applying a certain technology platform for internal processing. The above studies have shown a close relationship between relative advantage and the decision to use SEM Marketing.

#### **H9: Relevancy positively affects intention to use SEM Marketing**

Rogers (2003) wrote that compatibility is the degree to which new technologies connect with existing values and potential users' previous experiences. Compatibility plays an important role when an organization evaluates new technologies to see if there is any overlap with perceived ease of use and usefulness of past technologies. or not. As such, users are more inclined to use new technologies if it meets their values and fits their needs according to their usage habits. Heinle and Strebel (2010) conclude that the level of compatibility is the main reason for the failure of enterprises to make decisions to use new technology.

#### **H10: Complexity has a negative effect on intention to use SEM Marketing**

The concept of organizational complexity is derived from the technology acceptance model (TAM), where complexity is defined as the limitation and inconvenience to the use of technology. In the context of digital technologies becoming more and more developed, complexity is more and more concerned on technology applications serving many different purposes. In a study on the complexity of technology applications applied on cloud computing, Duc et al (2020) pointed out that complexity is a factor that needs to be carefully evaluated to measure the efficiency and effectiveness of the technology when applied.

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### H11+H12: Environmental characteristics positively affect the application of SEM

#### H11: Competitive advantage positively affects intention to use SEM Marketing

According to Oliveira & Martins (2011); Competitive advantage is the intensity of competition between businesses. It shows the pressure of a competitor in the industry. Research by Porter and Millar (1985) indicates that companies that adopt innovation are more likely to compete and take advantage of new ways to outperform competitors and change the rules of competition. Several studies (Chatzoglou & Chatzoudes, 2016; Nugroho, 2015) have investigated the impact of competitive pressure on technology adoption and found that it has significant implications. Thus, the ability to compete in meeting customer needs and expectations can drive positive SEM adoption among companies. Therefore, this study shows competitive advantage as a strong antecedent and driver of SEM adoption.

#### H12: External factors have a positive influence on the intention to use SEM Marketing

In this study, customer/supplier pressure is related to the level of pressure from customers/suppliers that SMEs feel. In many cases, the customer/supplier has the power to pressure a business to adopt a particular type of technology. According to Duan, Deng, & Corbitt, (2012), the greater the pressure a business perceives from trading partners, the more likely they are to adopt certain technological innovation(s) to maintain its position.

According to Zhu & Kraemer (2005) competitive pressure refers to the level of pressure from competitors in the industry that the company feels. As competitors begin to use new technologies to adapt to market changes in the 4.0 era, companies will be pushed into wider technology adoption to gain a competitive advantage painting. Therefore, the higher the level of competition in the industry, the greater the possibility of using SEM.

#### H13: The intention to use SEM Marketing has a positive influence on the behavior of using SEM Marketing

### III. RESEARCH METHODS

To serve the process of implementing the topic, the research team used a combination of different research methods, including qualitative research methods and quantitative research methods. The team conducted a qualitative study (the stage before the questionnaire was distributed) using secondary, observational data. The objective of the qualitative research team is to learn more deeply about the perception as well as the status of applying SEM Marketing of the research subjects. From there, evaluate and adjust the questionnaire. For the quantitative research method, the research team conducts quantitative research with a questionnaire, which is a method to help the research team collect subjective opinions from the research subjects. The quantitative research team aims to collect data related to the group's hypotheses through the form of a questionnaire (survey). From there, it is taken as primary data to serve the analysis of survey results, find out the motivating factors and the barriers to the application of SEM Marketing of small and medium enterprises across the country in general and Hanoi in particular, and at the same time can evaluate its influence.

The research team used a questionnaire and sent it to small and medium enterprises in Hanoi city. Primary data was collected from a survey of 433 participants through a questionnaire with a convenient sampling method. The survey was carried out during December 2022 - January 2023.

### IV. RESEARCH RESULTS

#### A. Results of testing the reliability of the scale

The results of Cronbach's Alpha test for 8 scales show that the analysis results of Cronbach's Alpha coefficient of the scales used in the study are all greater than 0.6 and the correlation coefficient of the total variable is greater than 0.4, except for the behavioral control variable and the subjective norm has Cronbach's Alpha coefficient < 0.6 (0.416 & -0.397 respectively) With this result, the behavioral control variable and the subjective norm will be excluded. Thus, the scale of factors affecting the enterprise's intention to use SEM has the required reliability to be used for subsequent analysis, except for behavioral control factors & subjective standards.

**Table 1: Cronbach's Alpha test results for independent and dependent variables**

No	Scale	Cronbach's Alpha
1	Usage attitude (UA)	0,780
2	Perceived usefulness (PU)	0,762
3	Perceived ease of use (PE)	0,721
4	Subjective norm (SN)	- 0,397
5	Behavioral control (BC)	0,416

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6	Enterprise resources (ER)	0,750
7	Perception of business owners (PO)	0,817
8	Relative advantage (RA)	0,812
9	Relevancy (RE)	0,788
10	Complexity (Com)	0,771
11	Competitive advantage (CA)	0,762
12	External factors (ExF)	0,817
13	Intention to use (IU)	0,925
14	Usage behavior (UB)	0,951

### B. Exploratory factor analysis results

The results of the EFA factor analysis showed that 12 factors were extracted at the Eigen value of 1,038 and the extracted variance was 76,988%. KMO coefficient = 0.738 > 0.5 so EFA fits the data. The results of the rotation matrix analysis exclude 2 variables Subjective norm (H2) and Behavior control (H3) which are not suitable among 14 factors analyzed from the model. In addition, Factor Loading > 0.5, so the observed variables are important in the research factors and have practical Significant. Sig Statistics. (Bartlett's Test) = 0.000 < 0.05 shows that observed variables are correlated with each other in the population.

The group decided to recalibrate to remove the variables Subjective norm (H2), Behavior control (H3) due to the EFA rotation model, running the remaining 12 factors test.

**Table 2: KMO and Bartlett test results for independent variables**

Factors to evaluate	Result
KMO . coefficient	0.738
Sig value. in Bartlett's test	0.000
Extracted variance	76.988%
Eigen value	1.038
Chi squared approx	6982.645
df	703

### C. Correlation Analysis Result

Before performing regression analysis, conduct Pearson correlation coefficient test to quantify the closeness of the linear relationship between the independent and dependent variables, as well as between the dependent variables. The research team used Pearson's coefficient to analyze the correlation between quantitative variables. If we look at the Sig coefficient of the dependent variable (Intent), we find that the correlation of the dependent variable with the independent variables is statistically significance (Sig < 0.05). In addition, the Sig coefficient of the independent variables is also guaranteed to be greater than 0.01, which explains the assurance that there is no multicollinearity phenomenon that falsifies the testing process. On the other hand, the correlation between the independent variables and the dependent variable is in a positive state when the assurance coefficient ranges from 0.023 to 0.945, proving that the discriminant value has been achieved.

**Table 3: Table of Pearson coefficients and Sig coefficients of dependent variable**

		UA	SN	BC	ER	PO	RA	RE	Com	IU	ExF	CA	PU	PE	UB
UA	Correlation coefficients	1	0.001	0.004	.125*	.258*	.144*	0.013	0.017	.227*	.146*	0.045	.105*	.143*	0.025
SN	Correlation coefficients	-0.001	1	.280*	0.025	-0.094	0.011	-0.054	-0.034	-0.003	0.015	0.055	0.023	-0.001	0.069

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BC	Correlation coefficients	0.004	.280**	1	0.059	-.099*	0.012	0.047	0.077	0.032	0.035	0.000	0.025	0.061	0.029
ER	Correlation coefficients	.125*	0.025	0.059	1	.177*	.260*	-.0019	0.038	.266*	.164*	.107*	0.086	0.032	0.037
PO	Correlation coefficients	.258**	-.0094	-.099*	.177*	1	.399*	.173*	.164*	.376*	.187*	0.048	-.0014	.117*	0.038
RA	Correlation coefficients	.144**	0.011	-.0012	.260*	.399*	1	.109*	.122*	.375*	.181*	0.053	-.0001	0.021	-.0007
RE	Correlation coefficients	0.013	-.0054	-.0047	-.0019	.173*	.109*	1	.392*	.253*	.126*	-.0035	0.098	0.004	0.078
Co m	Correlation coefficients	0.017	-.0034	-.0077	0.038	.164*	.122*	.392*	1	.278*	.138*	0.014	-.0001	-.0065	0.051
IU	Correlation coefficients	.227**	-.0003	-.0032	.266*	.376*	.375*	.253*	.278*	1	.366*	.176*	-.0007	0.042	.099*
ExF	Correlation coefficients	.146**	0.015	-.0035	.164*	.187*	.181*	.126*	.138*	.366*	1	.120*	.163*	.154*	0.051
CA	Correlation coefficients	0.045	0.055	0.000	.107*	0.048	0.053	-.0035	0.014	.176*	.120*	1	0.014	0.008	0.081
PU	Correlation coefficients	.105*	0.023	-.0025	0.086	-.0014	-.0001	0.098	-.0001	-.0047	.163*	0.014	1	.126*	-.0050
PE	Correlation coefficients	.143**	-.0001	-.0061	0.032	.117*	0.021	0.004	-.0065	0.042	.154*	0.008	.126*	1	-.0073
UB	Correlation coefficients	0.025	0.069	-.0029	0.037	0.038	-.0007	0.078	0.051	.099*	0.051	0.081	-.0050	-.0073	1

### D. Test results of regression hypothesis violation

For this hypothesis, the research team used a scatter plot for the standardized residual as well as the standardized predicted value. The results at the model show that the residual randomly disperses through the line at the zero mark, not forming a specific shape. That is, the residual value and the prediction are independent of each other, confirming that the assumption of linear relationship is met.

In this model, adjusted R2 is 0.358 and R is 0.345 (greater than adjusted R2) indicating that this model is suitable. So using adjusted R2 for evaluation is safer because it does not inflate the level of fit of the model (Hoang Trong and Chu Nguyen Mong Ngoc, 2008). In this model, the adjusted R2 (Adjusted R-square) shown in the table is 34.5%. In other words, about 34.5% of the variation of the dependent variable Intention (YD) is explained by 9 independent variables. Thus, the research model is appropriate and closely correlated.

However, this fit is only true for the sample data. We have to check the fit of the model through the F test to check whether the model can be deduced for the real population.

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**Table 4: Correlation results for Intention and Usage behaviour to use variables.**

Variable	Model	R	R <sup>2</sup>	R <sup>2</sup> adjusted	Estimated standard deviation	Durbin - Watson
Intention	1	0.599 <sup>a</sup>	0.358	0.345	0.49995	1.803
Usage behaviour	1	0.099 <sup>a</sup>	0.010	0.007	0.76282	1.827

a. Independent variables: UA, ER, PO, RA, RE, Com, CA, ExF

b. Dependent variable: IU

The model includes 8 independent variables namely UA, ER, PO, RA, RE, Com, CA, ExF and a dependent variable IU

**Table 5: Testing the relevance of the Intention and Usage behaviour model**

Variable	Model	Sum of squares	df	Average squared	F	Sig.
Intention	Regression	54.282	8	6.785	27.146	0.000 <sup>b</sup>
	Residual	97.231	389	0.250		
	Total	151.513	397			
Usage behaviour	Regression	2.290	1	2.290	3.395	0.48 <sup>b</sup>
	Residual	230.430	396	0.582		
	Total	232.719	397			

a. Independent variables: UA, ER, PO, RA, RE, Com, CA, ExF

b. Dependent variable: IU

In the ANOVA analysis table, the F test is used to test the hypothesis of the fit of the overall linear regression model. We have F = 27.146 and F = 3.395 with significance level sig = 0.000 and sig = 0.048 < 0.05. Therefore, the proposed linear regression model is suitable for the data and can be used.

In addition to assessing the factors belonging to the motivating or conditional groups, the authors also want to study in-depth the factors affecting the intention to apply SEM Marketing of enterprises based on the proposed research model. The research tests and scales have been selected by the group to be used for further in-depth analysis.

### E. Result for SEM linear structural model

A model is judged to be suitable for market data when it ensures the CMIN/df ≤ 3; TLI, CFI, GFI ≥ 0.9 and RMSEA ≤ 0.08. Thus, the index CMIN/df = 1,934; TLI = 0.919; CFI = 0.926; GFI = 0.9 and RMSEA = 0.049 meet the requirements, so it can be concluded that the model fits the research data. The model processing shows six factors including Usage attitude, Enterprise resources, Perception of business owners, Relative advantage, Compatibility, Complexity, Competitive advantage, External Factors has a p value of less than 0.05 (TABLE 8).

**Table 6: Model results of factors affecting the intention and behavior of using SEM Marketing**

Structural modeling effects	Coefficient	SE	p
Usage attitude -> Intention to use SEM	0.148	0.061	0.016
Enterprise resources -> Intention to use SEM	0.15	0.058	0.01
Perception of business owners -> Intention to use SEM	0.205	0.048	0.00
Relative advantage -> Intention to use SEM	0.25	0.052	0.00
Compatibility -> Intention to use SEM	0.128	0.046	0.006
Complexity -> Intention to use SEM	0.213	0.056	0.00
Competitive advantage -> Intention to use SEM	0.205	0.065	0.002

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External factors -> Intention to use SEM	0.28	0.056	0.00
Intention to use SEM -> Behavior to use SEM	0.146	0.069	0.035

Research results show that Attitude, Enterprise Resources, Perception of business owners, Relative advantage, Compatibility, Complexity, Competitive advantage, External influencing factors have a high degree of influence. to the behavior of using SEM Marketing through the intention to use SEM Marketing with unnormalized weights with absolute values of 0.148, 0.15, 0.205, 0.25, 0.128, 0.213, 0.205, 0.28, respectively. Thus, it can be concluded that the hypotheses H1, H4, H5, H6, H7, H8, H9, H10 are accepted at 95% confidence. In which, external factors, relative advantage, complexity are the factors that have the strongest impact on the intention to use SEM Marketing. In addition, the results also show that the intention to use has an impact on the behavior of applying SEM Marketing with a standardized weight of 0.146.

### V. RECOMMENDATIONS

The purpose of the study is to find out the factors affecting the application of SEM in small and medium enterprises in Hanoi city. SEM Marketing plays an extremely important role in both the operation of the business in general and the marketing process of the business in particular. Especially in the context of the ongoing 4.0 technology revolution, along with the fact that technology has been changing the world, the use of SEM Marketing will bring many benefits and improve the competitiveness of enterprises. The research team has built a research model based on the TRA Rational Action Theory, TPB Planned Behavior Theory, TAM Technology Acceptance Model, and Technology-Organization-Environment Framework TOE, in addition, inherits from similar studies both domestically and internationally, combined with observed factors to propose its research model.

From the research results, there are 11 factors affecting the intention to apply SEM Marketing of small and medium enterprises in Hanoi, including Usage attitude, Perceived ease of use, Perceived usefulness, Enterprise resources, Business owner perception, Relative advantage, Compatibility, Complexity, Competitive advantage and External factors- in which there are 4 major factors that influence to the decision to use SEM Marketing of small and medium enterprises in Hanoi, including: Attitude, Enterprise characteristics, Technology characteristics and Environmental characteristics.

Based on the research results, the research team believes that in order to improve the behavior of small and medium enterprises using SEM Marketing in Hanoi city, businesses need to focus on solutions such as:

Firstly, about the Attitude of Use, businesses need to have a correct and sufficient awareness of the usefulness and effectiveness of SEM Marketing. Enterprises need to actively enhance activities to improve employees' understanding of SEM Marketing, especially in the context that employees' knowledge of SEM is still limited. Businesses also need to focus more on plan to supplement and expand employee knowledge about SEM such as: Sponsoring or organizing workshops and activities on SEM, inviting experts in SEM field, create opportunities for employees to participate. online and face-to-face seminars to raise awareness of using SEM Marketing. These activities should be combined with marketing organizations and agencies, thereby increasing awareness of the usefulness and effectiveness of SEM Marketing.

Secondly, in terms of business characteristics, in small and medium-sized enterprises, the decision to apply innovative strategies, methods or even tools are almost always through leadership. To be able to apply SEM Marketing successfully, not only business personnel need to have a good understanding of SEM Marketing, but also business leaders need to have an understanding of this form of Marketing. When the leadership is knowledgeable about technology improvement, they will tend to accept the use of new technology applications more easily. From understanding SEM, business leaders also need to actively encourage and require relevant departments to use SEM Marketing in their work. Business leaders need to consider SEM as a mandatory requirement in the implementation of Marketing plans, not only at the level of encouragement but also need to strictly, seriously, and detailed requirements with output efficiency. Enterprises also need to have a clear plan and a reasonable budget for SEM for the plan to be applied most effectively.

Thirdly, in terms of technical characteristics, businesses need to calculate the correlation between the application of SEM and the marketing effectiveness of the business. The first is to understand the relative advantages achieved when applying SEM - that is, it helps to increase labor efficiency, save resources of enterprises and thereby increase profits for enterprises. Businesses also need to analyze the Compatibility when applying SEM to their business, evaluate new technologies to see if there is an overlap between perceived ease of use and usefulness of existing technologies. experience in the past or not. Businesses also need to calculate the complexity of SEM. In the context of Covid - 19, this issue is even more noticeable when new technologies are constantly being launched to serve society, not always meeting the optimization and simplicity for users.

Fourthly, on environmental characteristics, enterprises need to analyze the SEM strategies of competitors in the industry to recognize the competitive advantages gained if applying SEM. Enterprises also need to be active in finding external resources besides using available human resources to support the process of applying SEM.

The results of this study will be an outstanding contribution by future stakeholders, especially SMEs, the community and research. This study will explain the factors affecting the application of SEM Marketing in small and medium enterprises in Hanoi



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city. This will help managers understand and apply it to their businesses, thereby creating a competitive advantage over competitors in the same industry, potentially winning brand loyalty from consumers.

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