

Evaluating and Prioritizing the Effective Factors on the Success of Internet Marketing of Export Companies by Utilizing the Multi-Criteria Decision-Making Technique

Avaliando e priorizando os fatores eficazes no sucesso do marketing na Internet de empresas exportadoras, utilizando a técnica de tomada de decisão multicritério

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ABSTRACT

This study was designed to examine and prioritize the factors influencing the success of Internet marketing among export companies, using the TOPSIS multi-criteria decision-making technique. The statistical population consisted of managers from 52 export trading companies in Mazandaran province, Iran. A questionnaire was employed to collect the necessary data from the set of managers. A group of experts in the field make a check if the questions in the questionnaire serve to the purpose of the research study. After the validity of the questionnaire is confirmed by the experts its reliability is assessed by using the Cronbach's alpha statistical measure. The values of this measure are: for internal factors (0.84), external factors (0.85), international factors (0.83), and Internet marketing success (0.86). The structural equation model (SEM) was applied to analyze the data and test the research hypotheses using the SPSS and LISREL software. Additionally, the TOPSIS technique was utilized to prioritize the identified factors. The results indicate that internal, external, and international factors significantly impact the success of Internet marketing. The TOPSIS ranking revealed that external factors are rated the first place, followed by internal factors and international factors in the second and third places.

Keywords: Internal factors; External factors; International factors; Internet marketing success; Export companies; TOPSIS.

RESUMO

Este estudo foi elaborado para examinar e priorizar os fatores que influenciam o sucesso do marketing na Internet entre empresas exportadoras, usando a técnica de tomada de decisão multicritério TOPSIS. A população estatística consistiu em gerentes de 52 empresas de comércio de exportação na província

de Mazandaran, Irã. Um questionário foi empregado para coletar os dados necessários do conjunto de gerentes. Um grupo de especialistas na área verifica se as perguntas do questionário atendem ao propósito do estudo de pesquisa. Após a validade do questionário ser confirmada pelos especialistas, sua confiabilidade é avaliada usando a medida estatística alfa de Cronbach. Os valores desta medida são: para fatores internos (0,84), fatores externos (0,85), fatores internacionais (0,83) e sucesso do marketing na Internet (0,86). O modelo de equação estrutural (SEM) foi aplicado para analisar os dados e testar as hipóteses de pesquisa usando o software SPSS e LISREL. Além disso, a técnica TOPSIS foi utilizada para priorizar os fatores identificados. Os resultados indicam que fatores internos, externos e internacionais impactam significativamente o sucesso do marketing na Internet. O ranking TOPSIS revelou que os fatores externos ocupam o primeiro lugar, seguidos pelos fatores internos e pelos fatores internacionais, que ocupam o segundo e terceiro lugares.

Palavras-chave: Fatores internos; Fatores externos; Fatores internacionais; Sucesso do marketing na Internet; Empresas exportadoras; TOPSIS.

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1 INTRODUÇÃO

Companies operating in different countries start to export their products to other countries once their domestic markets are saturated or due to the attractiveness of foreign markets (Sakarya et al., 2007). Entering export markets and gaining demanded and desirable results from these markets often face obstacles and problems given the competitive conditions prevailing in global markets (Zekiri & Angelova, 2011). Thus, export companies strive to overcome such obstacles aimed at enhancing their export performance. However, this goal seems unachievable unless commercial institutions benefit from a scientific marketing system. As a matter of fact, changes in global economic conditions, leading to its further complexity, have made all companies turn to scientific and new marketing methods to adjust and align themselves with the needs of the global community (Sharma et al., 2018). E-marketing is nowadays known as one of the new marketing tools and methods, which has come into existence as a result of the emergence of the phenomenon of information and communication technology, and its most substantial means, i.e., the Internet, and with all its deep and extensive impacts on the commercial processes (Bala & Verma, 2018). The complication and intensification of competition in foreign markets have led the production-export companies to face numerous problems, some of which, result from the inability or incapacity of companies to properly do their marketing activities. Therefore, if these companies get to know the capabilities and advantages of electronic marketing and its techniques and methods and the process of utilizing them, they may solve some of their marketing-related export problems, and thereby, enhance the effectiveness of their export marketing activities (Edeh et al., 2020).

Hence, using the Internet in smart marketing seems to be one of the most important methods to improve the ability to develop international markets. Websites give businessmen access to a large amount of information related to international marketing (Melović et al., 2020). Based on this argument, utilizing the Internet in export marketing appears highly essential to contribute to export development (Kurdi et al., 2022). The phenomenon of globalization followed by the decreased importance of geographical boundaries, the continuity of communication, and the huge volume of information have led to the creation of the information society and the increased interdependencies between nations, people, and markets, which rely on the ever-increasing development of information technology and its branches, including e-commerce. Also, the competition in the international markets has compelled companies, especially export companies, to use new technologies aimed at meeting the needs of customers and markets and establishing further effective communication with other countries with the main goal of gaining a special position in the world markets (Singh et al., 2021). Given the fact that the nature of customers' needs is becoming increasingly globalized with actually slight differences between domestic and foreign markets, thus, the competitive pressures of the markets as well as new consumers make firms join electronic markets regardless of their willingness or unwillingness (Arunachalam et al., 2020). Internet marketing has come to the focus of attention to achieve the goals of modern marketing in electronic transactions due to the impact of the Internet on business and the formation of the digital economy foundations and is now seen as a key factor in the competitiveness of international markets. Factors such as the increased speed of computation, fast processing of information, the feature of searching and enhanced accuracy, the removal of unnecessary intermediaries, and electronic accomplishment of tasks overshadow the transaction and exchange process, and consequently, reduce the time of exchanges and increase productivity (Calvano & Polo, 2021).

Studies show that internal factors such as: product quality, human and financial resources, information technology, as well as external and international factors such as: national and regional laws and regulations, global trends and global competition affect the success of Internet marketing. The present study is conducted with the aim of identifying the effect and prioritizing the effective factors so that by filling the existing research gap, it can help the studied companies in this marketing path through the internet marketing platform. In this manuscript, firstly, the factors affecting the success of internet marketing and the impact of these factors on the performance of export companies are briefly reviewed, and then in the literature review section, the relationship between factors: domestic, foreign and international marketing and the success of internet marketing is explained. In the following, after measuring the effect of the mentioned factors on the success of internet marketing among the export

companies studied through the method of structural relations, the prioritization of these influencing factors is done by the TOPSIS method and at the end the obtained results are discussed and analysed.

2 LITERATURE REVIEW

2.1 Internet Marketing

Marketing is nowadays recognized as a science required in economic activities (Alford & Page, 2018). This knowledge, always existed in societies in various forms, has appeared in a new form in the present era and is oriented from traditional methods to a modern method fit to today's science, i.e. internet marketing. The presence of the Internet and its rapid progress in countries regardless of time and place situations highlight the positive aspect of Internet marketing (Eggert et al., 2018). However, some abuses of this type of marketing sometimes overshadow the positive aspects of this type of marketing due to the negative aspects, leading to doubts about its usage (Krizanova et al., 2019). Internet marketing is considered as one of the major pillars and crucial activities of any company operating in virtual space and e-commerce. With the ever-increasing penetration rate in human societies, the Internet has developed a platform to accelerate exchange and a tool for product introduction, pricing, and direct distribution of goods as a manifestation of face-to-face exchanges (Costa & Castro, 2021), which is indeed one of the most prominent and controversial topics in business and marketing (Erlanitasari et al., 2020). Although the Internet has provided a context for companies to reach global markets as one of the most effective marketing tools with global coverage, many companies are still wandering about the use of electronic marketing in export markets.

2.2 Internal factors and internet marketing success

The internal factors of an organization, including marketing strategy can significantly influence Internet marketing success (Su et al., 2023). An organization's marketing strategy is highly important for its internet activities. This strategy should be consistent with the target market, competitors, and competitive advantage of the organization. The marketing strategy must be thoroughly determined and implemented with commitment (Gao et al., 2023). The website and user experience are also very determining as other internal factors alongside the marketing strategy (González-Mena et al., 2022). The organization's website should be designed and optimized to provide a positive user experience for visitors. Factors such as beautiful design, good loading speed, compatibility with different devices, and useful and interesting content can significantly influence the user's experience. A website without proper content will not be influential. Marketing content highly matters in internet marketing (Geng et al., 2020). The organization needs to provide content that brings added value to the audience and resolves their needs and problems. The content needs to be attractive, informative, and valuable to attract the audience and establish trust and communication. Besides the mentioned factors, the factor of the organization's resources and capabilities, including the financial, human, and technical resources of the organization play a crucial role in the ability to accomplish Internet marketing processes (Chisafwa & Phiri, 2020). The organization has to allocate sufficient resources to marketing and recruit an expert team with the necessary capabilities to implement the digital marketing strategy. According to the issues posed above, the first hypothesis of the research will be as follows:

H1: Internal factors of the organization have a significant impact on the success of internet marketing of export companies.

2.3 External factors and internet marketing success

According to studies, external factors significantly influence the success of Internet marketing as well. Competition in the market is seen as one of the most important of these factors (Nuseir & Aljumah, 2020). The presence of competitors and the intensity of competition in the market have a huge impact on the success of Internet marketing. Changes in the technology are considered as another determining factor. Technologies and changes in the field of communication and internet technology can have a substantial impact on marketing success. For example, the growing trend of using smart devices and changes in consumers' consumption patterns may need some adjustments in marketing strategies (Salhab et al., 2023). The market growth process seems also important in this regard so that the market growth process of the intended industry will also significantly affect the success of internet marketing (López García et al., 2019). There seem to be more opportunities to attract customers and increase sales in growing markets. Also, proper improvements and changes can be applied to the marketing strategy according to the changes in the market growth trend (Dumitriu et al., 2019). Some other influential factors include social and cultural changes, laws and regulations, and global and economic changes. In general, it is highly important to analyze and understand different external factors and adapt the marketing strategy to them. Successful organizations in Internet marketing demonstrate their adaptability and flexibility against external changes well (Nuseir & Aljumah, 2020). According to the issues posed above, the second hypothesis of the research will be as follows:

H2: External factors of the organization have a significant impact on the success of internet marketing of export companies.

2.4 International factors and internet marketing success

Like internal and external factors, international factors have a considerable impact on the success of Internet marketing, including cultural changes and consumers' behavior. It is substantially important in Internet marketing to understand and adapt to cultural changes and consumer behavior at the international level (Katsikeas et al., 2020). Cultural differences, habits, needs, and preferences of consumers in different countries and regions may have a great impact on marketing strategies. Thus, it seems important to evaluate the target markets and adapt the marketing strategy to the needs and preferences of international customers (Wang, 2020). International regulations and laws also have a great impact on Internet marketing (Cetindamar Kozanoglu & Abedin, 2021). Various countries may have different restrictions and laws concerning advertising, privacy protection, consumer rights, and other aspects of marketing. Organizations need to be familiar with these rules and adjust their marketing strategies accordingly (Johnson & Shriver, 2020). In addition to the mentioned factors, international economic and financial developments have an important impact on Internet marketing as well. Factors such as exchange rates, price changes, demand and supply, economic conditions of countries, and other economic factors may influence the marketing strategy. For instance, changes in exchange rates can change the processes of pricing, competitiveness, and profitability for organizations (Singhal et al., 2019). The globalization of markets and communications has provided more opportunities and challenges for Internet marketing. Some of the advantages of globalization for Internet marketing include access to new markets, development of international relations, and creation of cooperation networks and information exchange. However, it also matters to understand cultural, linguistic, and legal limitations and challenges in the international markets (Kopalle et al., 2022). In general, one may say that the

influence of international factors on the success of Internet marketing is quite complex, and organizations need to design and implement their marketing strategies according to these factors. The need to get familiar with the target markets, international laws, competitors, new technologies, and the globalization process seems highly important and essential. According to the issues posed above, the third hypothesis of the research will be as follows:

H3: International factors have a significant impact on the success of internet marketing of export companies.

2.5 The research conceptual model

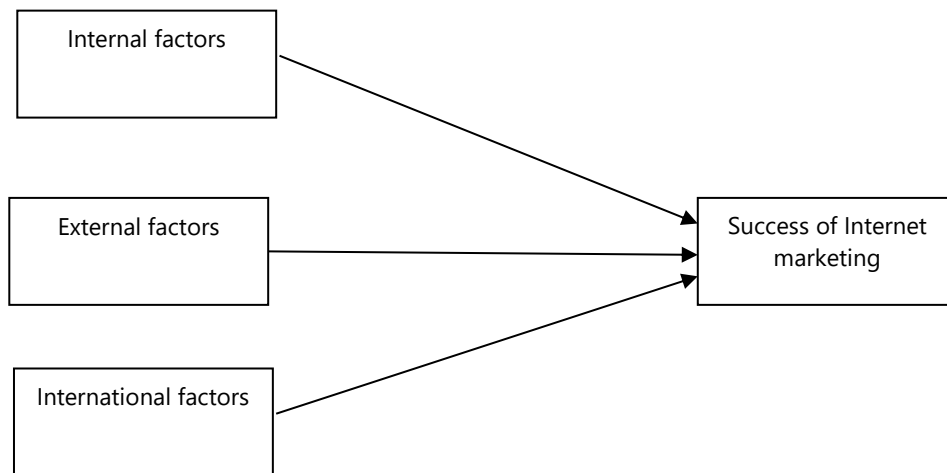


Figure 1- The research conceptual model

3 METHODOLOGY

The present research has an applicative nature and is based on the descriptive survey research method. The study statistical population consisted of business and information technology managers of 52 export trading companies in Mazandaran province, Iran. These export companies mainly operated in the fields of food industry, production of industrial equipment, and chemicals. The number of members of the studied population was estimated to be 104. Due to the limited size of the population in the research, the sample was considered equal to the statistical population, and two questionnaires were distributed for each company, which were completed by the business management and IT management. In the designed questionnaire, besides the demographic questions, the variable of internal factors with 8 questions derived from Dagan's study (2000), the variable of external factors with 5 questions derived from Chan's study (2000), the variable of international factors with 5 questions derived from Chan's study (2000), and the internet marketing variable with 5 questions derived from Fraser's study (2000) were measured. Cronbach's alpha was used in this research to calculate the reliability. Thus, following the distribution of 30 questionnaires as a preliminary test, the alpha value was obtained using the SPSS software. The Cronbach's alpha coefficient measures the internal consistency between two items by using the correlation between them. It is usually used to measure the reliability of a test or consistency within questions, ratings, and items within survey. The calculated alpha value for each variable and the total alpha value are given in Table 1.

Table 1- The Cronbach's alpha results for each research variable

Row	Variable Name	Cronbach's alpha	Number
1	Internet marketing success	0.86	30
2	Internal factors	0.84	30
3	External factors	0.85	30
4	International factors	0.83	30

Various statistical methods were utilized to analyze the data obtained from the questionnaires. To this end and following the analytical statistics requirements, SPSS and LISREL software were used in the two sections of descriptive statistics and inferential statistics. Besides using the structural equation modeling method to test the research hypotheses, the TOPSIS method was also utilized to prioritize the studied factors. In this method, to measure the similarity of an alternative (or option) to the ideal and anti-ideal solution, the distance of that alternative (or option) from the ideal and anti-ideal solution is measured. Then, the options are evaluated and ranked based on the ratio of the distance from the anti-ideal solution to the total distance from the ideal and anti-ideal solutions.

4 RESULTS

4.1 The descriptive statistics results

4.1.1 The results of demographic characteristics analysis

The features of gender, service history, and education level were used to describe the respondents, and the obtained results are shown in Table 2.

Table 2
 The demographic characteristics

		Frequency	Frequency Percentage
Gender	Male	90	0.865
	Female	14	0.135
Education Level	Bachelor's Degree	30	0.288
	Masters' Degree	48	0.462
	P.H.D	26	0.250
Service History	0-5	12	0.115
	5-10	25	0.240
	10 years and above	67	0.650

4.1.2 The descriptive statistics results of the variables

Table 3

The descriptive statistics of data according to the research variables

Variable	Number	Minimum	Maximum	Mean	Standard Deviation
Internal factors	104	2.25	5	4.01	0.577
External factors	104	1	5	4.04	0.697
International factors	104	1.40	5	3.82	0.703
Internet Marketing Success	104	1.20	5	4.02	0.755

According to the Table above, the variable of external factors has the highest mean among the variables with a value of 4.04.

4.1.3 The results of inferential statistics

4.2 Examining the normality of the data

The kurtosis and skewness criteria were utilized to examine the normality of the data. The results are given in Table 4.

Table 4

The results of the kurtosis and skewness of the research variables

Variable	Kurtosis value	Skewness value	State
Internal factors	0.501	-0.469	Normal
External factors	1.717	-1.147	Normal
International factors	0.392	-0.530	Normal
Internet Marketing Success	1.493	-0.998	Normal

4.3 The one-sample mean t-test for the research variables

The one-sample t-test was used in this research to examine whether each of the variables studied in the research is at an optimal level according to the respondents or not.

Table 5

The one-sample t-test results for the research variables

Variable	Test Value = 3					
	t-statistic	Degree of freedom	Significance level	Mean	Confidence interval (95%)	
					Lower limit	Upper limit
Internal factors	17.861	103	0.000	4.01	0.899	1.124
External factors	15.322	103	0.000	4.04	0.912	1.837
International factors	12.013	103	0.000	3.82	0.692	0.965
Internet Marketing Success	13.838	103	0.000	4.02	0.878	1.171

As shown in Table 5, since the significance level concerning the internal factors, external factors, international factors, and Internet marketing success is lower than 0.05 for all four items ($\text{sig} = 0.000 > 0.05$), the null hypothesis is rejected and the opposite hypothesis is accepted; i.e., the mean value of all four items is not equal to 3. Also, as the upper and lower limits are positive for all variables, the value of the t-statistic is higher than the critical limit of 1.96 in all variables. Thus, one may say that the status of the variables in the target population enjoys a good state.

4.4 Confirmatory factor analysis

The confirmatory factor analysis was used to evaluate the appropriateness of the selected questions for measuring the studied variables. In other words, the first step to evaluate the accuracy of a measurement model is to examine the fit of the variable measurement model. To do so, the fit indices are used. The general fit indices for the measurement models (confirmatory factor analysis) using the Lisrel software are given in Table 6.

Table 6
 The results of goodness of fit indices of the measurement model

Index name	Abbreviation	Model fit	Acceptable fit
The goodness of fit index	GFI	0.79	Close to 1
Normalized fit index	NFI	0.91	$\geq 90\%$
Non-normalized fit index	NNFI	0.96	$\geq 90\%$
Comparative fit index	CFI	0.96	$\geq 90\%$
Incremental fit index	IFI	0.9961	$\geq 90\%$
Chi-square/ df		1.48	< 3
RMSEA model fit		0.069	< 0.08

4.5 Testing the research hypotheses

The structural equation model was used to reject or confirm the current research hypotheses using the Lisrel software. The outputs of the Lisrel software are shown in Figures 2 and 3 in standard and significant modes. In these figures, AD represents the internal factors and AD 1 to AD 8 represent the components of internal factors, AK represents the external factors and AK 1 to AK 5 represents the components of external factors, AB represents the international factors and AB 1 to AB 5 are the components of international factors. Also, MBI indicates the Internet Marketing Success and MBI 1 to MBI 5 indicate the components of Internet Marketing Success.

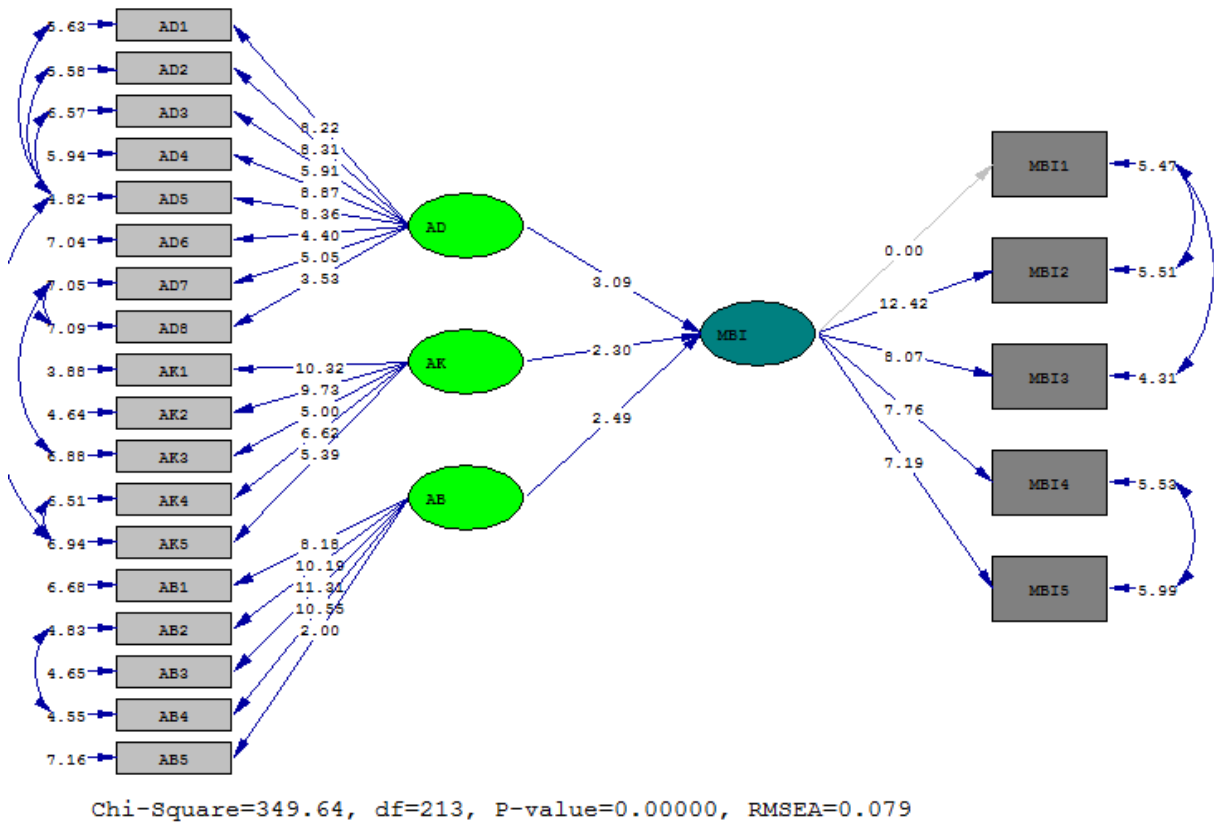


Figure 2- The structural equation modeling results in the significance mode

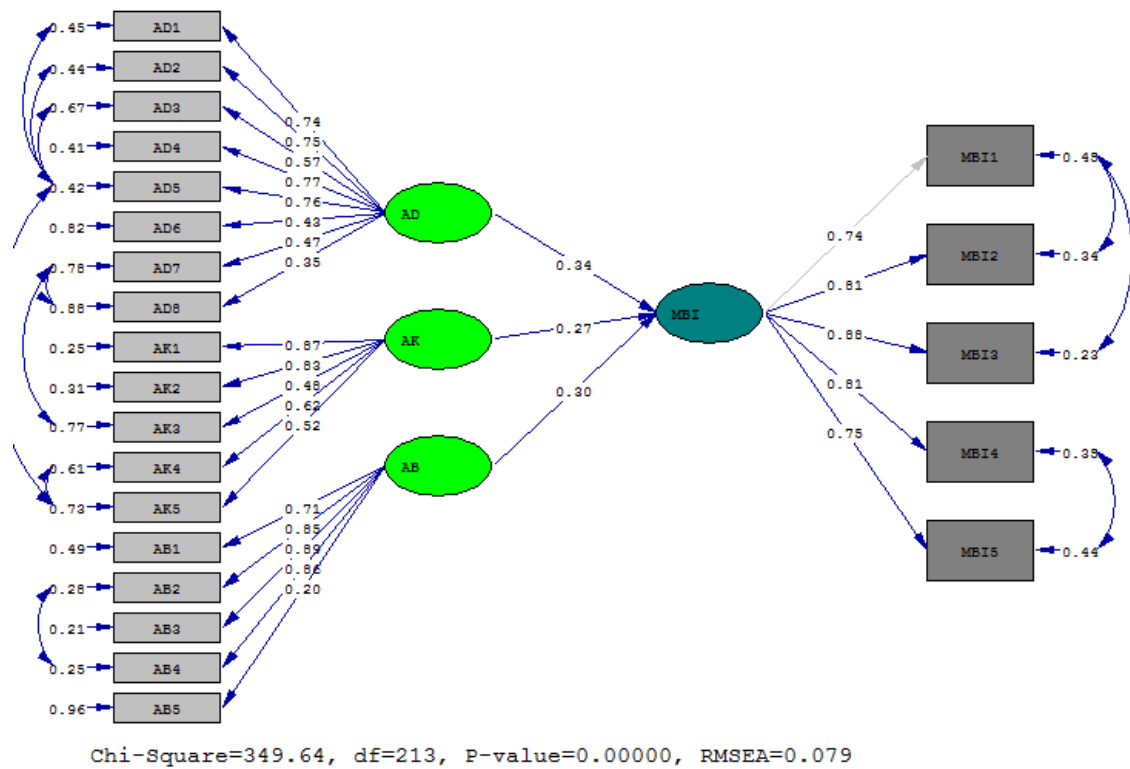


Figure 3- The structural equation modeling results in the standard coefficient mode

According to Figures 2 and 3, since the value of the standard coefficient (0.34) and the significance value (T-value = 3.09) are higher than 1.96, one can say at the 95% confidence level that internal factors have a positive and significant impact on the success of internet marketing. Thus, the hypothesis "Internal factors of the organization have a significant impact on the success of internet marketing of export companies." is confirmed.

According to Figures 2 and 3, since the value of the standard coefficient (0.27) and the significance value (T-value = 2.30) are higher than 1.96, one can say at the 95% confidence level that external factors have a positive and significant impact on the success of internet marketing. Thus, the hypothesis "External factors of the organization have a significant impact on the success of internet marketing of export companies." is confirmed.

According to Figures 2 and 3, since the value of the standard coefficient (0.30) and the significance value (T-value = 2.49) are higher than 1.96, one can say at the 95% confidence level that international factors have a positive and significant impact on the success of internet marketing. Thus, the hypothesis "International factors of the organization have a significant impact on the success of internet marketing of export companies." is confirmed.

4.6 The prioritization of factors using the TOPSIS method

The TOPSIS (Technique for Order Preference by Similarity to Ideal Solution) method is a widely used multi-criteria decision-making (MCDM) approach. It helps decision-makers evaluate and rank alternatives based on multiple criteria. The advantages of this method can be summarized as: simplicity in understanding and implementing it, providing a clear ranking of alternatives and considering the best and worst scenarios.

Solving the problem with this method requires the following six steps:

1. The quantification and de-scaling of the decision matrix (N): The "Norm" is used for de-scaling.
2. Obtaining the weighted unscaled matrix (V): To do so, the descaled matrix (N) is multiplied by the diagonal matrix of weights $\overset{\circ}{w}_{n \times n}$, that is: $v = n * w_{n \times n}$
3. Determination of the positive ideal solution and the negative ideal solution: The positive ideal solution and negative ideal solution are defined as follows:
 (vj^+) Positive solution idea = [The vector of the best values of each index of the matrix v]
 (vj^-) Negative solution idea = [The vector of the worst values of each index of the matrix v]

The "best values" for positive and negative indices are the largest and smallest values, respectively, and the "worst values" for positive and negative indices are the smallest and largest values, respectively.

1. Obtaining the distance of each alternative (option) to the positive and negative ideals: The Euclidean distance of each alternative (option) from the positive ideal di^+ and the distance of each alternative (option) to the negative ideal di^- are calculated based on the following formulas.

$$di^+ = \sqrt{\sum_{j=1}^n (vij - vj^+)^2}$$

$$di^- = \sqrt{\sum_{j=1}^n (vij - vj^-)^2}$$

1. Determining the relative closeness (CL) of each alternative (option) to the ideal solution

$$cl_i = \frac{d_i^-}{d_i^- + d_i^+}$$

2. Ranking of alternatives (options): Any alternative (option) with the greater "CL" would be the better one.

Since we wanted to prioritize the factors using the TOPSIS technique in this research, the decision-making matrix was formed according to the answers given to the questions in the questionnaire.

Table 7-The decision-making values

A \ C	C ₁	C ₂	C ₃	C ₄
A ₁	4.01	4.048	4.154	4.058
A ₂	4.106	4.221	4.173	3.875
A ₃	3.952	3.837	3.394	3.913

In the decision-making values:

As: Decision options as A1: Internal factors, A2: External factors, A3: International factors

Also, four indices were chosen based on the questionnaire questions, including:

C₁: Internet marketing costs

C₂: The importance of using internet marketing for export trading companies in Mazandaran province.

C₃: The speed of internet marketing development among export trading companies in Mazandaran province.

C₄: The rate of access to internet marketing information among export trading companies in Mazandaran province.

The following steps had to be done step by step for prioritization using the TOPSIS method:

Step 1: Obtaining the unscaled matrix using the Norm method, in which, each element of the decision matrix was divided by the square root of the sum of squares of the elements of each column.

Table 8- The unscaled matrix by the Norm method

A \ C	C ₁	C ₂	C ₃	C ₄
A ₁	0.576	0.579	0.611	0.592
A ₂	0.59	0.603	0.614	0.566
A ₃	0.568	0.549	0.499	0.572

This unscaled matrix had to be multiplied by the weight matrix; but since the weight matrix was not available, the entropy method was utilized.

Table 9- The results of step 1: Entropy

A \ C	C ₁	C ₂	C ₃	C ₄
A ₁	0.332	0.324	0.354	0.343
A ₂	0.24	0.349	0.356	0.327
A ₃	0.327	0.317	0.290	0.330

Step 2: The measurement of uncertainty using the Shannon Entropy relation:

$$E_j = -k \sum [P_{ij} \ln p_{ij}] \quad K = \frac{1}{\ln(m)}$$

Where m is the number of alternatives (options) of the decision matrix and P_{ij} are the elements of each column.

$$K = \frac{1}{\ln(3)} = 0.91$$

The answers of E_j are as follows by performing the relevant operations.

$$\begin{aligned} 0.999 &= (-1.098) - 0.91 = E_1 \\ 0.999 &= (-1.0978) - 0.91 = E_2 \\ 0.995 &= (-1.0942) - 0.91 = E_3 \\ 0.999 &= (-1.0983) - 0.91 = E_4 \end{aligned}$$

Table 10- The results of Step 2

E ₁	E ₂	E ₃	E ₄
0.999	0.999	0.995	0.999

Now, we need to obtain the "d_j" with the uncertainty level from the "1-E_j" formula:

Table 11- The results of Step 3

d _j	d ₁	d ₂	d ₃	d ₄	$\sum d_j$
1- E _j	0.001	0.001	0.005	0.001	0.008

In the next step, we divide the "d_j" by the $\sum d_j$ to get the weights of the indices.

Table 12- The results of Step 4

w _j	W ₁	W ₂	W ₃	W ₄	$\sum w$
$\frac{d_j}{\sum d_j}$	0.125	0.125	0.625	0.125	1

Once the weights matrix of the indices is obtained, we will return to solving the problem using the TOPSIS method; i.e., we multiply the unscaled matrix obtained by using the Norm method by the weights matrix.

Table 13- The descaled matrix by the Norm method

C \ A	C ₁	C ₂	C ₃	C ₄
A ₁	0.576	0.579	0.611	0.593
A ₂	0.59	0.603	0.614	0.566
A ₃	0.568	0.549	0.499	0.572

$$\begin{pmatrix} 0/125 & 0 & 0 & 0 \\ 0 & 0/125 & 0 & 0 \\ 0 & 0 & 0/625 & 0 \\ 0 & 0 & 0 & 0/125 \end{pmatrix}$$

Table 14- The results of $V=N \times W \times n$

A \ C	C ₁	C ₂	C ₃	C ₄
A ₁	0.072	0.072	0.382	0.074
A ₂	0.074	0.075	0.384	0.071
A ₃	0.071	0.069	0.312	0.072

- Positive and negative ideas:

Since all indices are positive, then, $V_j^+ = [Max Vij]$

$$V_j^+ = [0/074, 0/075, 0/0384, 0/074]$$

$$V_j^- = [min Vij] = [0/071, 0/069, 0/312, 0/071]$$

Now, we need to obtain the distance to positive and negative ideals:

$$di^+ = \sqrt{\sum_{j=1}^n (vij - vj^+)^2} = d_{1^+} = 0.004, d_{2^+} = 0.003, d_{3^+} = 0.072$$

$$di^- = \sqrt{\sum_{j=1}^n (vij - vj^-)^2} = d_{1^-} = 0.07, d_{2^-} = 0.072, d_{3^-} = 0.001$$

Finally, by using the formula $Cl = \frac{d_i^-}{d_i^- + d_i^+}$, we will obtain the value of Cl.

According to $Cl_3 > Cl_1 > Cl_2$, first, the A2 alternative (option), then the A1 alternative (option), and finally the A3 alternative (option) are closest to the ideal: $A_3 > A_1 > A_2$.

$$Cl_1 = \frac{0.07}{0.07 + 0.004} = 0.946$$

$$Cl_2 = \frac{0.072}{0.072 + 0.003} = 0.960$$

$$Cl_3 = \frac{0.001}{0.001 + 0.072} = 0.013$$

Therefore, we concluded that the external factors are the closest to the ideal, followed by the internal factors of the organizations, and eventually, there are the international factors, which are beyond the control of the organization and need to be further studied.

5 CONCLUSION

The growing international markets have provided a proper environment for the development of foreign trade of firms in the target markets. In this context, adopting appropriate policies and strategies and doing adequate research may resolve many problems of managers in interacting with international markets. Winning in today's competitive world needs a proper and up-to-date strategy. With the ever-increasing penetration rate in human societies, the Internet has developed a platform to accelerate exchange and a tool for product introduction, pricing, and direct distribution of goods as a manifestation of face-to-face exchanges, which is indeed one of the most prominent and controversial topics in business and marketing. The Internet has provided a context for companies to reach global markets as one of the most effective marketing tools with global coverage. This study was designed to examine and prioritize the effective factors on the success of Internet marketing of export companies by utilizing the TOPSIS multi-criteria decision-making technique.

5.1 Analyzing the results of testing the hypotheses

The findings of testing the first hypothesis confirmed the impact of internal factors on the success of internet marketing in the studied companies. Studies demonstrated that the obtained results were consistent with the research results of Mohammad (2022) and Leo et al. (2020). Substantially, focusing on internal factors such as generating marketing content, defining a targeted marketing strategy, and enhancing marketing capability can significantly contribute to the success of Internet marketing. In general, the organization's capability of utilizing Internet marketing tools and techniques plays a major role in marketing success. This also includes the use of search engine optimization (SEO), pay-per-click (PPC) advertising, social media marketing, email marketing, and other digital methods.

The findings of testing the second hypothesis confirmed the impact of external factors on the success of internet marketing in the studied companies. Studies demonstrated that the obtained results were consistent with the research results of Lee and Kim (2007) and Nuseir & Aljumah (2020). Accordingly, one may say that planning about effective external factors such as technological changes, market growth trends, and consumer behavior changes along with changes in laws and regulations can be highly influential and determining. Furthermore, global and economic developments can dramatically affect the success of Internet marketing as well. For example, changes in the exchange rate, global economic situation, international trade policies, and other similar factors can influence the marketing process and the organization's performance in international markets. In addition to the abovementioned factors, social and cultural developments also have an important impact on Internet marketing. Factors such as changes in consumers' habits and behaviors, cultural attitudes, and social and ethical issues can affect marketing strategies. In general, analyzing and understanding various external factors and adapting the marketing strategy to them seems to be extremely important.

The findings of testing the third hypothesis confirmed the impact of international factors on the success of internet marketing in the studied companies. Studies demonstrated that the obtained results were consistent with the research results of Tolstoy et al. (2020), Katsikeas et al. (2020), and Jung and Shagai (2023). Accordingly, one may conclude that understanding and adapting to cultural changes and consumer behavior at the international level is crucially important in Internet marketing. Cultural differences, habits, needs, and preferences of consumers in different countries and regions may have a great impact on marketing strategies. Thus, it seems important to evaluate the target markets and adapt the marketing strategy to the needs and preferences of international customers. Moreover, international regulations and laws have a great impact on Internet marketing as well. Various countries may have different restrictions and laws concerning advertising, privacy protection, consumer rights, and other aspects of marketing. Organizations need to be familiar with these rules and adjust their marketing strategies accordingly. International economic and financial developments have an important impact on Internet marketing as well. Factors such as exchange rates, price changes, demand and supply, economic conditions of countries, and other economic factors may influence the marketing strategy. For instance, changes in exchange rates can change the processes of pricing, competitiveness, and profitability for organizations.

5.2 The study limitations and suggestions for future research

Like other works and studies in the field of marketing management and social sciences, this study also faced some limitations in practice, some of which are mentioned below. Since this was an exploratory study, its findings are limited to the sample size, and thereby, the results may change in the case of any

changes in the sample size. Also, different opinions concerning the research topic among the members of the statistical population can somewhat influence the study results. The studied population in the current research included 52 operating companies in the export sector of Mazandaran province, Iran. Thus, the obtained results belong to these firms, and specifically, to the field of commerce and export, and cannot be somehow generalized to all organizations and companies in other industries. Researchers are suggested to work on the research topic in other organizations and manufacturing and service-providing industries inside and outside of Iran and compare the results obtained with the current research. Since this study examined the impact of internal, external, and international factors on the success of Internet marketing, the researchers are suggested to examine the effect of other variables and factors on the success of Internet marketing, factors such as technological infrastructure and cultural features in different geographical areas.

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