

Validation of the internationalization model of small and medium-sized industries with marketing innovation: Emphasizing the mediating role of market orientation in the direction of the prosperity of the leather industry market, focusing on the East Azerbaijan region

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Abstract

In developed countries, most of the economic activities of these countries are carried out through small and medium-sized companies, and SMEs act as the backbone of the dynamic economy of these countries. The purpose of this study is to design and validate the internationalization model of small and medium industries with marketing innovation, emphasizing the mediating role of market orientation in the direction of the prosperity of the leather industry market, centered on the East Azerbaijan region. The statistical population in the quantitative part included 1620 active units in East Azarbaijan province, and the statistical sample included 310 people based on the Morgan-Karjesi table, who were selected by a simple random sampling method. To do sampling, cluster sampling and available people were used for sampling. A Likert scale questionnaire was used to collect data. Structural equation modeling method and smart-pls software were used for data analysis. The findings of this study showed that marketing innovation has an effect on the performance of innovation and internationalization with mediating variables of market orientation, process innovation, innovation capability, and product innovation.

Keywords:

Internationalization, small and medium industries, marketing innovation, market orientation, marketing capabilities
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1 Introduction

In developed countries, most of the economic activities of these countries are carried out through small and medium enterprises, and SMEs act as the backbone of the dynamic economy of these countries. Today, the establishment and support of small and medium enterprises is one of the main priorities in economic development programs in many developed and developing countries. Small and medium-sized companies can meet the needs of today's changing

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societies due to their flexible structure [6]. Regarding the importance of these companies, it can be said that in 2018, there were at least 2.3 million small and medium enterprises in Germany, which have a staff of 20 million and have 70% of the total number of employees in this country. There are about 25 million small and medium-sized enterprises in the United States, accounting for more than 50 percent of the private sector workforce. These firms alone account for half of US gross domestic product and account for 96% of total US exports. Internationalization is one of the growth strategies through which companies seek market opportunities abroad [13] and. In order to achieve competitive advantage, small and medium-sized industries must pay attention to many factors, one of these factors is innovation capabilities. Marketing innovations or innovative marketing include a set of methods and tools for better production and sales [3]. Marketing capabilities are an integrated process in which companies use tangible and intangible resources to understand the complexity of specific customer needs, achieve a relative product differentiation for competitive advantage, and ultimately gain appropriate brand quality [11]. In the present study, an attempt has been made to examine the marketing innovation strategies of small and medium-sized leather companies in the East Azerbaijan region as a hub for the production and export of leather and leather products that lead to internationalization. This includes all small and medium-sized industries producing natural leather and leather products in the East Azerbaijan region, which are seeking to enter international markets. According to the statistics of the shoe manufacturers' unions in the province, there are 2580 licensed members, from which about 1400 members are active production units, of which 28 members have the membership of Commercial Office and 5 members have business cards. According to the information contained in the industrial towns of East Azerbaijan province, the city of Tabriz has 365 units of natural leather production, from which 220 units have exploitation licenses and 165 units produce natural leather without exploitation licenses. Of these, 110 units have business cards and 12 units actively export to Central Asian and Eastern European countries.

Theoretical literature of research

Innovation

Innovation is of particular importance in the manufacturing industry. Doing research in the field of innovation in manufacturing industries is very necessary and plays an important role in increasing the competitiveness and survival of these industries. Despite the fact that innovation as a resource is essential for the survival of today's organizations; However, many organizations and companies have not paid serious attention to the types of innovation. Besides, although many studies have examined the relationship between innovation and company performance, but little research combines the types of innovation components and their impact on various aspects of company performance. Taken together, a look at the economic and social systems in many developed and developed countries of the world shows that the establishment and support of small and medium enterprises is one of the main priorities to enter a competitive global trade market [5]. Internationalization is the result of providing a basis for change. In fact, the growth of companies provides the ground for them to move towards internationalization. Internationalization is generally referred to as the process of corporate adaptation (strategy, structure, resources) to the international environment [8, 10]. Marketing innovation is not just about producing a new product, it is about all the marketing processes (from the smallest changes to the most fundamental ones) and the goal is to make more profit. Marketing innovation means the implementation of a marketing method that includes dramatic changes in a product's design, packaging, promotion, pricing and position in the market. The goal of marketing innovation is to better identify the needs of customers, open new markets or position new products of the company in the market with regard to increasing the company's sales [2].

Marketing capabilities

Market orientation is a strong source of sustainable competitive advantage, as it is difficult to imitate and focuses the organization on finding opportunities for growth and reducing time lags in response to opportunities, and market orientation is a fundamental aspect of culture organization that creates competitive values, norms, artefacts, and behaviours, which in turn provides an opportunity for competitive advantage. The concept of marketing is about how the organization thinks about undertaking the necessary activities to implement the marketing concept [?]. Marketing capabilities are an integrated process in which companies use tangible and intangible resources to understand the complexity of specific customer needs, achieve a relative differentiation of products for competitive advantage, and ultimately gain appropriate brand quality. Marketing capabilities are integrated and coherent processes that are designed to apply the collective skills, knowledge and resources of the company, identify market needs and improve the value of the company's goods and services. Through these capabilities, the company is able to adapt itself to changing market conditions and use market opportunities to deal with competitive threats [7].

Research background

The studies conducted in this area, for example, Sanobar et al. [9] in their study called "the internationalization of knowledge-based companies: the role of foreign market knowledge and recognition of international entrepreneurial opportunities" suggest that helping the spread of the positive effects of knowledge-based companies on the country's economy, the development of market knowledge capabilities and recognition of international entrepreneurship opportunities for managers and employees should be considered as strategic priorities. Amini and Fattahi [1] in their study "Designing a model for internationalization of small and medium enterprises in Nano-based knowledge-based companies", showed that the ability to start the internationalization process of small and medium-sized businesses, the existence of sustainable competitive advantage in the world-class with the existing drivers is in the entity of the entrepreneur as well as in the heart of the business, and will intensify depending on the market situation, the level of internal competition, as well as the size of the company and the existing experience of the company. Rahimniya et al. [4], according to the moderation test in their study "Examining the impact of innovation strategies on the performance of export businesses", found that in the conditions of high competition, the use of the process innovation strategy is more efficient and effective than the use of the product innovation strategy. Wenbin et al. [12], in their study "the longitudinal effects of internationalization on firm performance: the moderating role of marketing capability", found that having marketing capabilities helps internationalization and it also leads to product development, but not having the capability marketing skills will not bring such positive results.

Table 1: Summary of related research

writers	Research title	Research results
Sanobar et al. [9]	Internationalization of knowledge-based companies with emphasizing on the recognizing of international entrepreneurial opportunities	They suggest that to help spread the positive effects of knowledge-based companies on the country's economy, the development of market knowledge capabilities and recognition of international entrepreneurial opportunities for managers and employees should be considered as strategic priorities
Amini and Fattehi [1]	the model of internationalization of small and medium-sized enterprises in nano-based knowledge-based companies	These results show that it is possible to start the process of internationalization of small and medium-sized Designing businesses, the existence of a sustainable competitive advantage in the world class with the drivers in the individual entrepreneur and also in the heart of the business, depending on the market situation the level of internal competition and the size of the company. and the existing experience of the company will be intensified.
Rahimnia et al. [4]	Examining the impact of innovation strategies on the performance of export businesses	According to the moderation test, it was found that using the process innovation strategy is more efficient and effective than using the product innovation strategy in the conditions of high competition intensity.

Conceptual model and research hypotheses

Research Hypotheses

1. Marketing innovation is effective on the internationalization of small and medium industries by emphasizing the mediating role of market orientation.
2. Marketing innovation is effective on the internationalization of small and medium industries by emphasizing the mediating role of process innovation.
3. Marketing innovation is effective on the internationalization of small and medium industries by emphasizing the mediating role of innovation capability.
4. Marketing innovation is effective on the internationalization of small and medium industries by emphasizing the mediating role of product innovation.
5. Marketing innovation is effective on the internationalization of small and medium industries.
6. Marketing innovation affects the performance of innovation in small and medium industries.

7. The performance of innovation is effective on the internationalization of small and medium industries.
8. Innovation capability is effective on product innovation in small and medium industries.
9. Innovation capability is effective on process innovation in small and medium industries.
10. Market orientation is effective on process innovation in small and medium industries.

Research method

The current research is quantitative. The statistical population of the research is equal to 1620 active units in East Azarbaijan province, and the statistical sample is based on the Morgan-Karjesi table of 310 people, and these people were selected by simple random sampling. It should be noted that 345 units are related to the northern region of East Azerbaijan province, 502 units are related to the western region of the province, 217 units are related to the southern region of the province, and 556 units are related to the eastern region of the province. The tool of data collection was done through a researcher-made questionnaire using the field method. Structural equation model method and smart pls software were used to analyze quantitative data.

Findings

In this section, structural equation modeling was used to validate the model. There are various methods to implement structural equation modeling. One of the newest approaches in this regard is the partial least squares method, which is used for low samples. To analyze the quantitative data while using descriptive methods, the structural equation modeling method was used using SPSS and smart pls software. Usually, the first criterion that is considered in reflective measurement models is the reliability of internal consistency. The traditional measure to control internal consistency is Cronbach's alpha, which calculates the estimate for reliability based on the internal correlation of measures. If Cronbach's alpha is greater than 0.70, the internal consistency and one-dimensionality of the block are confirmed. In addition to Cronbach's alpha, composite reliability used in PLS path models to evaluate the internal consistency reliability. If the value of this index, known as P Dillon-Goldstein, is more than 0.70, the composite or combined reliability of the model is also confirmed. Examining convergent validity means that the set of measures explains the main construct. suggested the use of the Average Variance Extracted (AVE) as a measure of convergent validity. A minimum AVE of 0.5 indicates sufficient convergence validity, meaning that a latent variable can explain on average more than half of the variability in its measures.

Table 2: Composite reliability table and Cronbach's alpha

Research variables	Composite reliability	Cronbach's alpha	Mean variance-extracted
internationalization	0.840	0.878	0.858
Innovation performance	0.910	0.899	0.942
Innovation capability	0.918	0.901	0.930
Marketing innovation	0.882	0.886	0.947
Process innovation	0.908	0.877	0.926
Product innovation	0.844	0.883	0.944
Market orientation	0.910	0.886	0.865

As you can see, the values obtained for Cronbach's alpha and composite reliability are all greater than 0.70, which indicates the optimal reliability of the research variables. Therefore, measurement models have good reliability. As shown in the table above, the value of AVE for all latent variables is greater than 0.5. Therefore, it can be said that convergent validity of measurement models is desirable. In Fornell and Larker validity, the square root value of each structure is shown by the correlation values between the other construct.

Table 3: Fornell and Larker’s divergent validity measurement matrix

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
internationalization (1)	0.9219						
Innovation performance (2)	0.770	0.9695					
Innovation capabilities (3)	0.806	0.878	0.9643				
Marketing innovation (4)	0.821	0.851	0.751	0.9695			
Process innovation (5)	0.773	0.852	0.877	0.811	0.9602		
Product innovation (6)	0.687	0.838	0.777	0.775	0.716	0.9695	
Market orientation (7)	0.860	0.860	0.853	0.869	0.839	0.809	0.9273

In the present study, the constructs (latent variables) in the model interact with their own indexes rather than with other constructs. In other words, the divergent validity of the model in terms of Fornell validity is moderate. The results of research hypotheses are shown in Figures 1 and 2.

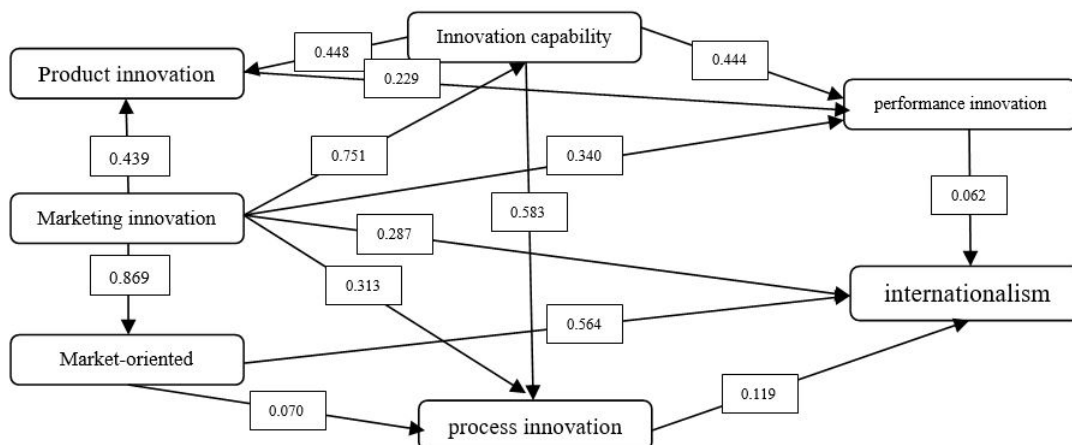


Figure 1: The measurement of overall model in standard form

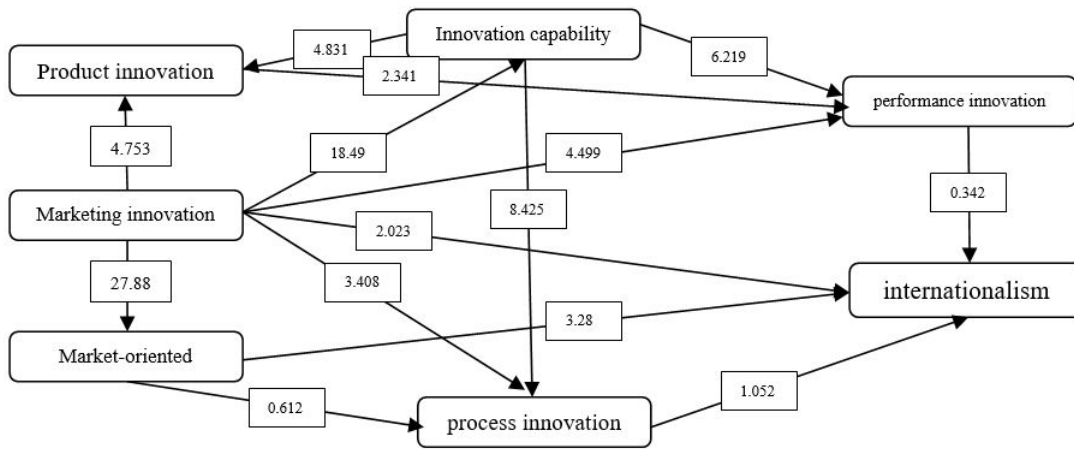


Figure 2: The measurement of overall model when significant

The results of the research hypotheses are summarized in table 4. Out of 10 research hypotheses, seven hypotheses have been confirmed and three hypotheses have been rejected.

Table 4: Results of research hypotheses using structural equation modeling

Hypothesis	independent variable	mediator	dependent variable	coefficient	meaningful	Result
1	Marketing innovation	Market orientation	Internationalization	0.564 – 0.869	3.28 – 27.88	accepted
2	Marketing innovation	process innovation	Internationalization	0.119 – 0.313	1.05 – 3.40	rejected
3	Marketing innovation	innovation capability	Internationalization	0.444 – 0.751	6.21 – 18.49	accepted
4	Marketing innovation	Product innovation	Internationalization	0.229 – 0.439	2.34 – 4.75	accepted
5	Marketing innovation	...	Internationalization	0.287	2.023	accepted
6	Marketing innovation	...	performance innovation	0.340	4.499	accepted
7	performance innovation	...	Internationalization	0.062	0.342	rejected
8	innovation capability	...	product innovation	0.448	4.83	accepted
9	innovation capability	...	process innovation	0.583	8.42	accepted
10	Market orientation	...	process innovation	0.07	0.612	rejected

The overall goodness of fit (GOF) of the model is calculated as the geometric mean (R2) and communality:

$$GOF = \sqrt{Communality \times R^2}. \quad (1.1)$$

the explained variance index R2, and the quality of the COMMUNALITY measurement model is as follows: It

should be noted that the explained variance index is checked for the endogenous constructs of the model and shows how much the dependent variable could predict or explain the dependent variable. The model fit index is shown in 4.

Research variables	R ²	communality	GOF
Internationalization	0.766	0.858	0.818
innovation performance	0.872	0.942	
Innovation capability	0.564	0.930	
Marketing innovation	0.947	
Process innovation	0.823	0.926	
Product innovation	0.689	0.944	
Market orientation	0.755	0.865	

Table 5: *GOF validity index*

The positive goodness of fit (0.818) indicates a desirable fitness of overall model. Since this value is greater than 0.35, therefore it has a desirable value. As a result, the overall fitness of the model is confirmed.

2 Discussion and conclusion

The effect of marketing innovation on the internationalization of small and medium industries with an emphasis on the mediating role of market orientation was been the first hypothesis; The path coefficient between the two variables was 0.869 and 0.564 with a significance level of 27.883 and 3.281. It was considered as desirable (it is more than 1.96) and the existence of a significant effect was confirmed. In this case, the existence of a significant effect is confirmed. In the second hypothesis, marketing innovation is effective in the internationalization of small and medium industries by emphasizing the mediating role of process innovation. The path coefficient between the two variables was 0.313 and 0.119, with a significance level of 3.408 and 1.052. It was not desirable (it is less than 1.96) and the existence of a significant effect was not confirmed. In this case, the existence of a significant effect is not confirmed.

In the third hypothesis, marketing innovation is effective on the internationalization of small and medium industries by emphasizing the mediating role of innovation capability. The path coefficient between the two variables was 0.751 and 0.444 with a significance level of 18.490 and 6.219. It was desirable (since it is more than 1.96) and the existence of a significant effect was confirmed. In the fourth hypothesis, marketing innovation is effective in the internationalization of small and medium industries by emphasizing the mediating role of product innovation. The path coefficient between the two variables was 0.439 and 0.229 with a significance level of 4.753 and 2.341. It was considered as desirable (since it is more than 1.96) and the existence of a significant effect was confirmed. In the fifth hypothesis, marketing innovation affects the internationalization of small and medium industries. The path coefficient between the two variables was 0.287, with a significance level of 2.022, which was considered desirable (since it is more than 1.96) and the existence of a significant effect was confirmed. In the sixth hypothesis, marketing innovation affects the performance of innovation in small and medium industries. The path coefficient between the two variables was 0.340 with a significance level of 4.499, which was considered desirable because it is more than 1.96. In this case, the existence of a significant effect was confirmed. In the seventh hypothesis, the performance of innovation affects the internationalization of small and medium industries. The path coefficient between the two variables was -0.62 with a significance level of 0.342, which was not desirable (since it is less than 1.96) and the existence of a significant effect was not confirmed. In the eighth hypothesis, innovation capability affects product innovation in small and medium industries. The path coefficient between the two variables is 0.448 with a significance level of 4.83, which was considered desirable because it is more than 1.96. In this case, the existence of a significant effect is confirmed. In the ninth hypothesis, the ability to innovate affects the process of innovation in small and medium industries. The path coefficient between the two variables was 0.583 with a significance level of 8.425, which was considered desirable (since it is more than 1.96) and the existence of a significant effect was confirmed. In the tenth hypothesis, market orientation affects process innovation in small

and medium industries. The path coefficient between the two variables was 0.070 with a significance level of 0.612, which is not desirable because it is less than 1.96. In this case, the existence of a significant effect is not confirmed.

In terms of market exploration and exploitation, it is suggested to the leather industry managers of East Azarbaijan province take appropriate measures to increase their market knowledge from reliable and up-to-date sources. Also, in order to increase the attractiveness and quality of products, items with more details and more innovation in the leather industry should be addressed. Managers of leather industries can help improve the quality of services and internationalization of leather industries by improving the logistics infrastructure. In addition, it is recommended that the mentioned managers should always consider the segmentation of the target market along with the correct pricing. Regarding the innovation of the product, it is suggested to the leather industry managers of East Azarbaijan province address and identify the current needs and demands of customers. In this regard, innovative packaging of products based on customer needs is suggested in the internationalization of leather industries and product production according to different cultures. Furthermore, the establishment of the research and development department in the organization will lead to providing innovative services to customers and the market, as well as the internationalization of the leather industry. Managers of the leather industries of East Azarbaijan province should take the necessary measures to provide innovative training to their employees. Providing financial resources for conducting research and new projects and the innovative performance of the organization has a great impact on product innovation.

Regarding the innovation of the process, it is suggested to the leather industry managers of East Azarbaijan province to improve the organizational processes and of course the internationalization of the leather industry by reviewing the process of providing services and products and updating the technological equipment. In this regard, the use of new methods in processes has a tremendous impact. Also, carrying out the social responsibility of the organization by observing the standardization of organizational processes is also suggested for the internationalization of leather industries. Given the administrative innovation, it is suggested to the leather industry managers of East Azarbaijan Province to make the role of the employees in the organization more prominent and effective by carefully examining the employees' duties according to innovative methods and using new management systems. Organizational managers can prevent many challenges by promoting new recruitment, hiring and evaluation systems in the organization. In addition, the participation of employees in providing innovative ideas in this field also helps the internationalization of the leather industries.

Regarding marketing innovation, it is suggested to the leather industry managers of East Azarbaijan province comply with the environmental requirements and model successful innovative experiences in order to internationalize the leather industry. Also, creating differentiation through offering new products with the help of mixed marketing management is also effective in this field. Internationalization of leather industries can be achieved by employing marketing innovation experts and using product innovation strategy. Regarding the competitive forces, it is suggested to the leather industry managers of East Azarbaijan province deal with their new strategies in terms of inflation, exchange rate and commercial policies. Also, by taking into account the size of the foreign market and the type of existing competitors, they can help the internationalization of the leather industry. In this context, managers should not ignore the growth rate of the market and its presence in new markets. Therefore, it is suggested to achieve the competitive advantage of the products by continuously monitoring the market and identifying the weaknesses and strengths of the competitors.

Regarding market orientation, it is suggested to the leather industry managers of East Azarbaijan province to pay special attention to the international obligations of the organization managers and to meet the needs and demands of the domestic markets in order to internationalize the leather industry. Establishing communication and partnership with international organizations and gaining awareness of international marketing regulations and policies will lead to improving the internationalization of leather industries. Therefore, the government's membership in the World Trade Organization is recommended through using the advantage of the geographical region in this field. Regarding the marketing capabilities, it is suggested to the leather industry managers of East Azarbaijan province to internationalize leather industries by identifying international borders and using export incentives and increasing export capacity. What is important in this regard is the international management knowledge of SAT, which leads to obtaining standards and attending international exhibitions. Relevant managers should also take necessary measures to improve the management of relations with international customers. By implementing the aforementioned strategies and proposals, achieving results and consequences such as commitment to international laws, gaining a competitive advantage, upgrading the banking exchange system, political and economic stability of the country, improving interactions with the target countries, developing internal technologies, growing organizational income, developing the name and Globalization of the organization, penetration into the international market and increase in target customers and market development will not be far from expected.

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