

ORIGINAL ARTICLE



Examining Export Performance Based on Innovative Process Strategies, Case Study: Textile Industry

Afshin Najafi¹, Ali Sabaghian², Kamran Yeganegi³

¹M.A Student, Department of Business Management, Naraq Branch, Islamic Azad University, Naraq, Iran

²Assistant Professor, Department of Industrial Engineering, Naraq Branch, Islamic Azad University, Naraq, Iran

³Assistant Professor, Department of Industrial Engineering, Zanjan Branch, Islamic Azad University, Zanjan, Iran

Corresponding Author: Kamran Yeganegi

Abstract:

Considering the position and role of export in the country's economic and social goals, as well as the issue of competition in international markets, it is important to pay attention to businesses active in export. In order to survive in the market, these types of businesses can overcome their uneconomic size through innovation in front of bigger competitors. By applying innovation strategies, businesses will be able to improve their performance and continue their existence in the environment by creating a new product or designing a new method for production. The purpose of this project is to find out, by conducting field research, what effect the use of innovation in textile companies has on their performance. The current research is a descriptive-correlational and applied research. Also, from the theoretical point of view, it is considered as one of the proof researches and from the point of view of reasoning, it is considered as one of the inductive researches. In this research, two library and field methods were used to collect information. The questionnaire was designed by the researcher based on the model taken from the research of Jud Endoboisi Edeh et al. (2020), which includes 5 components (marketing innovation, technological innovation, product innovation, process innovation and external innovation collaboration). Also, the export performance questionnaire (Zou et al., 1998) has been used. The results of data analysis in this research showed that the export performance of textile companies is based on innovative strategies and the initial assumptions of the research were confirmed and emphasized.

Keywords: textile industry, export performance, innovative strategy

Introduction

With the intensification of global competition, companies have turned to business development strategies, especially innovation (Gunday, et al. 2011). Innovation refers to the efforts of a company to find new opportunities and new solutions and gain a competitive advantage through new products, new services or improved processes (Dess & Lumpkin, 2005). Schumpeter considers innovation as a mechanism that leads to entrepreneurial profit (Ahmadpourdarani and Nasiri, 2019). When we can make the market in our favor by using innovation and introducing

new products and services, we can create more wealth. Some research shows that innovative changes have a positive effect on business performance (Wiklund, Patzelt, & Shepherd, (2009)) (Marques & Ferreria, (2009), Gandhi et al. (2011) showed that Process innovation does not affect innovation performance. One of the important consequences of the global economy is the increasing attention of companies to operate in international markets, in the meantime, the export behavior and performance of companies is one of the most important variables of interest to

researchers in the field of international marketing (Mokhtari Hashimabadi, 2016). It is when a product is exported to a foreign market. In addition, this variable has a multi-dimensional concept that requires quantitative and qualitative variables for measurement. The degree of success of a company in the matter of export can be evaluated by its export performance. (Bakhtiari and Bakhsandeh, 2018) Today, strengthening non-oil exports is one of the main and strategic concerns of the country, as well as the main concern of international companies, is to improve export performance. The complexity of the growing export process in today's world is such that organizations cannot solve some of the problems that have arisen (Kiriimi Alawijeh and Zohrehvand, 2014). In this regard, many researches have investigated the reason for the success of companies in international business environments, which has focused on marketing processes as the first step in the success and improvement of export performance (Keh et al., 2006). Marketing capabilities are used to formulate effective marketing strategies to identify and pursue international opportunities. Accordingly, it is necessary for companies to have marketing capabilities to create value for international customers, marketing capabilities require less resources than more complex capabilities, so they are core capabilities. In response to resource constraints, organizations develop distinctive marketing capabilities to modify or expand their resource base as a means to address customer preferences and develop unique value propositions. (Buccieri et al., 2020)

What is largely unexplored is the heterogeneous effects of innovation types on the performance of SMEs, especially in developing countries. (Jude Ndubuisi Edeha et al., 2020: 1) The authors of this article hope that in this research, the existing research gap will be completed by using real data from textile companies from developing countries.

Literature Review

Innovation strategy is strategies that show companies how much and in what way to use innovation to expand their operations (Gilbert, 1994).

lendel, V., & Varmus (2011) also defined the innovation strategy as follows: Changed the company's goals to focus on future business.

According to these definitions, innovation strategy is one of the most important supporting factors for innovative capabilities, companies can improve and develop their operations with the help of innovation strategy (Akman & Yilmaz, 2008).

Guan, , Yam, Tang, & Lau (2009), also claimed that improving performance requires the appropriate and robust selection of innovation strategies. Therefore, one of the ways of growth, continuity (survival) and development of companies in the considered industry in dynamic and changing environments is to create innovations. In simpler terms, innovation is an important strategic tool for creating a competitive advantage in complex environments (Akman & Yilmaz, 2008). Lu (2010) believes that these types of strategies are vital for the continued prosperity of industrial security in today's world with its growing scarcity.

Process innovation

Process innovation is often the fastest way to reduce costs, improve customer service delivery, and accelerate time-to-market. Usually, this problem can be relatively easy, cheap and available, especially in new industries.

For this, it should be checked which parts of the internal work flow of the process can be automated to reduce costs and increase productivity. For example, connecting to an online ordering infrastructure and connected to the accounting and management system, can help reduce errors in receiving information in the collections, reduce the overhead of administrative costs and significantly increase the speed of goods delivery. Similarly, the use of systems that automatically inform customers of the latest status of their order, not only reduces phone calls and customer follow-up, but also increases customer confidence.

Always updating or modifying the equipment that produces the product, or requires less operator, or has cheaper and simpler maintenance and care, should be on the agenda of the company. Sometimes, in order to optimize the process, it is necessary to redefine the job description of the personnel and try to improve the skill level of the personnel in order to reduce the delays caused by the delay and human error.

It is also necessary to plan to outsource the non-essential activities of the collection to external

suppliers and to focus the personnel for the works that create high added value for the customer, so that the administrative costs are reduced as much as possible.

- Najafi and Yeganegi (2022) The impact of innovation strategies on export performance, a case study: textile industry In this research, focusing on the textile industry, the effect of implementing innovative strategies on the export-oriented performance of this industry was investigated.
- Jude Ndoboisi Edeha & et al. (2020), The Effects of Innovation Strategies on Export Performance: New Empirical Evidence from Developing Market Firms In this research, the individual and joint effects of technological and non-technological innovations on SME export performance were experimentally examined. First, they find that product innovation has a negative effect, while process innovation leads to increased export performance. In this research, they also found that marketing innovation has a positive effect on export performance. Furthermore, the joint effects of product, process and marketing innovations are significant, albeit with heterogeneous effects on export performance. In addition, they found that the innovation-export performance relationship is influenced by foreign innovation collaborations. The findings have implications for the effective design of public policy instruments aimed at promoting firm innovation in developing countries.
- Lee, Lee and Garrett (2019), have conducted a research titled the relationship between new products and company performance. They found that the relationship between new products and firm performance increases with the introduction of marketing innovation. Technological and marketing innovations can reinforce each other, leading to cumulative positive effects on firm performance.
- Prajogo (2016), during the research, measured the impact of innovation strategies on the performance of organizations. The results stated that innovation strategies have a positive and significant effect on performance. They determined that by implementing the process innovation strategy in businesses, as business costs are reduced, the company's profit will increase. Reducing the price will

make more customers buy this product because similar products have a higher price. In this case, the company will be more profitable and the business will get a larger share of the market and improve the export performance.

- Rodil et al. (2015), have conducted a research entitled the relationship between innovation and export behavior: the case of Galician companies, technology forecasting and social change. have also shown a positive relationship between innovation and export at the level of companies. The general result of these people's studies indicated that innovation stimulates exports in industrialized countries.

Research method

In this research, two library and field methods are used to collect information. The library method is used to review literature and research records. In this method, books, domestic and international publications related to the research topic are studied. Regarding the collection of information related to the confirmation or rejection of the research hypotheses, the field method is mainly used. Also, the variables of this research are calculated and edited with Excel software, and then the research hypotheses are analyzed and tested, along with its results, according to the outputs obtained from spss software. Since the most common means of collecting information in survey research is a questionnaire, a questionnaire is also used in this research.

The questionnaire used in this research was developed by the researcher, and the questionnaire of innovation strategies was used based on the model taken from the research of Jude Ndubuisi Edeha & et al. In this research, the components of innovation strategy including 5 components (marketing innovation, technological innovation, product innovation, process innovation and external innovation cooperation) have been introduced. In the export performance variable, the export performance questionnaire (Zou et al., 1998) was used. The export performance measurement questionnaire consists of 9 items and 3 subscales of export financial performance (3 questions), strategic export performance (3 questions) and satisfaction with exporting (3 questions), which is used to measure export performance.

Table 1 . Composition of the research questionnaire in the research questions section

Number of questions	questions	Dimensions
Questions 1 to 4	4	Marketing innovation
Questions 5 to 10	6	Technological innovation
Questions 11 to 18	8	Process innovation
Questions 19 to 23	5	Foreign innovation cooperation
Questions 24 to 28	5	Product innovation
Questions 1 to 9	9	Export performance

Savis Dilijan textile company was founded as one of the sub-groups of Sharq Gostar Industrial Group in 2019 in Dilijan Industrial Town located in the central province with the aim of producing all kinds of synthetic fibers. Currently, the company has 190 employees. Of these, 30 people are directly and indirectly engaged in export, sales and marketing.

Arak Chamber of Commerce was established in 1375 according to Note 1 of Article 4 of the Law on the Establishment of Chambers in Cities. Now Arak Chamber operates with a total of 1500 members, both real and legal.

The statistical population of this research consists of 30 experts of Savis company who are directly and indirectly engaged in export, sales and marketing, as well as 135 members of the commercial department of Arak Chamber of

Commerce.

In order to determine the sample size, after collecting the statistics and figures obtained from the population size of 165 people, using the sample table of Krejcie and Morgan, the sample size of 115 people is determined by using the simple random sampling method.

Research findings

"Process innovation has an effect on export performance in the textile industry."

To check the correlation between the independent variable (process innovation) and the dependent variable (export performance in the textile industry), considering that the process innovation variable is not normal and the export performance variable in the textile industry has a normal distribution, we use Spearman's correlation coefficient test:

Table 2. The results of the Spearman test for the research hypothesis

		Correlations	
		amalkard	farayand
Spearman's rho	Correlation Coefficient	1.000	.466**
	amalkard		
	Sig. (2-tailed)	.	.000
	N	115	115
	Correlation Coefficient	.466**	1.000
	farayand		
	Sig. (2-tailed)	.000	.
	N	115	115

** . Correlation is significant at the 0.01 level (2-tailed).

According to Table 2, at the detection level of 2% error and 99% confidence, the obtained number (0.466) was between -1 and +1 for the positive process innovation variable, so there is a direct relationship between the two variables. Regression test is used to test this hypothesis. The regression method used in this research is the simultaneous or Enter method, where all variables are entered into the model simultaneously.

H0: There is no linear relationship between the two variables of process innovation and export performance in the textile industry.

H1: There is a linear relationship between the two variables of process innovation and export performance in the textile industry

Table 3. Linear regression model information in the research hypothesis

Model Summary			
R	R Square	Adjusted R Square	Std. Error of the Estimate
.446	.199	.195	.354

The independent variable is farayand.

Table4 . ANOVA table for research hypothesis

ANOVA					
	Sum of Squares	df	Mean Square	F	Sig.
Regression	6.693	1	6.693	53.373	.000
Residual	26.963	113	.125		
Total	33.656	114			

The independent variable is farayand.

The data of the linear regression test at the detection level of 1% error and 99% confidence are given in Table 3. The correlation coefficient between the two variables of process innovation and export performance in the textile industry is 0.446, which indicates a direct relationship between these two variables. The coefficient of determination of this model is 0.199, which indicates that the process innovation variable has been able to explain about 19.9% of the changes

in the export performance variable in the textile industry, and the rest of the changes are influenced by variables outside the model. The results of the ANOVA test in regression at the detection level of 1% error and 99% confidence are shown in Table 4. The sig value of 0.000 was obtained and the null hypothesis is rejected, which indicates a linear relationship between these two variables.

Table5 . Regression coefficients of research hypothesis

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
	farayand (Constant)	.315	.043	.446	7.306
	2.471	.148		16.651	.000

The results of the linear regression test at the detection level of 1% error and 99% confidence are shown in Table 5. This table shows the results of regression coefficients. The standard beta coefficient indicates the relative contribution of

the independent variable in the explanation of the dependent variable, which indicates the positive effect of the process innovation variable on export performance in the textile industry.

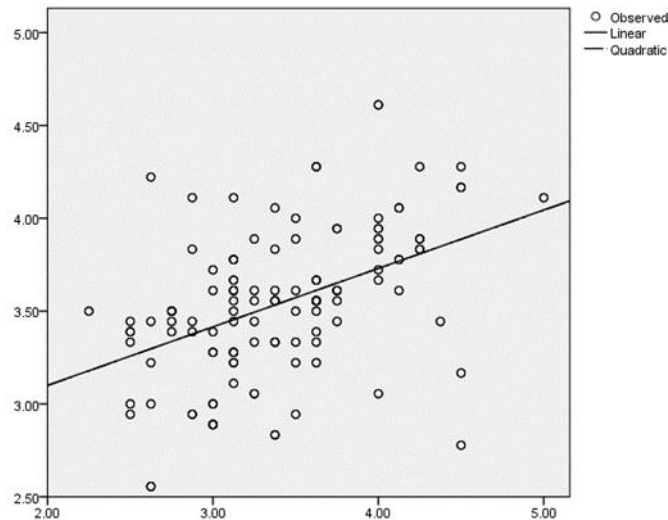


Diagram 1. Distribution diagram of variables

The scatter diagram shows that there is a positive and direct relationship between these two variables.

In general, it can be said that the equation of the regression line estimated based on the standard coefficients is as follows:

$+2.471 [0.315 \times (\text{process innovation})] = \text{export performance in textile industry}$

Therefore, the hypothesis is accepted and it can be said:

Process innovation has an effect on export performance in the textile industry.

Conclusion

Process innovation strategy has a positive and significant effect on export performance. The results of this hypothesis with the studies of Kang and etal, 1996; Ittner, & Larcker, 1998;, are in line and all confirm the positive effect of process innovation strategy on export performance. Today, due to reasons such as lack of resources, lack of economic scale, and the dubious reputation of small and medium-sized companies, innovation is of great importance in these companies. According to the studies conducted, businesses that choose process innovation as their strategy create entry barriers for their competitors to enter in today's turbulent markets where there is a lot of imitation. In other words, because the strategy of process innovation is carried out in the company's production lines, then this innovation is under the monopoly of the business itself and thereby

improves performance. On the other hand, by implementing process innovation strategy in businesses because it reduces its costs, the performance of the company will improve.

Acknowledgment

The authors express their utmost gratitude to the management of Savis Textile Company of Dilijan and the Arak Chamber of Commerce for their cooperation in compiling this research.

Reference

1. GUNDAY, g. ULUSOY, g. KILIC, k, & ALPKAN, I. 2011. EFFECTS OF INNOVATION TYPES ON FIRM PERFORMANCE. 2011. International Journal of Production Economics, 133, pp. 662-676
2. Dess, g g., & Lumpink, G.T. (2005). The role of entrepreneurial orientation in stimulating effective corporate entrepreneurship. Academy of management executive, 19(1), 147-156
3. Marques, s. c. & ferreria, j. 2009. Sme innovation capacity, competitive advantage and performance in a traditional industrial region of Portugal. Journal of technology management and innovation, 4(4), 53-68
4. Wiklund, J. Patzelt, h. Shepherd, d, a. 2009. Building an integrative model of small business growth. Small Bus Econ (2009) 32:351-374
5. Buccieri, D., Javalgi, R. G., & Cavusgil, E. (2020). International new venture performance: Role of international

- entrepreneurial culture, ambidextrous innovation, and dynamic marketing capabilities. *International Business Review*, 29 (2), 101639
6. Jude Ndubuisi Edeha .Divine Ndubuisi Obodoechib . Encarnación Ramos-Hidalgo.(2020). Effects of innovation strategies on export performance: New empirical evidence from developing market firms. *Technological Forecasting and Social Change*. Volume158, September, 120167. <https://doi.org/10.1016/j.techfore.2020.120167>
 7. Lee, C. (2011); “Trade, productivity, and innovation: Firm-level evidence from Malaysian manufacturing”, *Journal of Asian Economics*, 22, 284–294.
 8. Akman, Gulsen&Yilmaz, Cengiz (2008). Innovative Capability , Innovation Strategy and Market Orientation :An Empirical Analysis in Turkish Software Industry . *International Journal of Innovation Management* ,12(1),PP 69-111.
 9. Iendel, V., & Varmus, M. (2011). Creation and implementation of the innovation strategy in the enterprise. *Economics and management*, 16, 819-825.
 10. Gilbert, J.T. (1994). Choosing an innovation strategy: theory and practice. *Business Horizons*, 337(6): 16-21
 11. Guan, J.C., Yam, R.C.M., Tang, E.P.Y. & Lau, K.W.A. (2009). Innovation strategy and performance during economic transition: Evidences in Beijing, China. *Research Policy*, 38 (5): 802-812.
 12. Lu, W. (2010). An improved SWOT approach for conducting strategic planning in the construction industry. *Journal of Construction Engineering and Management*, 136(12): 1317-1328.
 13. Mokhtari Hashimabad, Mohammad Reza, (2016). Investigating the role of export orientation and marketing capabilities on export performance (case study: companies active in the field of live cattle export). Master's thesis in the field of business management, international orientation, Islamic Azad University, Naraq branch
 14. Karimi Alawijeh, Mohammadreza. Zohra Vand, Tahereh. (2014). The strategic effect of market and technology turbulence on the relationships between inter-task interactions and export performance, *Strategic Management Studies*, No. 22, Summer, page 152145-131
 15. Bakhtiari, Mina. Fakhshandeh, Qasim. (2018). Investigating factors affecting export performance with the mediating role of marketing mix adaptation in export companies of Khuzestan province, *International Business Management*, Faculty of Economics and Management, Tabriz University, second year, number 3, fall, page 145-162
 16. Ahmadpour Dariani ,Mahmoud, Mohammad Kazem Nasiri, (2013) *Entrepreneurship Theories*, Aghah Publishing
 17. Najafi , Afshin , Yeganegi , Kamran (2022) , The impact of innovation strategies on export performance, a case study: textile industry , *International Journal of Scientific Research and Management (IJSRM)*, Volume 10 , Issue 12 , DOI: 10.18535/ijrm/v10i12.em05