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Performance Gap Analysis Under the Influence of Management Innovation and Business Model Innovation

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ABSTRACT

In the present study, the effect of Management innovation and Business model innovation on firm performance has been investigated by considering the mediating role of sustainable competitive advantage. The present study in terms of applied purpose and in terms of the data collection method, is descriptive-survey, because it describes the variables in the statistical sample studied. The statistical population of the research is all Managers and vice presidents of export-oriented production firms located in industrial parks of Khouzestan province in Iran. The study of statistical results showed that the variables of management innovation and business model innovation have a positive and significant effect on firm performance. Also, the variable of sustainable competitive advantage with a positive effect on firm performance, mediates the relationship between two independent variables of research with the dependent variable. Management innovation considers new ways to design a strategy, change firm practices, compensate the service system to organizational members, and create adaptation and change in the firm. Because it is difficult to emulate innovation in management, it will increase the ability of firms to maintain their competitive advantage, and this will also improve performance. Also, firms can achieve a sustainable competitive advantage and thus superior performance by properly utilizing resources through business model innovation and turning it into a kind of core competency with the continuation of innovative practices in line with developments resulting from the dynamics of the business environment.

Keywords: *Strategic Orientation, Sustainable Competitive Advantage, Business Model Innovation, Management Innovation*



Introduction

Today, fundamental and transformational changes in the business environment have challenged firms to maintain superior performance in the long-term (Hock-Doepgen et al., 2021). Organizations To quickly respond to technological change, competition, and client preferences, the creation of new organizational skills such as flexibility or expertise as well as successful performance requires coordination between their business, information systems, and strategy (Gomes & Romão, 2017). Therefore, the main focus of strategic management research is on this issue and the main mission of this research is on how to improve the performance of firms in dynamic environments. In an environment where firms are exposed to dynamic competition, achieving a sustainable competitive advantage is critical to survival and long-term success (Keat et al., 2018). somehow, sustainable competitive advantage can be considered as the most fundamental concept of strategy (McGrath, 2015). And the firms that have sustainable competitive advantage increase their performance. Therefore, achieving and maintaining competitive advantage has become the ultimate goal of strategic management of firms (Na et al., 2019). Competitive advantage is the result of managerial decisions and refers to the ability of firms to achieve higher performance than competitors (Kim et al., 2020). In this regard, firms employ different strategies to compete and maintain stable positions in markets (Evans & Bosua, 2017). According to Grant, one of the main sources of competitive advantage is strategic innovation; Where organizations strive to bring value creation to their customers by creating and applying new ways of doing things, including business models innovation (Grant, 2017). Business model innovation as an emerging concept in strategic management research has attracted the attention of strategists, academics and business professionals (Clauss et al., 2019). And it has helped them understand the role of business model innovation in order to achieve a competitive advantage because it is easy and cost-effective to imitate a new product, while imitating a complete business model is very difficult (Bashir & Verma, 2019). So that firms, so that firms, by focusing on business model innovation, have to Manifold their pace of achieving sustainable competitive advantage (Zhang et al., 2016). The results of studies indicate that business model innovation has a significant effect on competitive advantage (Anwar, 2018; Cheah et al., 2018; Khan et al., 2019). On the other hand, many researchers have studied business models from the perspective of innovation and stated that innovation is one of the main factors of success in order to sustain the performance of companies (Clauss et al., 2019). The results of the Foss and Saebi (2017), Anwar (2018), Pang et al. (2019), and Clauss et al. (2019) studies show the existence of a significant relationship between business model innovation and sustainable competitive advantage. In other words, business model innovation plays an effective role in achieving competitive advantage, especially in turbulent and dynamic markets, and leads to superior performance. Moreover, Organizations are always looking for alternative resources that are difficult to emulate. These resources can be managerial resources that exist only in the minds of those who administer organizations. The results of some past research show that the success or failure of an organization depends on the managers who are responsible for it (Honyenuga et al., 2019). companies must implement managerial innovations that create and maintain their competitiveness in the rapid development of the science and technology environment. It is difficult for competitors to imitate management innovation and is likely to increase companies' ability to maintain a

competitive advantage (Keat et al., 2019). However, there is little empirical evidence in the literature about the relationship between management innovation and organizational performance, and there seems to be a gap in the management innovation literature and how it helps the organization to superior performance. Management Innovation Increases Companies' Ability to Achieve Competitive Advantage by Innovating Management Principles and Processes (Honyenuga et al., 2019). Therefore, it seems that the management innovation approach, by challenging the managers of organizations in order to increase organizational performance, encourages them to think outside the box. Management innovation also changes the way managers are appointed, decision-making, it is about coordinating activities and motivating people. These changes are part of organizational management innovation that, by establishing practices, new management processes or structures help (Ganter & Hecker, 2014; Mol & Birkinshaw, 2006). Although the resource-based view speaks of creating and maintaining a sustainable competitive advantage, however, many issues and knowledge gaps have been highlighted in this approach that needs further research. In fact, the main purpose of the research is to answer the question that what is the effect of management innovation and business model innovation on the performance of export-oriented firms by explaining the mediating role of sustainable competitive advantage?

Theoretical framework of research

Management innovation

Innovation as an essential concept over the Past periods has devoted large literature that has been largely inspired by Schumpeter's works (Keat et al., 2019). Management innovation or distinct change in the principles of traditional management, Processes, and practices or a conventional organizational form that significantly revises the way management works (Ganter & Hecker, 2014). replicate management innovation is hard and likely to increase companies' ability to maintain their competitive advantage (Mol & Birkinshaw, 2006). Innovation as a multidisciplinary concept has always been of interest to many researchers in the field of management and generally, it can be defined as the creation and acceptance of new ideas (Honyenuga et al., 2019). The initial concept of management innovation was created as organizational innovation in economics literature to make a difference with technological innovation. Stata (1989) was the first scholar to differentiate management innovation from technological innovation (Stata, 1989). Management innovation is new ways to formulate strategies and tasks and structured units, change firm management processes and administrative systems, inspire and reward organizational members, and create adaptation and change in the firms (Damanpour & Aravind, 2012). Management innovation is the creation and implementation of a management function, process, structure, or method to progress and advance organizational goals. Therefore, it seems that the management innovation approach, by challenging the managers of organizations in order to increase organizational performance, encourages them to think outside the common framework. Management innovation is also about changing the way managers are appointed, making decisions, coordinating activities, and motivating people. These changes are part of organizational management innovation that helps establish new management practices, processes, or structures (Honyenuga et al., 2019).

Business model innovation

Advances in technology have led to a shift in the traditional balance between customers and suppliers by creating new communication regimes in the business environment. Therefore, business managers must select and manage alternative strategic options in order to move towards value creation. Their efforts to answer the question of how they can best present a value proposition to their customers? Has led to the development of the term business model innovation (Jagoda et al., 2010; Clauss et al., 2019). Business model innovation can be defined as an organizational innovation that changes the way businesses create, present, and capture value for stakeholders (Hock-Doepgen et al., 2021). And it has reached its peak over the years with the advent of the Internet (Chesbrough, 2010) As a result, managers must consider different options for replacement and move toward value creation, taking into account technological advances and changes in the way they communicate. Their efforts to respond to how to deliver a better value proposition have led to the development of the term business model innovation (Clauss et al., 2019). Business model innovation can be defined as an organizational innovation that changes the way businesses create, present, and capture value for stakeholders (Hock-Doepgen et al., 2021). firms are required to innovate in response to changing customer demands and lifestyles, and innovation plays a key role in creating value and maintaining companies' competitive advantage. Researchers have studied business models from the perspective of innovation and stated that business model innovation is one of the main success factors in order to sustain the performance of firms (Chesbrough, 2010).

Sustainable competitive advantage

Competitive advantage is a set of unique capabilities of an economic unit that allows it to penetrate arbitrary markets and be superior to competitors (Camison & Lopez, 2011). In this regard, Kim et al. (2011) state that competitive advantages can be classified in different ways according to different indicators, which is one of the most important of these classifications in terms of Longevity, reflectivity, and the ability of competitors to imitate and copy it fall into two categories: sustainable competitive advantage and transient(temporary) competitive advantage. The longer the organization can use that competitive advantage over a longer period of time and cannot be easily imitated by competitors, the more stable the competitive advantage is.is in the term and it refers to a sustainable competitive advantage (Kim et al., 2011). In this context, having certain resources and special capabilities can lead to a sustainable competitive advantage. The value and scarcity of corporate resources lead to the creation of competitive advantage and the irreplaceability and inimitability of these resources lead to maintaining a competitive advantage. Businesses achieve sustainable competitive advantage when they develop a combination of attributes and perform better than competitors (Keat et al., 2019). Therefore, almost all strategic frameworks and tools used to formulate and implement the strategy, it is derived from a single basis, namely sustainable competitive advantage, and the ultimate goal of strategic management is to achieve competitive advantage (Na et al., 2019).

Firm's performance

The performance of organizations is considered as one of the basic principles in the management and most management tasks are formed based on this concept. Because the success of organizations

is reflected in their performance (Chamanifard et al., 2014). Organizational performance refers to how organizational missions, tasks, and activities and the results of their performance are performed. In another definition, organizational performance is: achieving organizational and social goals, or going beyond them and fulfilling the responsibilities of the organization (Busi & Bititci, 2006). According to Altuntas et al. (2014), organizational performance has multiple meanings. They defined the performance of the organization based on the two concepts of operational outcome means financial outcomes, which Operational outcomes include productivity and quality, and financial outcomes include return on investment and return on the shareholder. In Ho's (2008) definition, organizational performance is an indicator that measures how to achieve the goals of an organization or institution. Accordingly, the performance of the firm can also be examined from two dimensions: One is the firm's financial performance (profitability, return on investment, and liquidity cash flow) and the other is the firm's performance in terms of the market (sales growth, market share, market power, and market development) (Djaja & Arief, 2015). It can be said that the performance of the firm is the sum of the achievements that businesses attain as an organization. Studies have suggested different methods for evaluating the performance of the firm. The literature in this field shows that perceived comparative performance is a good indicator of the superiority of a business (Lee et al., 2016).

Conceptual framework and hypothesis development

Management innovation and firm performance

Management innovation is related to changes such as how managers determine the guidance of managers, how to make decisions, how to coordinate activities and motivate employees (Hamel, 2006). Management innovation by integrating and applying new methods, helps the organization to have high performance (Hervas-Oliver et al., 2018). The goal of management innovation is to increase firm performance. Management innovation is a key tool for the growth of organizations and plays an important role in improving the productivity and performance of the firm, which in turn improves the profitability of firms. Researchers believe that management innovation is the most important factor in organizational performance and significantly contributes to the positive financial performance of the firm (Zhang et al., 2019). In general, research shows that management innovation has a significant effect on firm performance (Walker et al., 2015; Magnier-Watanabe & Benton, 2017; Zhang et al., 2019). Therefore, the first hypothesis of the present study is:

Hypothesis 1: Management innovation (MI) has a positive and significant effect on firm performance (FP).

Management innovation and sustainable competitive advantage

Management innovation brings with it new management functions, processes, and structures designed to advance organizational goals. Management innovation by innovating in the principles and processes of management, increases the ability of firms to achieve competitive advantage and is in fact an essential resource for gaining a sustainable competitive advantage and improves the competitiveness of the firm by accelerating change (Keat et al, 2018; Honyenuga et al., 2019). Researchers believe that in order to maintain a sustainable competitive advantage, companies must

turn to management innovation (Yang et al., 2020). This is a key management task that leads to sustainable competitive advantage by using new management practices, processes, structures and techniques to synchronize them (Heij et al., 2020). A review of the literature in this area, considering the dynamic nature of the business environment, states that management innovation has a significant impact on firms' achievement of sustainable competitive advantage (Hinterhuber & Liozu, 2017; Keat et al., 2018; Honyenuga et al., 2019). Therefore, the second hypothesis of the research is presented as follows:

Hypothesis 2: Management innovation (MI) has a positive and significant effect on sustainable competitive advantage (SCA).

Business model innovation and firm performance

Studies focusing on the impact of business model innovation on performance improvement are very few and far between. Most studies on the impact of business model innovation to date have been conducted through qualitative methods and more research is needed on the quantitative approach. (Bashir & Verma, 2019; Phangestu et al., 2020). Accordingly, another group of researchers believes that business model innovation is the key to firm performance and there is a significant relationship between business model innovation and firm performance (Pohle & Chapman, 2006). business models Innovative are said to play a vital role in corporate performance superiority (Foss & Saebi, 2017). Studies by Anwar (2018), Pang et al. (2019), and Clauss et al. (2019) also indicate that business model innovation has a significant effect on firm performance. Therefore, the third hypothesis of the research is as follows:

Hypothesis 3: Business model innovation (BMI) has a positive and significant effect on firm performance (FP).

Business model innovation and competitive advantage

Today, increasing competition in different domains, organizations seek to achieve their goals such as creating a positive mind - set in the target community, creating customer satisfaction with the services offered and finally, access to the optimal use of their competitive advantages over competitors (Azizi et al., 2019). Therefore, firms have doubled their acquisition speed to sustainable competitive advantage by focusing on business model innovation (Zhang et al., 2016). The results of various studies show that business model innovation has a significant effect on sustainable competitive advantage (Anwar, 2018; Cheah et al., 2018; Khan et al., 2019). Scholars have proven that business models play an important role in company performance and creating a competitive advantage. According to Porter (1998), competitive advantage refers to the ability of companies to achieve higher performance than their competitors. In highly dynamic environments, companies need experience-based adaptation to create a competitive advantage. Innovative business models enable companies to commercialize their ideas, resources, and products in strategic, operational, and economic ways (Pratono et al., 2019; Lee et al., 2019). When customers gain new value from products and services, business model innovation can improve their willingness to buy new products and services and the firms performance. Therefore, the fourth hypothesis of this study is proposed:

Hypothesis 4: Business model innovation (BMI) has a positive and significant effect on sustainable competitive advantage (SCA).

Sustainable competitive advantage and firm performance

Achieving a competitive advantage with a certain level of performance is the key to the long-term success of organizations. Competitive advantage is the increasing attractiveness of the company's offers compared to competitors from the customers' point of view. Competitive advantage includes a set of factors or capabilities that always enable the company to show better performance than competitors (Sadri & Lees, 2001; Na et al, 2019). Competitive advantage includes a set of factors or capabilities that always enable the firm to perform better than competitors. A review of the literature in this area reveals a significant relationship between sustainable competitive advantage and firm performance (Ferreira et al, 2019; Kim et al, 2020; Ferreira & Coelho, 2020). Therefore, the fifth research hypothesis is presented as follows:

Hypothesis 5: Sustainable competitive advantage (SCA) has a positive and significant effect on firm performance (FP).

The mediating role of sustainable competitive advantage

Gaining a competitive advantage is one of the most challenging topics in today's competitive markets, and firms try to provide the ground for their growth and development by formulating appropriate competitive strategies and achieving a competitive advantage, increasing the competitiveness of their products. By properly utilizing resources by innovating the business model and turning it into a core competency, firms can achieve a sustainable competitive advantage and thus superior performance (McGrath, 2015). On the other hand, the rapid development of new technologies and digital communications has led to an increase in the importance of intangible resources as a vital resource for competitive advantage by organizations that will be able to create and develop a sustainable competitive advantage (Hajimohammadi et al., 2019). Researchers believe that intangible resources are a key factor in the success of firms in achieving competitive advantage in dynamic economic environments as well as improving organizational performance (Fletcher-Brown et al., 2020). In addition, companies need management innovation to maintain a sustainable competitive advantage and create new value in today's competitive environment (Yang et al., 2020). Management innovation is a strategic tool to achieve competitive advantage and improve the performance of organizations and as a strategic asset enables firms to achieve superior performance by achieving sustainable competitive advantage. Accordingly, the sixth and seventh hypotheses of the present study are presented:

Hypothesis 6: Sustainable competitive advantage (SCA) mediates the relationship between management innovation (MI) and firm performance (FP).

Hypothesis 7: Sustainable competitive advantage (SCA) mediates the relationship between Business model innovation (BMI) and Firm performance (FP).

Research conceptual model

According to the theoretical foundations and the identification of the main variables of the research and also based on the proposed hypotheses, the proposed conceptual model of the research has been designed and formulated as follows (Figure 1).

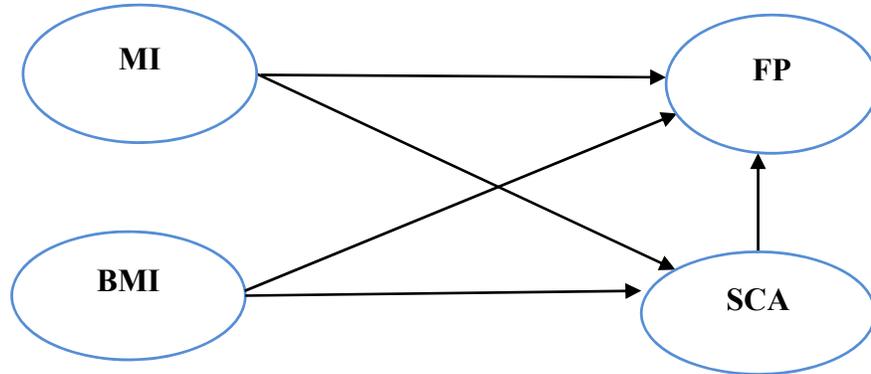


Figure 1. The proposed research conceptual model

Research method

The present study is an applied research in terms of purpose and is descriptive-survey in terms of the data collection method. This study describes the variables in the statistical population and provides applied knowledge about the quality of the relationship and the effectiveness of four variables: Management Innovation, Business Model Innovation, sustainable Competitive Advantage, and Firm Performance. The statistical population of the research is all Managers and vice presidents of export-oriented production firms located in industrial parks of Khuzestan province (Ahvaz city), whose number was 570 people. Given that the statistical population wasn't very large and its members have the same characteristics, it can be said that it is homogeneous, and therefore, a simple random sampling method was used. Due to the limited population size, Cochran's formula was used to determine the sample size, which obtained a sample size of 230 people, which was collected in a total of 219 samples (95% confidence level). In the following table (Table 1), the demographic characteristics of the statistical sample are analyzed and the findings are summarized.

Table 1. Demographic characteristics of the research participants

<i>Variable</i>	<i>Level</i>	<i>Frequency percentage</i>
<i>Gender</i>	Male	78.26
	Female	21.73
<i>Education</i>	Diploma /Associate Degree	23.91
	BA/BSC	38.69
	MA/MSC and higher	37.39
<i>Age</i>	Less than 30	6.08
	30–40	53.47
	41 and over	40.43

A standard questionnaire was used to collect data. In the first part of the questionnaire, demographic questions are raised. Also, in the second part of the questionnaire, questions are provided to measure the research variables. All structures in the model were measured using Likert scale (strongly disagree - strongly agree). To measure the four latent constructs in the conceptual model, all scales were completely adapted from the literature and a 20-item questionnaire was developed. The proposed questionnaire was used to measure management innovation (Zhang et al., 2019). Business model innovation and Sustainable Competitive Advantage were measured using a proposed questionnaire (Asemokha et al., 2019) and (Akram et al., 2018). A questionnaire used by (Clauss et al., 2019) was used to measure firm performance. Therefore, according to the data collected in this study, SPSS26 software and structural equation modeling with SMARTPLS3 were used to analyze the data.

Analysis and findings

Measurement model

In this study, the reflective model was used. Before measuring the relationships in the structural model, it is necessary that the measurement model has an appropriate level of reliability and validity. Provided that the evaluation of the measurement model shows the desired quality, the researcher will evaluate the structural model.

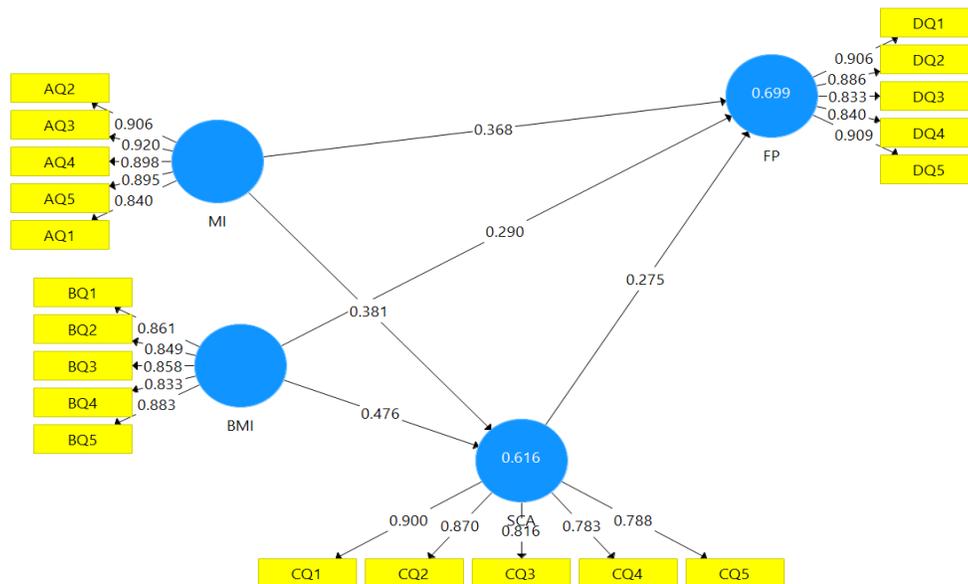


Figure 2. Confirmatory Factor Analysis

First, the outer loadings were examined. The researchers then evaluated the reliability of the external model. For this purpose, three Cronbach's alpha tests, composite reliability (CR) and Rho_A were used. Convergent validity was also assessed by the average variance extracted (AVE) test. The results of the study are shown in Table (2).

Table 2. Reliability and convergent validity for the measurement model (n= 219)

<i>Latent Variables</i>	<i>Items</i>	<i>Loadings</i>	<i>Cronbach's alpha coefficient</i>	<i>CR</i>	<i>AVE</i>	<i>Rho-a</i>
	Thresholds	≥ 0.7	≥ 0.7	≥ 0.7	≥ 0.5	≥ 0.7
<i>MI</i>	AQ1	0.840	0.935	0.951	0.795	0.937
	AQ2	0.906				
	AQ3	0.920				
	AQ4	0.898				
	AQ5	0.895				
<i>BMI</i>	BQ1	0.861	0.910	0.933	0.735	0.911
	BQ2	0.849				
	BQ3	0.858				
	BQ4	0.833				
	BQ5	0.883				
<i>SCA</i>	CQ1	0.900	0.891	0.919	0.693	0.909
	CQ2	0.870				
	CQ3	0.816				
	CQ4	0.783				
	CQ5	0.788				
<i>FP</i>	DQ1	0.906	0.924	0.942	0.766	0.927
	DQ2	0.886				
	DQ3	0.833				
	DQ4	0.840				
	DQ5	0.909				

Note: Management Innovation (MI), Business Model Innovation (BMI), Sustainable competitive advantage (SCA), Firm performance (FP), Composite reliability (CR), = Average variance extracted (AVE)

Discriminant validity was assessed by Fornell – Larcker and Heterotrait – Monotrait Ratio (HTMT) tests. The results are reported in Tables 3 and 4.

Table 3. Fornell–Larcker criterion

	<i>MI</i>	<i>BMI</i>	<i>SCA</i>	<i>FP</i>
<i>Management Innovation (MI)</i>	0.892			
<i>Business Model Innovation (BMI)</i>	0.674	0.857		
<i>Sustainable competitive advantage (SCA)</i>	0.757	0.740	0.875	
<i>Firm performance (FP)</i>	0.702	0.733	0.746	0.833

Table 4. Heterotrait–Monotrait Ratio (HTMT)

	<i>MI</i>	<i>BMI</i>	<i>SCA</i>	<i>FP</i>
<i>Management Innovation (MI)</i>	1			
<i>Business Model Innovation (BMI)</i>	0.727	1		
<i>Sustainable competitive advantage (SCA)</i>	0.811	0.804	1	
<i>Firm performance (FP)</i>	0.746	0.788	0.793	1

Structural model

Ensuring the optimal quality of the measurement model, the researchers evaluated the structural model. Initially, the focus was on the predictive power of the structural model. For this purpose, the coefficient of determination (R²), cross-validated redundancy index and the path coefficients were

used. In addition, like the measurement model, the quality of the structural model was measured by the cross-validated redundancy index or the Q2 index. The results showed that the structural model was desirable and of good quality (please refer to Table 5).

Table 5. Summary of research results

Latent Variables	R ²	f ²		Q ²
		SCA	FP	
Management Innovation (MI)	-	0.206	0.204	-
Business Model Innovation (BMI)	-	0.321	0.116	-
Sustainable competitive advantage (SCA)	0.616	-	0.097	0.386
Firm performance (FP)	0.699	-	-	0.499

In order to test the hypotheses, path coefficients and significant values were evaluated. A bootstrapping method was used to calculate significant values for all paths.

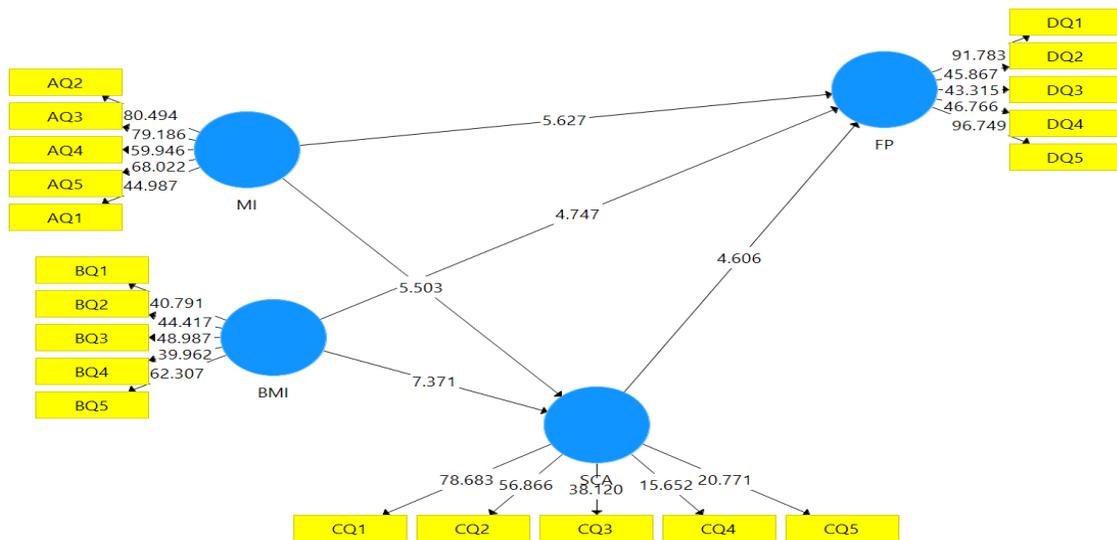


Figure 3. Results for direct hypotheses test

Table 6 shows the test results of the hypotheses. The first five hypotheses of the research were confirmed (at 95% confidence level).

Table 6. PLS-SEM path coefficients: Direct effect results (n= 219)

Hypothesis	Path	Path Coefficient	t-Statistic	p-Value	Result
H1	MI → FP	0.368	5.627	0.003	Confirmed
H2	MI → SCA	0.381	5.503	0.000	Confirmed
H3	BMI → FP	0.290	4.747	0.000	Confirmed
H4	BMI → SCA	0.476	7.371	0.000	Confirmed
H5	SCA → FP	0.275	4.606	0.000	Confirmed

Note: Management Innovation (MI), Business Model Innovation (BMI), Sustainable competitive advantage (SCA), Firm performance (FP)

To evaluate the overall model fit, the GOF index and standardized root mean square residual (SRMR) test were used. According to Table 7, the GOF value showed that the overall fit of the

model is very strong. Also, the SRMR values were less than 0.08. The results of these two tests showed that the structure of the research model is appropriate.

Table 7. Goodness-of-fit measures

<i>GOF</i>	<i>SRMR</i>
$GOF = \sqrt{AVE \times R^2}$	Estimated Model= 0.072
$GOF = \sqrt{2.990 \times 1.315} = 0.701$	Saturated Model= 0.072

Investigating the role of mediation

The Sobel test is the most common method of testing mediating coefficients. This framework was introduced by Michael Sobel in 1982. The Sobel test is used to examine the significance of the mediator variable in the relationship between the independent and dependent variables. That is, whether the effect of the independent variable on the dependent variable through the mediating variable is significant or not? Therefore, it is necessary to run the research model once without the presence of a mediator variable and again with the presence of a mediator variable in the software. In the present study, the model was implemented without the presence of a mediating variable. The value of T-Value in both triangles (first and second mediator analysis) is significant for the straight path. That is, sustainable competitive advantage has a mediating effect on the relationship between management innovation and business model innovation with firm performance (according to direct significance). On the other hand, in the Sobel test, a value of Z-Value is obtained through the following formula, which if this value is greater than 1.96 Hypothesis zero (stating that the mediating variable has no role between the relationship of independent and dependent variables) is rejected and the mediating effect in this regard is significant. The results are reported in Table 8 below. The results are reported in Table 8 below.

$$z - \text{value} = \frac{a * b}{\sqrt{(b^2 * s_a^2) + (a^2 * s_b^2)}}$$

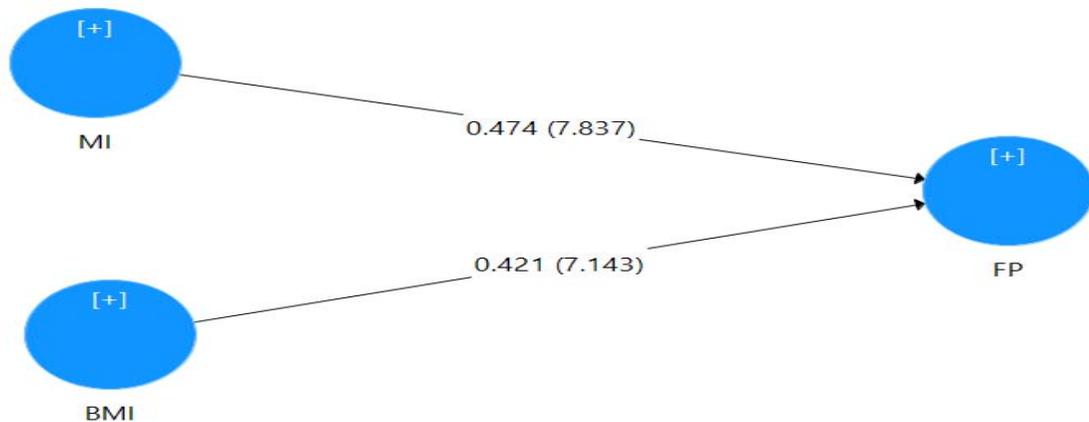


Figure 4. Total effects of MI and BMI on FP

Table 8. Sobel test results

<i>Variable</i>	<i>Z-Value</i>	<i>Result</i>
<i>H6</i>	3.53	Confirmed
<i>H7</i>	3.90	Confirmed

As it turns out, the Z-Value for sustainable competitive advantage variable is higher than 1.96. Therefore, at the 95% confidence level, the mediating effect of the variable can be confirmed.

Conclusions and implications

This study was conducted with the aim of investigating the impact of sustainable competitive advantage in the relationship between management innovation and business model innovation and firm performance in export-oriented manufacturing firms, considering the dynamics of today's business environment. In this research, first, the theoretical concepts and research literature were reviewed and then previous studies were presented and finally the proposed conceptual model was presented. Then, a standard questionnaire was used to collect research data, and finally, the collected data were analyzed. The results of this study indicate that management innovation has a positive and significant effect on sustainable competitive advantage and firm performance. Management innovation considers new ways to formulate strategy, change firm processes, inspire and reward organizational members, and create adaptation and change in the firm. Because it is difficult to imitate management innovation, it will increase firms' ability to maintain their competitive advantage, and this will also improve performance. This result is consistent with the studies of (Walker et al., 2015); (Magnier-Watanabe & Benton, 2017); (Zhang et al., 2019) & (Honyenuga et al., 2019). Also, the results of the current research model showed that business model innovation has a positive and significant effect on the sustainable competitive advantage and firm performance. These results are in line with the findings of studies (Anwar, 2018); (Khan et al., 2019); (Clauss et al., 2019); (Ferreira et al., 2019) and (Na et al, 2019). Theoretically, the findings of this study support the core theme of the resource-based view, as it has been empirically documented that the innovation of an efficient business model helps companies create a sustainable competitive advantage. Also, with the expansion of previous studies, this study examines the mediating role of sustainable competitive advantage in the relationship between business model innovation and company performance improvement, the results of which greatly contribute to the existing literature in the field of business model innovation, sustainable competitive advantage and Increases the performance of firms, especially in the market of high-tech products. By properly utilizing resources through business model innovation and turning it into a core competency by continuing innovative practices in line with developments resulting from the dynamics of the business environment, firms can achieve a sustainable competitive advantage and thus superior performance. The results of the fifth hypothesis test showed that a sustainable competitive advantage has a positive and significant effect on company performance. Gaining a competitive advantage is one of the most challenging topics in today's competitive markets, and firms try to formulate appropriate competitive strategies and achieve a competitive advantage, increase the competitiveness of their products, and provide their progress. This result is also consistent with previous studies (e.g., Sadri & Lees, 2001; Na et al, 2019; Kim et al, 2020; Ferreira & Coelho,

2020). Finally, the sixth and seventh hypotheses test also shows the mediating role of sustainable competitive advantage in the relationship between management innovation, business model innovation, and company performance.

According to the results of the research, the attention of managers and decision-makers to innovation strategies is very important. Companies can achieve superior performance by creating strategic alliances along their value chain as key partners in the business model. This is especially important in innovative and manufacturing industries that use high-level, capital-intensive production technologies.

Therefore, in addition to developing infrastructure and engineering and manufacturing processes, businesses must be careful in selecting key partners and combining resources, and directing activities in order to create value for the customer. On the other hand, in the resource-based view, whose philosophy is to emphasize the resources and capabilities of the organization to create a competitive advantage, research and development are considered as innovative capabilities. Organizations that emphasize R&D capability have a high ability to create new products. Therefore, for market-oriented organizations, creating innovative products is essential. In this regard, businesses are advised to always move on the axis of innovation by strengthening research and development processes.

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Conflict of Interests

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