

Investigating the Factors Affecting the Success of Innovation in Sustainable Businesses

Dr. Mehdi Jafarzadeh¹, Kourosh Sabzevari^{2*}

¹Department of Management, Entrepreneurship, University of Tehran, Tehran, Iran, jafarzadeh.mahdi@ut.ac.ir

²Master student, Department of Management, Entrepreneurship, University of Tehran, Tehran, Iran

*Corresponding Author Email: Sabzevari.eng@gmail.com

Abstract: The present study examines the factors affecting the success of innovation in sustainable businesses. As we know, the survival of a company or organization depends on success in various dimensions. According to its content, the success of innovation indicates the success of an innovation in the company, which is very important because, in many cases, the success of innovation in the organization provides a sustainable life for the company. Since sustainable business, in addition to the general characteristics of a company, including its economic, financial, and socio-legal dimensions, also includes the ecological, environmental dimension, so at a time when sustainable development is recognized as a requirement of human life, investigating the success of innovation in such businesses is very important. In the present study, the effect of six variables of strategic orientation, growth orientation, management orientation, resource orientation, philosophy of reward, and entrepreneurial culture on the success of innovation variable has been measured. The statistical population of the study includes companies located in Rasht Industrial City and Qazvin Industrial Town. According to the industrial operating companies, 140 questionnaires were distributed, and 77 of these questionnaires were completed and presented by senior managers. In terms of research classification in terms of data collection is descriptive research. The measurement tool included a standard questionnaire with 49 questions. The statistical method used includes SPSS 24 software and SmartPLS 3 software. The results indicate a positive and significant effect of some research variables on the success of innovation. The results show that most of the research variables except the variable of management orientation at all three levels of the company, team (teamwork and individual work) are effective in innovation success. At the same time, the entrepreneurial culture has the most significant impact on the success of innovation.

Keywords: Innovation, Success, Innovation Success, Business, Sustainable Business

Introduction

Today, businesses are facing rapid changes, and in the current competitive environment, an organization can survive if it has the necessary mechanisms to cope with these changes. One of the new approaches that help organizations' lives in today's competitive environment is paying attention to innovation to improve business performance (Salamat, Fariba, 2017).

Businesses operating in today's dynamic markets face constant challenges to success. In the past, organizations created most of their innovative activities within the company and protected it as their strategic asset, and in some industries, companies' innovative ideas were the frontier of market entry (Davoodi et al., 2016).

Creativity and innovation are characteristics that are reflected in the outputs of organizations (including goods, services, etc.), leading to a competitive advantage for the organization. In addition, having innovative thinking and behavior in the processes, operations, and management of organizations also facilitates doing things and promotes productivity and performance of the organization. Innovation in an organization is applying new ideas resulting from the creativity that can lead to a new product, new service, or a new solution to get things done. For this reason, managers and employees must use the power of creativity and innovation to adapt and adapt to rapid changes in production lines, management methods, production processes, and so on. From a competitive perspective, in organizations that innovate to achieve a competitive advantage, new knowledge and ideas of employees and managers are used to produce new products and services according to customer needs. Creativity and innovation are part of the process of developing knowledge and turning it into business value. Innovation is the selection, correction, and, most importantly, application of an idea. Innovation is a critical factor for the development of productivity and performance at various economic, organizational, and individual levels and a reason for the success and survival of organizations. Successful product and process innovation give organizations a unique advantage that competitors lack. Therefore, the fundamental question is that although the category of innovation is essential, but can small, medium, and large companies adapt to the challenges and problems they face, as well as adapt and align themselves with Increasing global changes that strongly need to develop and strengthen and use their capabilities and capabilities and the development of innovation to achieve this critical thing (Saleh Khel, Fatemeh, 2014).

Schumpeter, one of the leading Austrian school economists, states that innovation is the engine of economic development. Today, organizations that can achieve high levels of innovation and productivity are among the most successful and leading institutions and enterprises globally. The element of innovation is considered an essential element of the survival of organizations (Alirezai and Toulai, 2008).

Much attention has been paid to entrepreneurship research in recent decades, and this issue has become a valid research field. However, its main focus is on the constructs of different company levels, such as the entrepreneurial orientation, while it is ignored at the group and individual levels. The multilevel organizational approach to entrepreneurship research focusing on sustainable businesses is still in its infancy and therefore lacks comprehensiveness and homogeneous theory for use. In fact, after the determination and start-up phase of a business and for the company's long-term survival, it is necessary to use appropriate ways to achieve the company's goals. The path to success can significantly help the company survive in the long run (Flan Hoffer, 2017)

Nowadays, innovation in the current technological Environment for companies plays an important role, and most organizations are looking to create new ideas to use the knowledge to offer new products and services to stakeholders and thus the infraconstruct. Create the necessary for innovation. Currently, environmental issues are one of the most important issues globally and nationally in many countries worldwide. So far, important international conferences and meetings have been held in this regard, and countries have signed numerous treaties and conventions to prevent. They are committed to making the global Environment worse. Having enough information about the environmental situation of countries and studying the trend of environmental change has been one of the topics of concern to world forums in recent years. This issue plays a vital role in recognizing and understanding the current situation to determine the necessary changes in management and presentation of management programs (Imanipourfar et al., 2010). Innovation is not a new phenomenon, and it can be said that it is as old as human history (Nazarizadeh et al., 2013).

To examine the organizational levels of subsidiaries in ever-stable firms and thus expand entrepreneurial research, researchers must rely on credible metrics and critical firm constructs. This study is necessary because the predecessors' understanding of innovative processes for sustainability increases. Companies must consider all the essential factors of entrepreneurship to promote opportunity-based behavior that inspires the creation and implementation of innovation. Stevenson and Carlos Jerilio Messi describe entrepreneurship as "the process by which individuals pursue opportunities for themselves or within an organization regardless of the resources they control." This conceptualization of opportunity entrepreneurship is consistent with traditional definitions, such as "opportunity awareness awareness" proposed by Curzenter (Kreuzer 1979) and contemporary definitions of entrepreneurship in the management dimension, broader than the international framework. A more precise definition of consciousness depends on opportunities and one's ability to recognize opportunities that are overlooked by others, defining international entrepreneurship as "a combination of innovative, active, and risky work that transcends the boundaries of purpose and intention." Creation in organizations. "is being defined. According to Shinfar Vankata Raman, entrepreneurship is the discovery and exploitation of opportunities. The increasing importance of innovation is due to the globalization of markets and the pressure of competition on companies continuing to pursue innovation. These facts motivate companies to increase their focus on innovation as a requirement. Sustainable businesses are one of the

most important economic pillars of any country and play a vital role in economic growth. The difference between the construct and characteristics of sustainable companies and larger companies highlights the need for different methods and factors in the success of innovation processes. Sustainable businesses have different characteristics that make them superior to large companies in terms of innovation.

Factors of innovation in sustainable businesses have long been of interest to researchers, but there is still a lack of identification and description of the success factors of innovation in sustainable businesses. Describing the success of an innovation is a complex task because it is not possible to draw the exact line between failure and success. However, this goal can be achieved by identifying the success factors of innovation in sustainable businesses. A model has been used to do this: strategic orientation, growth orientation, resource orientation, management orientation, reward philosophy, and entrepreneurial culture. In general, entrepreneurship and innovation are critical to promoting an entrepreneurial culture in an organization. Previous studies have found a significant positive relationship between entrepreneurship and innovation. Innovations have a positive effect on company performance. This is especially true for sustainable businesses. Quang Peng and Eun Shua 2010 reported that innovation enhances a company's performance in an entrepreneurial field. For decades, most entrepreneurial behaviors have been explored as an effective tool for promoting innovative processes in organizations. However, the organizational breadth of the concept of entrepreneurship has not been considered in entrepreneurship research. Sustainable entrepreneurship has not yet been a top priority. After determining and starting a business and for the company to survive in the long run, it is necessary to use appropriate ways to achieve its goals. The success of innovation has long been of interest to researchers, but there is still a lack of identification and description of the success factors of innovation in sustainable businesses (Flan Hoffer, 2017). The success of innovation specifically leads to the success of the company. Thus, innovations potentially increase wealth in society (Eggers et al., 2018). It can be said that innovation is one of the tools that companies can contribute to sustainable development. Shifting business focus from competition alone to a combination of sustainability and competition can affect companies' ability to innovate (Mousavi and Bosonik, 2017).

Therefore, for the success of innovation in sustainable companies, comparing the country's current situation with the statistics of other countries or the global average, it is necessary to examine its factors. The implementation of this research helps identify these factors. The present study examines the factors affecting the success of innovation in the current world of companies' sustainability and, in particular, examines the success of innovation in sustainable businesses.

Innovation

As the driving force of a developed economy based on knowledge and technology, innovation is a condition for survival in the global market and a prerequisite for authoritative interaction with other countries. Firms innovate in isolation, but technology innovation and development result from a complex set of inter-network relationships between organizations and institutions in public and private sectors that drive their interaction. Despite the efforts made, innovation as a general concept from idea to market has a limited place in the Iranian economy, and in international measurements, the country's earnings index is lower than many of its peers in the region. (Daneshkohan et al., 2017)

Innovation means creativity has been manifested and reached the stage of action; in other words, innovation means realized creative thought; Innovation is the introduction of a new product, process, and service to the market; Innovation is the use of mental abilities to create a new thought or concept (Fallahi Maman, 2016).

Innovation is the transformation of your ideas into action and results. The primary support of innovation in all its dimensions is having and presenting new ideas. Innovations often result from a conscious and purposeful search for new opportunities, and this process begins with the analysis of these opportunities. The term innovation refers to minor changes in thinking, objects, processes, or services. Innovation is a social phenomenon and the result of collective learning, and the region's economy is based on it. These areas are more adaptable to changes and ongoing environmental threats, such as the globalization of the economy, showing that firms in these areas are flexible and adapt to new methods and strategies. Their culture is receptive to diversity and mutates with change. In general, innovation is a creative process in which resources and ideas lead to new solutions (Mir Ghafouri et al., 2013).

In today's changing world, which is not static and is constantly evolving, it is not possible to be helpful for a long time by providing goods or services without change. Due to changes in the Environment, simply collecting statistical information and providing goods and services at a minimum cost is not enough (Ismaili, 2016). One way to understand innovation is to look at it in two dimensions. The first dimension is the classification of innovation according to its changing nature. Therefore, innovation can be divided into innovation in product, service, process, organization, and market from now on. To classify innovation, the second dimension is the degree of novelty, which can range from gradual change or gradual novelty at one end of the spectrum to radical innovation that involves destructive change and novelty; At the other end of the spectrum is variable.

Sustainable business

Before the Industrial Revolution, there was a balance between man and nature, and man lived his life without destroying nature and the Environment, and the components and elements around man, both renewable and non-renewable resources, automatically balanced. They continued. However, the outbreak of the Industrial Revolution and the adoption of the modernist ideology as a model of growth, led to the destruction of the Environment and created numerous environmental problems. Based on this, planners tried to create planning models to improve the current situation that the model of sustainable development is one of these models (Ismailzadeh et al., 2014). People often see sustainable development as a shared need and long-term vision by society through social, economic integration with environmental goals (Deering, 2000).

In 1998, the UN General Assembly decided to convene an International Environment Summit, bringing the first United Nations Conference on the Environment to the international agenda. In 1987, the Human Environment Committee reviewed the world's environmental issues and finally submitted a report to the United Nations entitled *Our Common Future*. The term sustainable development was first mentioned in this report. Twenty years later, the Earth Summit was held in Rio de Janeiro. At this time, views on development seemed to change over time, from the first perspective of economic development to economic, social, and cultural development. In this conference, a plan for the implementation of sustainable development was developed under agenda 21, and the following central concept was stated: proper and efficient management and utilization of primary resources, natural resources, financial resources, and human resources to achieve an appropriate consumption pattern And desirable and the use of appropriate technical facilities and organizations that meet the needs of today and future generations (Ismailzadeh et al., 2014). In other words, as defined by the World Commission on Environment and Development (1987, WCED), the term "should" refers to the ability to meet today's demands without limiting the ability to meet future demands, while the value of a business proposal refers to It is traditionally concerned with providing economic returns. The value of a sustainable business can also be explained by the significant environmental and social value along with the economic value (Flan Hoffer, 2017).

Relationship between innovation and business performance

The speed of innovation is a vital element for market competition that can lead to better performance. Empirically, a positive relationship has been seen between the speed of delivery to the oven market and the success of a new product. Since innovation is team cohesion and a complex social capability that can not be easily developed and imitated, so companies can use this feature to keep themselves competitive in the field of identifying needs due to close contact with customers. . In addition, increasing the fixed-rate, technological development in the market and reducing the product life cycle, require companies to innovate quickly (Shatami et al., 2012). In many industries, innovation has become the most critical driver of competitive advantage. The increasing importance of innovation is partly due to the globalization of markets. Global competition has pushed companies in different industries to produce distinctive products and services and to innovate constantly. Launching new products helps companies maintain profit margins, and investing in process innovation helps companies keep costs down. In fact, by intensifying the competitive environment globally, innovation can be considered a condition for survival in any market, and its prerequisite can be considered the acceptance of the principle of competition (Sadeghi Rahimabadi, 2016).

The innovation literature notes that research and development lead to creating scientific knowledge that a company can use in a different way to develop innovations and competencies and improve performance by developing efficient processes. Forgive. Innovation, for example, can reduce the cost of producing goods by introducing new products or improving the quality of existing goods, which will increase market share and sales. Innovation enables organizations to offer valuable, rare, unimaginable, and different products. As a result, it leads to a higher level of financial performance (Hajipuro Kurd, 2011).

Research hypotheses

- H_{1a}: Strategic orientation affects the success of sustainable business innovation.
- H_{2a}: Growth orientation affects the success of sustainable business innovation.
- H_{1b}: Resource orientation affects the success of sustainable business innovation.
- H_{2b}: Management orientation affects the success of sustainable business innovation.
- H_{3a}: The philosophy of reward affects the success of sustainable business innovation.
- H_{3b}: Entrepreneurial culture influences the success of sustainable business innovation.

Research Methods

The present study is applied in terms of purpose because its purpose is to understand the necessary knowledge to determine how a specific need is met.

On the other hand, its results can be used for different groups of planners and managers of production units, especially companies located in Sepid Rud industrial town and Rasht industrial city, so it is applied research in terms of data collection, it is descriptive research because what Describes and interprets what is and pays attention to the

situation with existing relationships, common beliefs, current processes, tangible effects, or expanding trends. It is also of the correlation type because it determines whether a relationship between two or more quantitative variables (Measurable) and, if so, what is its size and extent?

The statistical population in this study includes all managers of companies located in Qazvin industrial town (140 companies) that by referring to all operating and independent companies (companies that are not a subset of a larger company) from different industrial groups have been used.

In this study, a questionnaire was used, which is a common tool in collecting field data. The present questionnaire includes 5 general questions and 49 technical questions as follows:

Table 1. Research data collection tools

Variable	Number of questions	No.	Reference
Strategic orientation	6	1-6	(Flan Hofer, 2017)
Growth orientation	4	7-10	
Resource orientation	8	11-18	
Management orientation	10	24-33	
philosophy of reward	6	34-39	
Entrepreneurial culture	6	40-45	
Innovation success	4	46-49	

In the present study, after collecting the necessary data and information through a questionnaire and observation, all of them were coded and then entered into SPSS software. To analyze general and demographic data collected from the subject (such as location, history, and the number of employees), the company mainly uses descriptive statistics by EXCEL software in data analysis, SPSS software, and test research hypotheses). Structural equation modeling (SEM) has been used using the partial least squares (PLS) approach. The approach for estimating the parameters of a structural equation model includes the oven-based covariance approach and the PLS variance-based approach. It tries to reduce the difference between the sample covariance in the covariance predicted by the theoretical model, so the parameter estimation process tries to reproduce the matrix covariance of the observed values.

Contrary to the covariance-based approach, PLS was first introduced by Sherman Wald (1975) as the partial least squares of a nonlinear resume. Instead of reproducing the experimental covariance matrix, this approach maximizes the variance of dependent variables predicted by independent variables. Like the LISREL approach, this approach consists of a structural part that shows the relationships between the latent variables and a measurement part that shows the relationships of the latent variables with its markers. In the PLS approach of the structural part, the internal model is called the external model measurement part. But in addition to the two parts, the PLS approach also has a third part called weight ratios. This section is used to estimate the values of items for latent variables. Unlike the covariance-based approach, in which the model parameters are first estimated, and then the item values are estimated by returning them to the set of all markers. In the PLS approach, the case values are calculated first. To achieve this, latent variables are met by the exact linear combination of their experimental markers. PLS then uses these estimated agents as complete substitutes for the latent variables. The weights used to determine these case values are calculated to include the maximum beneficial variance for predicting dependent variables from independent variables. This is based on the assumption that all the measured variance of the variables in the model are useful variances that need to be explained. This part of PLS analysis is similar to principal component factor analysis, which analyzes all the variance of the measured variables and estimates the factors as a simple linear combination of markers. After calculating the weights in the PLS approach, it is possible to determine the variable of each latent variable.

This is done by calculating the weight average of the markers of a construct. After calculating the values of the latent variables, the weights of the structural path are calculated through the regression of the least common squares. It is worth noting that this algorithm repeats until convergence and results are obtained.

Research Findings

Hypothesis 1: Strategic orientation influences the success of sustainable business innovation.

According to the structural model of the research in the case of significant coefficients, it is observed that the amount of t-statistic is between the two variables of being Strategic orientation and the success of innovation outside the range (-1 / 96 & 1/96) and therefore, the hypothesis is accepted. The effect of Strategic orientation on the success of innovation is equal to 0.156.

Table 2. Test results of the first research hypothesis

Result	Standard path coefficient	T-VALUE	Hypothesis			
confirmed	0.156	2.391	success of innovation	←	Strategic orientation	H _{1a}

Hypothesis 2: Growth orientation has an impact on the success of sustainable business innovation.

According to the structural model of the research in the case of significant coefficients, it is observed that the amount of t-statistic between the two variables of growth orientation is on the success of out-of-range innovation (-96/1/96), and therefore the hypothesis is accepted. The effect of growth orientation on innovation success is equal to 0.307.

Table 3. Results of the second research hypothesis test

Result	Standard path coefficient	T-VALUE	Hypothesis			
Confirmed	0.307	3.366	success of innovation	←	Growth orientation	H _{1b}

Hypothesis 3: Resource Orientation affects the success of sustainable business innovation.

According to the structural model of the research in the case of significant coefficients, it is observed that the amount of t-statistic is between the two variables of resource orientation and success of innovation outside the range (-1 / 96 & 1/96), and therefore the hypothesis is accepted. The effect of resource orientation on innovation success is equal to 0.233.

Table 4. Test results of the third research hypothesis

Result	Standard path coefficient	T-VALUE	Hypothesis			
Confirmed	0.233	2.146	success of innovation	←	Resource Orientation	H _{2b}

Hypothesis 4: Management orientation affects the success of innovative businesses.

According to the structural model of the research in the case of significant coefficients, it is observed that the amount of t-statistic between the two variables of management orientation and innovation success is out of range (-96/1/96), and therefore the hypothesis is not accepted. The effect of management orientation on innovation success is equal to 0.087.

Table 5. Results of the fourth research hypothesis test

Result	Standard path coefficient	T-VALUE	Hypothesis			
Rejected	0.087	0.855	success of innovation	←	Management orientation	H _{1b}

Hypothesis 5: The philosophy of reward affects the success of sustainable business innovation.

According to the structural model of the research in the case of significant coefficients, it is observed that the amount of t-statistic between the two variables of reward philosophy and innovation success is out of range (-1 / 96 & 1/96), and therefore the hypothesis is accepted. The effect of reward philosophy on innovation success is equal to 0.271.

Table 6. Test results of the fifth research hypothesis

Result	Standard path coefficient	T-VALUE	Hypothesis			
Confirmed	0.271	2.954	success of innovation	←	philosophy of reward	H _{1b}

Hypothesis 6: Entrepreneurial culture has an impact on the success of sustainable business innovation.

According to the structural model of the research in the case of significant coefficients, it is observed that the amount of t-statistic is between the two variables of entrepreneurial culture and the success of innovation outside the range (-96/1/96), and therefore the hypothesis is accepted. The impact of entrepreneurial culture on the success of innovation is equal to 0.331.

Table 7. Results of the sixth hypothesis test of the research

Result	Standard path coefficient	T-VALUE	Hypothesis			
Confirmed	0.331	3.514	success of innovation	←	Entrepreneurial culture	H _{3b}

conclusion

Based on the test results of the first and second hypotheses at the company level based on the effect of strategic orientation and growth orientation on innovation success, it is suggested that companies prepare a strategic plan so that the organization's strategy, in the long run, is transparent and traceable. Also, the growth of the company should be considered through innovations and considering more environmental opportunities. Based on the test results of the third and fourth hypotheses at the team level (working group) on the effect of resource orientation and management orientation, and innovation success. With the moderating role of environmental attitude, it is suggested that the material resources of skilled human resources, materials, and equipment, etc.) and spiritual (technical knowledge, etc.) of the company be used effectively in the success of innovation and collection managers to be more effective. To have innovation management training, based on the test results of the fifth and sixth hypotheses at the individual level based on the impact of reward philosophy and entrepreneurial culture on the success of innovation, it is suggested to use more reward in achieving the goal and success of innovation and used for Raising the entrepreneurial culture from the applied courses offered by the educational centers.

Conflict of interest

The authors declare no conflict of interest

References

- Daneshkohan, H. (2015). Investigating and Prioritizing the Key Factors of Innovation Success in Iran Auction Industry, *Innovation Management Quarterly*, Fourth Year, 4, 130-107.
- Davoodi, N. (2016). Identifying and prioritizing factors affecting success, *Entrepreneurship Development Quarterly*, Volume 9, Number 1, 256-239.
- Hajipour, B., & Kurd, M. (2011). The effects of strategic modules on the relationship between organizational learning, innovation and financial performance of the company, *Quarterly Journal of Improvement and Transformation Management Studies*, 21st year, 64, 166-141.
- Imanipour, N. (2010). Success Factors for Innovation in Small and Medium Businesses, *First International Conference on Management and Innovation*, Shiraz.
- Mirghfour, H. (2013). Ranking the factors affecting the promotion of innovation, *Quarterly Journal of Parks and Growth Centers*, 19-28.

- Obeidat, Bader Yousef. (2016). The Effect of Strategic Orientation on Organizational Performance: The Mediating Role of Innovation. *International Journal of Communications, Network and System Sciences*. 9 (11), pp.478-505.
- Omar, Nor Asiah, Nazri, MuhamadAzrin, Alam, Syed Shah, Ahmad, Azhar. (2016). Assessing the Factors Influencing Service Innovation Capabilities and Performance. *Information Management and Business Review*. 8 (4), 52-63.
- Paluszkiewicz, Ewa, Mak, Wilfred, Jacobs, Wouter. (2009). Common factors behind success or failure of innovations Algae farming in the port of Rotterdam.
- Przychodzen, Wojciech, Przychodzen, Justyna. (2018). Sustainable innovations in the corporate sector - The empiricalevidence from IBEX 35 firms. *Journal of Cleaner Production, Elsevier*. 172, 3557-3566.
- Sadeghi Rahimeyadi, S. (2016). Investigating the effect of open innovation on positive marketing to create a competitive advantage in companies, University of Guilan.
- Salamat, F. (2015). The Impact of Environmental Innovation Dimensions on Business Performance. Master Thesis in Business Management, Islamic Azad University, Rasht Branch.
- Saleh Khel, F. (2014). The relationship between management process and innovation and the role of innovation capability in small and medium enterprises, Master Thesis in Business Management, Islamic Azad University, Rasht Branch.
- Seyedesmaeil, A.G.Bossink, Bart. (2017). Firms' capabilities for sustainable innovation: The case of biofuel foraviation. *Journal of Cleaner Production, Elsevier*, 167, 1263-1275.