



KADİR HAS UNIVERSITY
SCHOOL OF GRADUATE STUDIES
PROGRAM OF FINANCE AND BANKING

**THE IMPACT OF INNOVATION-RELATED INVESTMENT AND
MANAGEMENT PERFORMANCE ON CORPORATE FINANCIAL
RETURNS**

MOHAMMED HEBAH

SUPERVISOR: DR. ASLI TOGAN EĞRİCAN.

MASTER'S THESIS

ISTANBUL, MAY, 2019

**THE IMPACT OF INNOVATION-RELATED INVESTMENT AND
MANAGEMENT PERFORMANCE ON CORPORATE FINANCIAL
RETURNS**

MOHAMMED HEBAH

SUPERVISOR: DR. ASLI TOGAN EĞRICAN.

MASTER'S THESIS

Submitted to the School of Graduate Studies of Kadir Has University in partial fulfillment of the requirements for the degree of Master's in the Discipline Area of Finance and Banking under the Program of Finance and Banking master program.

ISTANBUL, MAY, 2019

DECLARATION OF RESEARCH ETHICS /
METHODS OF DISSEMINATION

I, MOHAMMED HEBAH, hereby declare that;

- this Master's Thesis is my own original work and that due references have been appropriately provided on all supporting literature and resources;
- this Master's Thesis contains no material that has been submitted or accepted for a degree or diploma in any other educational institution;
- I have followed "Kadir Has University Academic Ethics Principles" prepared in accordance with the "The Council of Higher Education's Ethical Conduct Principles"

In addition, I understand that any false claim in respect of this work will result in disciplinary action in accordance with University regulations.

Furthermore, both printed and electronic copies of my work will be kept in Kadir Has Information Center under the following condition as indicated below:

The full content of my thesis/project will be accessible from everywhere by all means.

MOHAMMED HEBAH



29.05.2019

KADIR HAS UNIVERSITY
SCHOOL OF GRADUATE STUDIES

ACCEPTANCE AND APPROVAL

This work entitled **THE IMPACT OF INNOVATION-RELATED INVESTMENT AND MANAGEMENT PERFORMANCE ON CORPORATE FINANCIAL RETURNS** prepared by **MOHAMMED HEBAH** has been judged to be successful at the defense exam held on **29, MAY, 2019** and accepted by our jury as **MASTER'S THESIS**.

APPROVED BY:

(DR. ASLI TOGAN EĞRICAN) (Advisor) (Kadir Has Üniversitesi)



(Prof. Dr. Nurhan Davutyan)

(Kadir Has Üniversitesi)



(Assoc. Prof. Tolga Kaya)

(İstanbul Teknik Üniversitesi)



I certify that the above signatures belong to the faculty members named above.


Prof. Dr. Sinem AKGÜL AÇIKMEŞE

Dean of School of Graduate Studies

DATE OF APPROVAL: / /

TABLE OF CONTENTS

ABSTRACT	vi
ÖZET	vii
ACKNOWLEDGEMENTS	viii
DEDICATION	ix
LIST OF TABLES	x
LIST OF FIGURES	xi
1. INTRODUCTION	1
1.1. PROBLEM UNDER DISCUSSION	1
1.2. PURPOSE OF THE STUDY	2
1.3. RESEARCH QUESTIONS	3
1.4. HYPOTHESES	4
1.5. OBJECTIVES	5
1.6. THESIS STRUCTURE	5
2. LITERATURE REVIEW	7
2.1. CHALLENGES OF INNOVATIONS	7
2.2. DISRUPTIVE INNOVATIONS APPROACHES	9
2.3. INNOVATIONS AND FINANCIAL PERFORMANCE	12
2.4. ROLE OF LEADERSHIP MODEL IN THE DEVELOPMENT OF INNOVATIONS	13
2.5. LEADERSHIP MEDIATING FACTORS	16
2.6. LEADERSHIP MODEL AND FINANCIAL PERFORMANCE	21
3. METHODOLOGY	22
3.1. RESEARCH DESIGN	22
3.2. VARIABLES	23
3.3. SAMPLE POPULATION	24
3.4. MATERIALS	26
3.5. PROCEDURE	27
3.6. METHODOLOGY FOR THE ANALYSIS OF SURVEY RESULTS	28
3.7. LIMITATIONS OF THE METHOD	30
4. RESULTS	32
5. DISCUSSION	45
5.1. FINDINGS OF THE STUDY	45
5.2. IMPORTANCE OF FINDINGS	47
5.3. IMPLICATIONS	48

5.4. FUTURE RESEARCH OPPORTUNITIES	49
6. CONCLUSION.....	51
CURRICULUM VITAE	55
APPENDIX	56



THE IMPACT OF INNOVATION-RELATED INVESTMENT AND
MANAGEMENT PERFORMANCE ON CORPORATE FINANCIAL RETURNS.

ABSTRACT

THE PROBLEM OF FINANCIAL PERFORMANCE OF MODERN BUSINESSES IS CONNECTED WITH THE PERMANENT SEARCH FOR OPPORTUNITIES FOR IMPROVEMENT OF THE OBTAINED FINANCIAL RESULTS. IN THIS RESPECT, A PARTICULAR INTEREST HAS BEEN PAID TO THE DISCUSSION OF THE PERSPECTIVES OF INNOVATION DEVELOPMENT AND IMPROVEMENT OF MANAGEMENT EFFECTIVENESS AS THE LEADING FACTORS OF MODERN BUSINESSES' FINANCIAL PERFORMANCE. THE PRESENTED STUDY AIMS TO CONTRIBUTE TO A BETTER UNDERSTANDING OF THE ACTUAL ROLE OF THESE TWO PARAMETERS IN THE FINANCIAL DEVELOPMENT OF MODERN BUSINESSES IN THE MIDDLE EAST REGION. THE QUANTITATIVE RESEARCH DESIGN IS UTILIZED TO PERFORM A SURVEY STUDY ON THE EXPERIENCE OF MANAGERS OF LEADING MIDDLE EAST COMPANIES, ACCOMPANIED BY A LITERATURE REVIEW OF RELEVANT ACADEMIC SOURCES. THE MAIN OBJECTIVE OF THE STUDY IS TO ASSESS THE IMPACT OF INNOVATIONS AND MANAGEMENT ON THE FINANCIAL PERFORMANCE OF BUSINESSES. THE RESULTS OF THE STUDY DEMONSTRATED THE SIGNIFICANT IMPACT OF BOTH PARAMETERS ON BUSINESS PERFORMANCE AS WELL AS THEIR INTERCONNECTION. THE RESULTS OF THE STUDY DEMONSTRATE SIGNIFICANT IMPACT OF FACTORS OF INNOVATION AND MANAGEMENT MODEL OF REALIZATION OF FINANCIAL RETURNS OF BUSINESS.

Keywords: Corporate Finance, Innovation, Investment, Management, Financial Performance.

İNOVASYON İLE İLGİLİ YATIRIM VE YÖNETİM PERFORMANSININ
FİNANSAL GETİRİLER ÜZERİNDEKİ ETKİSİ.

ÖZET

MODERN İŞLETMELERİN FİNANSAL PERFORMANSI, ELDE EDİLEN MALİ SONUÇLARIN İYİLEŞTİRİLMESİ İÇİN SÜREKLİ YENİ FIRSAT ARAYIŞLARIYLA BAĞLANTILIDIR. BU BAĞLAMDA, MODERN İŞLETMELERİN FİNANSAL PERFORMANSININ ÖNDE GELEN FAKTÖRLERİ OLARAK İNOVASYON VE İNOVASYON İLE İLGİLİ YÖNETİM ETKİNLİĞİNİN İYİLEŞTİRİLMESİ PERSPEKTİFİ İLE İLGİLİ TARTIŞMALAR ÖN PLANA ÇIKMAKTADIR. SUNULAN ÇALIŞMA, ORTA DOĞU'DAKİ MODERN İŞLETMELERİN FİNANSAL GELİŞİMİNDE BU İKİ PARAMETRENİN GERÇEK ROLÜNÜ DAHA İYİ ANLAŞILMASINA KATKI SAĞLAMAYI AMAÇLAMAKTADIR. NİCEL ARAŞTIRMA TASARIMI, İLGİLİ AKADEMİK KAYNAKLARIN LİTERATÜR İNCELEMESİ EŞLİĞİNDE, ÖNDE GELEN ORTA DOĞU ŞİRKETLERİNİN YÖNETİCİLERİNE YÖNELİK BİR ANKET ÇALIŞMASI YAPMAK İÇİN KULLANILMAKTADIR. ÇALIŞMANIN SONUÇLARI, ŞİRKET PERFORMANSININ ÜZERİNDE HEM BU İKİ PARAMETRENİN AYRI AYRI HEM DE BAĞLANTILI OLARAK ÖNEMLİ ETKİLERİ OLDUĞUNU GÖSTERMİŞTİR. SONUÇ OLARAK ÇALIŞMANIN SONUÇLARI, FİNANSAL GETİRİLERDE İNOVASYON VE YÖNETİM MODELİ FAKTÖRLERİNİN ÖNEMLİ ETKİSİ OLDUĞUNU GÖSTERMEKTEDİR.

Anahtar Kelimeler: Kurumsal Finans, Inovasyon, Yatırım, Yönetim, Finansal Performans.

ACKNOWLEDGEMENTS

I would like to express my sincere acknowledgements to all the people who supported me in the process of development of this work. I offer my sincere appreciation for the learning opportunities provided by my committee, thanks for your continued support and encouragement.

My completion of this project could not have been accomplished without my parents help, thank you for allowing me time away from you to research and write. My family and friends are the ones who contributed to the success of this project, and it would be impossible to succeed without their support. Also, I would like to express thanks and admiration for my home country – Yemen, which currently suffers from social and economic disasters.

Finally, to my caring, loving, and supportive wife, Nasreen: my deepest gratitude. Your encouragement when the times got rough are much appreciated and duly noted. It was a great comfort and relief to know that you were willing to provide management of our household activities while I completed my work. My heartfelt thanks.



To my wife Narseen and my child Elias.

LIST OF TABLES

Table 1: General Regression Results Summary	39
Table 2: Innovation Regression Results Summary	41
Table 3: Management Regression Results Summary	43
Table 4: Multicollinearity Assessment.....	44



LIST OF FIGURES

<i>Figure 1.</i> Professional distribution of participants	33
<i>Figure 2.</i> Experience of innovations	34
<i>Figure 3.</i> Age of corporate organization	34
<i>Figure 4.</i> Distribution of organizations by industry	35
<i>Figure 5.</i> Distribution of businesses.....	36



1. INTRODUCTION

1.1. PROBLEM UNDER DISCUSSION

A major part of modern business organizations faces the issue of search and application of means and solutions oriented toward the improvement of their financial and market performance, especially in the conditions of the rapid increase of competition caused by globalization and development of new products and services. The factor of globalization leads to the situation where the status of a leader in the domestic market cannot guarantee the sustainable development of business and the adaptation to the global market conditions is required (Denti & Hemlin, 2012). In these circumstances, the companies are forced to seek the optimal and cost-effective solutions to the issue of the efficient development of their business.

One of the existing approaches to the resolution of the issue of business development in modern conditions is connected to the growth of innovations in the related operations. Different approaches and solutions in the sphere of innovation development are available, and the companies should pay specific attention to the selection of the concrete innovative development paradigm for their realization. At the same time, innovations present significant risks for the organizations, which is why it is important to consider the advantages and disadvantages of the specific innovative solutions before their practical implementation. Finally, the understanding of the role of innovations for modern businesses is quite limited, lacking the discussion on many important aspects of this process, including disruptive and sustaining innovations, innovations spillover phenomenon, and others. Each of these elements has a specific role in the growth of a business organization, and it is important to discuss the impact of certain instruments and tools before the realization of the strategy of innovative development.

The second important question that should be discussed in the context of the study is connected with the proper understanding of the role of management and leadership in the improvement of company's performance, including the realization of innovations. Here, mainly the question of management performance in context of innovations development had been discussed. In terms of the existing format of management role understanding, the researchers consider the effective means of resource control in the

organization as one of the key indicators of its development. Simultaneously, limited attention has been paid to the discussion of the role of management and leadership model in the proper implementation of innovations and financial development of the organization. The researchers share the opinion that the effective leadership model is essential for the innovative development of a business (Kesting, Ulhoi, Song, & Niu, 2015). At the same time, different positions are presented in the sphere of identification of the right leadership model.

1.2. PURPOSE OF THE STUDY

The presented study aims to analyze the existing situation with the innovative development of business in the Middle East region, assess the impact of innovations and management model involved in this process, and offer recommendations for the improvement of the situation in organizations by using the tools of innovation development and a proper management model in all business processes. The specific interest to the Middle East region is explained by the researcher's specialization and personal interest in this area from the point of future employment. It is important to identify the potential impacts of innovation development and realization of proper management and leadership models for the effective organizational performance. In this case, the discussion of the specific related aspects, including innovations spillover, different approaches to innovative development of business, and different leadership models is essential. According to the situation observed in the chosen research sphere, the researchers have a basic understanding of the connections between management, innovation development, and their impact on the financial and market performance of the company. At the same time, the analysis of credible research has demonstrated the fact that the previously stated connections and dependencies between the parameters cannot be considered as a guarantee of an optimal result. For example, the realization of the transformational leadership model in the enterprise cannot be regarded as a guarantee of the effective innovative development of business if senior management and staff, in general, are not technology-oriented (Chen, Chen, Liang, & Wang, 2013). In these conditions, they would be able to encourage the personnel to achieve better results, but the development of innovations would not become the logical result of such

performance. A similar tendency can be seen when attempting to understand the innovations spillover phenomenon, where only a limited number of researchers have demonstrated the actual impact of the development of innovations in a single company on the innovation situation in the industry in general (Chen, Tang, Jin, Xie, & Li, 2014). For this reason, it is important to analyze each phenomenon that is not properly addressed in the modern research, apply them when conducting an analysis of the performance of real-life business organization in the Middle East region, and offer recommendations for better development of the companies on the basis of innovation creation and future effective management model.

1.3. RESEARCH QUESTIONS

In the context of the presented study, the following research questions were identified:

- Do innovation-related investments shape and modify the performance of financial system of the firm?
- What are some of the lived impacts of innovation-related investments on the financial returns of companies?
- In what ways does management performance affect corporate financial returns?

As it can be seen from the structure of research questions, they are oriented toward the assessment of the impact of two key variables, innovation development and management model, which are regarded in terms of their impact on the financial returns of business organizations. In this way, it is important to answer the question about the potential impact of each of these variables on the performance of the company and identify the connections between the parameters. On the basis of the resolution of the stated research questions, it will be possible to provide better recommendations for the effective development of business organizations in the Middle East region in the future.

1.4. HYPOTHESES

For the effective realization of the main study objectives and in order to address the stated research questions, a list of hypotheses that should be considered in the process of the study has been developed. Their analysis will contribute to the resolution of research questions and the presentation of reliable and effective recommendations for the development of the Middle East firms in the future. For the aims of the study, the following hypotheses were identified:

- Hypothesis 1: Innovation-related investments in business can have a significant impact on the financial and market performance of the company.

In the context of the stated hypothesis, it is essential to identify the actual impact of innovation development on financial and market performance of firms based on the responses from the representatives of specific business organizations. To test this hypothesis, the potential impact of innovation-related investments on the development of firm's financial performance will be analyzed. It is important to identify whether the development of innovations should be considered as an effective solution for any sort of organization and which innovation model should be viewed as most optimal one for business to implement.

- Hypothesis 2: The selection of the adequate leadership and management model cannot be considered as a sufficient condition for the successful development of business organization if innovation development is taking place.

In this hypothesis, the main idea of is that the effective leadership model cannot be viewed as the ultimate condition for the successful development of modern business, especially if innovation development is occurring (Chen et al., 2014). Here, the basic idea is best expressed in research by Chen et al. (2014), who states that the innovative development of business can be achieved only if the management is technology-oriented, regardless of the current level of leadership effectiveness. In this context, it is vital to analyze the connections between innovation development and leadership model applied by the senior management of organization. Without a proper understanding of the connections between these parameters, it would be difficult to find the optimal

solutions that businesses in the Middle East could implement. At the same time, different industries have to be analyzed to assess industry-specific outcomes of the innovative development and leadership models.

1.5. OBJECTIVES

According to the aforementioned information, the following objectives for research can be formulated:

- To identify the impact of innovation-related investments on financial returns of modern businesses;
- To assess the role of different models of innovations integration in the performance of modern businesses;
- To identify the optimal leadership models that can be applied for the effective development of business;
- To define the required format of the connection between innovations development and leadership model in the organization to reach optimal results.

1.6. THESIS STRUCTURE

The presented study will be organized in sections format that will include the following: introduction, literature review, methodology, results and discussion, and conclusion section. The introduction section will provide a general understanding of the discussed problem, formulate the purpose of the study, as well as reveal research questions and objectives to the audience. The literature review section will analyze the relevant and reliable academic sources for the researcher to be able to answer the stated research questions and form the basis of a study. The methodology section will inform the audience about the means and research design that will be applied for the presented study. It is important to consider the specific tools and procedures that will be utilized in the research realization. The results section will present a summary of the main outcomes of the performed analysis and inform the audience about the results of cooperation with the participants of the study. The discussion section will serve for the

presentation of the main implications of the study, recommendations for business organizations, and suggestions for future research. The overall obtained results of will be summarized in the conclusion section.



2. LITERATURE REVIEW

The resolution of the stated research questions requires the researchers to understand the impact of all mentioned variables on the performance of organizations in general. Thus, the impacts of innovations and leadership model on the companies should be clearly stated and understood. The information from the literature review will also serve as a basis for the development of the research method, mainly, the questionnaire form for the study. That is why it is essential to analyze all aspects of the issue and provide a detailed description of all factors that affect business organizations from the points of innovation development and management model.

2.1. CHALLENGES OF INNOVATIONS

The main objective of the performance of businesses has been always connected with the maximization of positive financial outcomes achieved through the increase in sales by attracting new clients and the removal of the competitors from the market, which helps gain dominance. In these conditions, the optimization of business processes and operations is generally considered as the main objective of the long-term performance of the company. The reduction of prices for products and services, the improvement of their quality, and a more effective strategy of product and service promotion in the market are the main strategies applied by the firms to gain top market positions.

Therefore, innovations always serve as the main instrument for the realization of the stipulated objectives. While the specific conditions of innovation development vary for companies, the value of innovations in financial performance improvement is shared by the majority of business organizations. The companies develop new technologies for production, distribution, delivery, and management of key business processes in the firms. Simultaneously, although innovations are considered as the main instrument of business performance optimization, it is sensible to assess the approaches to the development of innovations that can guarantee the best outcomes for the organizations and minimize the risks they face.

Among the variety of the existing approaches to the realization of innovations in the organization, today, the primary role is played by the concept of disruptive innovations

(Christensen et al., 2018). The proper understanding of this concept is vital for any type of business that aims to reach the key objectives of disruptive innovation development and minimize the risks connected with poor effectiveness of innovative solutions as well as the inability of the business to return the innovation-related investment expenses (Christensen et al., 2018). The development of the concept of disruptive innovations in business is associated with the active technological boom and the emergence of completely new solutions and technologies that could be applied in organizations. Although the rapid development of the technologies is generally considered from the optimistic perspective by businesses, it actually leads to failures of a significant number of them in realizing these new technologies. In this way, the improper realization of the principles of innovative development of the company leads to its failures and bankruptcy. In fact, many firms have demonstrated worse results of financial performance after the integration of innovations, meaning that this solution was problematic for them.

Among the factors that are considered as most important sources of failures for innovative companies, the following were identified: “technological complexity, faulty managerial cognition, and organizational inertia” (Christensen et al., 2018). At the same time, a more detailed analysis identifies the significant impact of the nature of innovation on the effectiveness of its realization. Here, the connections between the personnel performance and innovation development emerge. This argument is especially relevant for disruptive innovations that differ from the sustainable ones in terms of the nature of their influence on the applied technologies and business processes implemented by the organization. The sustainable innovations are supposed to support the existing products and business processes and they are generally understandable and clear for the personnel of the company. People see the objectives and functions of the proposed innovations and become highly motivated to realize them due to the ability to observe the final results (Christensen et al., 2018). As for disruptive innovations, they are generally more complex and ambitious. They are oriented toward the development of a completely new trend in the current structure of organization, which may entail product, service, or business process. As a result, the personnel may lack an understanding of the perspectives of innovations in this segment and demonstrate opposition to their development based on this concept. Christensen et al. (2018) identify

the fact that the personnel's misunderstanding of the main objectives and importance of disruptive innovations development in the organization should be considered as one of the main factors of such projects' failures. For this reason, the factor of the personnel's role in innovation realization should be seen as vital.

In terms of the question of innovation development, Christensen et al. (2018) highlight the fact that innovations that are not oriented toward the current customers and are not supposed to bring a significant growth of profit margin in a short-term perspective are not actively supported by the personnel. It usually leads to the failures of the innovative development projects. Because of this, the management of the organization should clearly understand that the proper work with the personnel should be considered as the main condition for the successful realization of innovations.

At the same time, the position of the senior management should be regarded as an important factor that contributes to the integration of innovations. The results of a recent study have demonstrated that management is unlikely to deliver resources for disruptive innovations if they are not planned to appeal to the current customers (Christensen et al., 2018). In addition, if the management considers innovations as a threat for the existing business model, they will not invest efforts and time into their realization (Christensen et al., 2018). The discussion of all the mentioned cases aims to inform the audience about the variety of challenges and barriers that can exist in regard to the performance of the organization in terms of the existing business model and personnel structure. As a result of the existence of all these barriers, the firm can face the risk of innovation failure. To avoid it, proper actions should be taken in relation to the management and the general employees.

2.2. DISRUPTIVE INNOVATIONS APPROACHES

In the previous section of the literature review, different challenges to the successful realization of disruptive innovations in the organization have been identified. In this section, the main perspectives on the understanding of the disruptive innovations will be demonstrated. The discussion of the alternative perspectives is supposed to contribute to a better definition of the concept of innovations and its role in the financial development of the organization, which will be explored in the following section. Therefore, it is

important to mention the main challenges for the organizations in the sphere of innovation realization.

The first perspective that should be mentioned is the evolutionary one, which was initially offered by Christensen (Kumaraswamy, Garud, & Ansari, 2018, p.1026). According to it, disruptive innovation is the process that aims to improve the performance of the existing business products despite being considered contradictory in regard to the current solutions that are most common among the customers. Thus, innovations are supposed to be undesired and unattractive for the customers at the initial stage of development. The company can realize them but the proper results in the form of income generation and improvement of market positions will be reached only in the period when old technologies and solutions lose their attractiveness for the customers, providing the new technologies with the opportunities for growth. This process is supposed to be permanent since new technologies always require time to gain effectiveness and bring positive results for the organization. In these conditions, the employees are not likely to demonstrate a high level of support for innovations at the early stage of development since they cannot understand the benefits of this change yet. The problem of opposition to innovations among the employees has been carefully discussed in the previous section of the literature review.

The second perspective of disruptive innovations is the relational one. According to it, disruptive innovations can affect not only the organization that has developed them but also a wider list of stakeholders, including competing businesses and connected industries, along with the customers (Kumaraswamy et al., 2018, p.1027). In the context of this perspective, the development of innovations in the network process activates changes in the industry and affects all stakeholders, even those who were not supposed to be influenced, mainly the competing companies. This phenomenon is called innovation spillover effect (Chen et al., 2013). The innovative solutions that have demonstrated their effectiveness in one single business or organization are shared by other players in the same niche or market. Without the realization of an innovative solution by the first business that has presented it, others would be unlikely to even think about this innovation. At the same time, the practical effectiveness of the innovative solution encourages other players in the industry to share its received benefits, and they start investing into new technology by using their own facilities.

As a result, the domination in the question of innovation development is a timely process. If one company manages to implement the successful innovative solution in some sphere, in a certain period of time, the same technology will be realized by other players in the market who will use the same idea or even resources as the first innovating business. For this reason, the practice of attracting the talented employees from the innovative companies has been found to be one of the most effective solutions (Chen et al., 2013). As soon as one company develops and presents innovation in a certain aspect of business performance, its competitors start a process of recruiting, seeking the most talented employees from this organization. The attraction of the talented creators aims to shorten the period of time required for the competitors to realize the technologies similar to those of the most innovative industry leader, along with the minimization of research and development (R&D) expenses while keeping innovation related activities at the same level. The temporal nature of innovations and their impact on business is the basis of temporal perspective of disruptive innovations (Kumaraswamy et al., 2018). This is the negative side of all innovations that reduces the opportunities for the companies to effectively use the results of their innovative development for a long period of time.

As a conclusion, the following model of innovative development of business can be presented as a summary of the earlier-demonstrated arguments. Firstly, a single company or a group of companies working as an alliance can develop innovations for a specific product or business process. Innovation strives to improve the performance of the company via a reduction of expenses, an increase of product or service quality, and the optimization of the existing processes aimed to improve the competitive positions of the organization. As soon as the innovative solution is developed and ready for integration into the existing business model, the management will most likely face the active opposition of the employees in the company. The innovations are usually changing the earlier-existing approaches to the specific operations and functions, and the employees consider them unnecessary and harmful for their own position in the company. Therefore, the management of the organization should be able to effectively solve the existing challenges and remove the barriers for the successful realization of innovations.

At the second stage of the innovation development process, the new idea is successfully implemented, and it starts bringing benefits to the organization. This process is monitored by all stakeholders, including the competitors of the company. As a result, they start a competition for the opportunity to implement similar innovations in their own businesses to be able to access the same benefits. This way, the process leads to the situation where each player in the industry realizes the same innovation as the first player, and the benefits from the initial development of innovations for the latter are lost. Altogether, it is possible to say that innovation is the phenomenon that can bring significant advantages and benefits to the business player that effectively realizes them. However, the opposition of internal stakeholders to innovations should be effectively removed. In addition, the innovations will be beneficial for the company only during a short period of time, until each player in the industry integrates the same innovative solutions. When other players start integrating innovations as a result of innovations spillover process, the value of the benefit for the initial innovating company also keeps reducing (Schiavi & Behr, 2018). On the basis of this information, it is possible to make a conclusion about the ambiguous role of innovations in the financial performance of the organization.

2.3. INNOVATIONS AND FINANCIAL PERFORMANCE

In accordance with the earlier-mentioned arguments, innovations aim to have a significant impact on the financial performance of any type of business organization (Kumaraswamy et al., 2018). The main objective of innovation development is connected with the realization of unique advantages that allow the company to win in the competition against other players. The realization of innovations is supposed to contribute to the minimization of costs of production and delivery of goods and services to the customers, improve their quality and attractiveness, and provide optimization opportunities in the sphere of the existing business processes.

The understanding of the nature of innovations helps identify a variety of barriers and challenges existing in the sphere of their practical realization. Firstly, the truly evolutionary disruptive innovations need a certain period of time to gain maximum popularity among the customers and start bringing benefits to the organization

(Christensen et al, 2018). Furthermore, the personnel and other internal stakeholders of the company are likely to demonstrate considerable opposition and reject the innovations due to the lack of understanding and the fear of their negative impacts (Denti & Hemlin, 2012). Finally, when innovations become implemented and start bringing substantial benefits to the company, the effect of innovations spillover leads to the process where the competitors begin to develop similar approaches independently or by using the resources of the organization in order to receive similar benefits. In the end, the positive effect of innovation is fairly distributed among all players in the market, and the innovation loses its beneficial nature for the business that has implemented it first. Instead of being innovative, this approach transforms into a common practice applied everywhere in the industry. The company should search for new solutions to obtain the new effects of innovative development. As a result, the process of innovation development and integration is permanent because the companies cannot stop here unless they want to lose their competitive advantages. Moreover, with each new innovation realization, similar challenges and problems continue to be relevant. In this context, it is sensible to discuss the means and solutions that could be applied to minimize this significant challenge for any organization aiming to develop innovations. The issues of opposition and rejection of the innovative decisions among the internal stakeholders should also be addressed.

2.4. ROLE OF LEADERSHIP MODEL IN THE DEVELOPMENT OF INNOVATIONS

The discussion of the realization of the mechanism of business organizations' innovative development for the aim of financial performance improvement has demonstrated a significant impact of the barriers generated by the personnel on its final result. Here, the impact of the management in the sphere of innovation control and monitoring should not be underestimated. Two main functions are identified for the management in the process of innovation development in the company. They entail promoting the innovation-oriented culture in the organization and launching plans and strategies for the realization of specific innovative solutions (Denti & Hemlin, 2012,). Therefore, the management should be capable of not only effectively realizing

innovative solutions but also maintaining the innovation-related culture of personnel performance in all periods of the company's operations. Due to the complexity of the issue, a more detailed discussion is required.

The role of a leader in the organization is associated with the development of a proper environment for the operations performed by the personnel and the change of social relations among them, aimed to contribute to the realization of the company's general objectives (Slimane, 2015). In the process of these objectives' implementation, the management can use different tools and instruments that identify the format of the leadership style used in the company. For this reason, each leadership style should be discussed in detail to inform the audience about the available solutions and the optimal format for the organization of innovations in the company. The list of the existing leadership styles includes the following: directive and participative leadership, charismatic and transformational leadership, instrumental and strategic leadership, and distributed leadership (Kesting et al., 2015). Each of these models should be thoroughly discussed to understand their potential impacts on the process of innovation development inside the firm.

Directive leadership model presupposes the manager taking the leading role in the organization of work processes, stimulating the development of directive orders for the employees to follow, and providing a small amount of personnel's autonomy in the company (Kesting et al., 2015). This leadership format is not acceptable for the successful realization of innovations since it cannot be used for the effective removal of the barriers connected with the employees' opposition to changes. Instead of discussing the benefits and the importance of innovations with the employees, the management merely provides them with directive orders that cannot be considered as a source of motivation. Here, the participative leadership model is more effective since it creates a semblance of the employees' participation in the final decision-making process. However, it remains a semblance only since the final decision still depends solely on the position of the manager and the workers have no actual influence on the results. From this point, both of the discussed approaches cannot be seen as contributing to the successful realization of innovations in business.

Charismatic leadership is the approach to the development of innovations based on the idea of the leader serving as an example that would encourage the personnel to accept

changes. In this way, the leader is a charismatic person who presents an example of behavior and attitude to innovations that are shared by the employees. The results of the studies have demonstrated that while the charismatic leadership model can encourage the personnel to participate in innovative activities, it cannot guarantee the optimal result since the charismatic leader loses opportunities for knowledge collection and effective leadership due to the existing conditions (Kesting et al., 2015). In this context, transformational leadership can be considered as a more attractive alternative since it is based on the idea that the leader should strive to achieve the personnel's professional growth, encouraging his or her followers to constantly develop new skills and knowledge (Mokhber, Ismail, & Vakilbashi, 2011). This approach to the realization of the personnel's potential can contribute to the success of the innovative initiatives in the organization.

Transactional or instrumental leadership is different from the approaches demonstrated earlier in terms of the resolution of the issue of personnel management in the way it is oriented toward the clear set of goals and objectives (Kesting et al., 2015, p.31). The instrumental approach is utilized to provide specific instructions to the employees, informing them and giving them a proper motivation for work. Such approach is quite sensible since it can contribute to the reduction of risk of personnel opposition to changes. People receive a clear understanding of the importance of the upcoming transformations and understand their benefits in the process. At the same time, this approach lacks focus on professional skills and knowledge development that is common for the transformational leadership.

Strategic leadership model presupposes the leading role taken by the senior management in the process of innovation development and realization (Kesting et al., 2015). It has to play a major role in the process of innovation realization by ensuring the development of proper organizational environment and the setting of clear and understandable goals. Nevertheless, this model lacks focus on the importance of proper management at the local level, where the main barriers to the new ideas and innovations can be generated.

Finally, shared and distributive leadership models are both based on the assumption that the successful realization of innovations requires the effective cooperation and exchange of leadership functions inside the teams (Kesting et al., 2015). Leaders should

encourage initiative and active work among the employees, and consequently, the employees should be capable of participating in the final decision-making process. This approach is useful from the position of the employees' attraction to the process of final decision making. However, the perspectives of high personnel autonomy can lead to the development of anarchy in the organization. To avoid such risk, the clear identification of the responsibilities and objectives is required.

Altogether, the discussion of the main leadership styles that are currently applied in the organization has demonstrated strong and weak sides of each specific solution. Some of them are not common for the realization of innovations while others require certain improvements to reach the optimal result for the company. For this reason, it is possible to offer a combination of transformational and distributive leadership styles as an optimal strategy for the realization of innovations. In this way, the effective distribution of responsibilities and encouragement of professional growth among the employees will contribute to the successful realization of innovations in the company. After the discussion of the most promising leadership models required for innovative development, it is sensible to consider specific factors in the performance of the personnel that could contribute to the realization of innovations.

2.5. LEADERSHIP MEDIATING FACTORS

The previous section of literature review has served for demonstration of the dominant role of the proper leadership model development as a factor of innovation integration inside the business organization. From this point, innovation integrations' effectiveness is mainly affected by the organizational environment created inside the company (Munshi, Oke, Stafylarakis, Puranam, Towells, Moslein, & Neelyet, 2014). The existence of the wrong organizational environment can lead to the situation where the company will not be able to perform its tasks effectively without the integration of new innovative solutions and technologies. In these conditions, it is important to identify the factors that should be integrated into the organizational environment of the business to guarantee the optimal outcomes for the firm from the point of innovation development. Firstly, it is important to discuss the technology-oriented approach of management and personnel as a key factor of innovation development. In this context, the personnel

should demonstrate the proper level of support and understanding of modern technologies for the organizations to be able to realize the innovative solutions in their business (Chen et al., 2014). Otherwise, the innovation-related organizational culture will not receive the proper development, and the innovation-oriented initiatives of the management will not lead to the outcomes desired by the organization. Each employee in the company should clearly understand the impacts of modern technologies on their performance. They should be able to find opportunities for the effective integration of these technologies into their work. On the basis of this argument, a sufficient understanding of technologies should be cultivated and supported in the modern organizations so the management could create a proper environment for the integration of innovations. This is the part of management responsibilities connected with the creation of an environment of permanent changes.

Among other factors that should be integrated into the organizational environment of modern businesses to guarantee a successful realization of innovations, the following groups of parameters should be mentioned: individual level, team level, and organizational level. Individual-level factors include the parameters that should be developed for each employee to follow, which is needed for the successful realization of the objectives of innovative development of business organizations. They comprise creative self-efficacy, organization-based self-efficacy, self-presentation, external work contacts, and personal initiative (Denti & Hemlin, 2012). Each of these factors should be discussed in detail.

Creative self-efficacy is the factor that is connected with the employees' confidence in their ability to generate and develop innovations for their own benefit and that of the organization. The introduction of this parameter in the organizational environment of the company should serve for the objective of removal of personnel barriers to enable the integration of innovations. The employees should be motivated to develop innovations and the management should encourage such practice through the provision of a higher level of personnel autonomy in the current operations. It is a part of the transformational leadership model. Organization-based self-esteem is used to characterize the feeling of the employee as a part of the team. Here, the employee should be confident that the team he or she works in appreciates his or her initiative and is ready to support any promising innovative idea that will be presented to them.

Otherwise, the employees will not be able to see the need for the realization of the most perspective ideas. The role of management is connected with the establishment of a proper working environment.

Self-presentation is the parameter of personnel performance that identifies the changes in their behavior caused by the social expectations demonstrated by the organizational environment. In this context, the employees tend to adapt to the requirements of the environment they work in. If this environment is characterized by the passive approach and neglect toward innovations, even the most innovative and motivated employees will choose one of the two alternatives — namely, to adapt to the general trend and lose any motivation or to leave the environment that provides no perspectives. In this case, the management of the organization is supposed to contribute to the formation of proper expectations in regard to the employees who aim to work in an innovative organization. They should demonstrate readiness for changes and the environment, in general, should encourage them to participate in the development of innovative solutions even if this was not their initial intention.

Finally, the individual factors that affect innovation development are external work contacts and personal initiatives. External work contacts comprise the communication of the employees with specialists in their field of activity outside the organization.

According to the study results, such contacts contribute to the development of innovations in the firm (Denti & Hemlin, 2012). Here, the problem is that without the effective communication with the environment, people in the company may lose the desire and ideas for innovations. In turn, the lack of any significant changes inside the company can change it from being innovation-focused to following everyday routine. The external communications held during specialized conferences or other practical events contribute to the exchange of opinions between specialists, the discussion of new ideas and solutions in the narrow sphere of activity, and the realization of new strategies. The impact of the innovation spillover effect can be seen in this context. The employees should be motivated to participate in public events in their sphere of activity to collect new ideas and process them for the benefit of the company.

Finally, the earlier-mentioned activities will not be effective without the proper level of personal initiative. The management of organization should contribute to the realization of scenarios where the employees are performing tasks and activities that exceed the

terms of their initial employment contract. If the employees demonstrate activity only in terms defined by the contract, it should be considered as a failure for the organization. Managers should create conditions for the full realization of the personal and professional potential of their employees, using the means of direct and indirect motivation. The employees should be encouraged to demonstrate activity exceeding their initial agreement with the employer and receive proper compensation and satisfaction from it.

Among the team level factors of innovation development, the following should be mentioned: team reflection, team heterogeneity, task characteristics, psychological empowerment, team climate, and group development stages (Denti & Hemlin, 2012).

Team reflection characterizes the situation where each member of the team works with a similar vision and the team generally pays attention to the discussion of the common goals and objectives of the firm's development. In this context, it is important for the management of the company to achieve the situation where employees would share a similar understanding of the goals and objectives of organizational performance and operate effectively for their implementation. Team heterogeneity characteristic identifies the relevance of the differences in employees' positions and the impact of this factor on the general performance of the organization. The employees might have different or even opposite positions in the questions related to the firm's development. The role of the management is connected with the search for opportunities for the development of compromises needed to secure a more active cooperation of the workers.

The parameter of task characteristic identifies the complexity of the task that should be realized by the employees in the process of cooperation. More difficult and complex tasks are supposed to serve as a factor of team unity and positively affect the performance of team members. This advantage should be effectively utilized by the management of the organization in order to implement the most ambitious projects inside the teams. Psychological empowerment is the parameter that has to be realized to support the most promising projects inside the company. Through its realization, the management should demonstrate that it is ready to accept the position of the personnel on the most important issues of innovative development. At the same time, to ensure the removal of the existing barriers to the integration of innovations among the personnel,

the latter should take an active part in the practical realization of the projects connected with the former.

For the successful realization of all recommendations at the team level regarding the employees' performance, the management should develop proper team climate and understand the potential impacts of the group development stages on the behavior and reactions of the employees to the leadership initiatives. The primary stages of the team development are characterized by the presence of general support toward the position of a senior management, while at the later stages of team performance, conflicts can become the integrated part of teamwork (Denti & Hemlin, 2012). Because of this, the management should be able to properly assess the risks of conflicts at each stage and offer optimal solutions for the minimization of their potential negative outcomes.

Finally, it is important to discuss the organization-level factors of personnel management that can affect the realization of innovative solutions. Here, such factors as organizational structure and culture are relevant (Denti & Hemlin, 2012). The basic understanding of these parameters and their roles in the performance of the organization was provided earlier in the paper, meaning that only a brief mention is sufficient. An organizational structure defines the distribution of responsibilities in the team and organization in general while organizational culture identifies the approach to the resolution of different issues connected with the personnel management. They include personnel empowerment, the application of different means of motivation to support the innovative initiatives of the employees, and other aspects of management.

Altogether, the mentioned factors of personnel management are supposed to contribute to the realization of a single logical system that could serve as a basis for the development of innovations in the organization. In these conditions, each of the mentioned elements should be fully to guarantee a proper result for the firm in general. All mentioned aspects should be adequately discussed and integrated into the leadership model utilized within the business. Thus, it is sensible to summarize the information presented earlier and to demonstrate how the proper leadership model can contribute to the maximization of financial performance results of organization.

2.6. LEADERSHIP MODEL AND FINANCIAL PERFORMANCE

The discussion of specific leadership styles and factors of personnel performance related to innovation in the organization has demonstrated the significant impact of these parameters on the final result in the sphere of innovation development. The implementation of the proper leadership model and the encouragement of the development of the desired skills and knowledge among the personnel, along with the implementation of the appropriate behavior models, are the key factors of successful realization of innovations in business. On the basis of the mentioned parameters, it is logical to discuss the importance of leadership format as one of the drivers of successful innovations and development of the organization in general. In this way, both factors of innovation development and leadership style should be considered as the main variables and catalysts of the financial performance and growth of the firm.

3. METHODOLOGY

3.1. RESEARCH DESIGN

For the aims of the presented study, the quantitative research design in the form of a questionnaire is utilized. The advantage of this format of data collection is that it is possible for the researcher to focus on the analysis of positions of a wide range of participants. On the other hand, the qualitative research design is optimal for the analysis of a narrow sample size with a limited number of participants. In addition, quantitative analysis allows the researcher to collect information about the participants on a wider scale as compared to the qualitative approach, which is oriented toward a careful and detailed analysis of the study object.

In the context of the presented study, the performance of business organizations in the Middle East region is analyzed. This includes firms with different organizational structure, the industry of operations, and previous experience of working in the selected markets. As a result, it is possible to say that it is quite difficult to collect the detailed information about each object and organization for such a large scale of the sample population. That is why the quantitative design is utilized in the presented study, enabling the researcher to gather information about the widest range of companies in the targeted region and develop a basic understanding of their conditions and requirements. Based on the selection of this format of data collection and processing, it is possible to present study results that integrate the positions of the widest range of business organizations. They are also effective for each business and industry represented in the context of the research. Therefore, the research design is focused on the maximization of its utility for the general scope of business organizations in the Middle East region, without specialization in any specific company or industry. In the future, a more detailed and specialized study using qualitative design can be performed by utilizing the findings of the presented research to understand the position of concrete executives and managers about the implications and findings of the presented study.

3.2. VARIABLES

The key variables that are analyzed in the context of the presented study include the following: characteristics of business organizations that have already been discussed in the research, innovation-related investments performed in the selected organization, leadership model utilized in the selected firms, and their financial and market performance. The first three variables are considered independent while the latter are assessed as a dependent variable. In this way, the objective of the study is connected with the identification of specific characteristics of the presented parameters for each organization integrated into the research process, as well as with the analysis of the impact of characteristics of independent variables on the dependent ones in each company. Such approach to the analysis of the study variables allows the researcher not simply to identify the impact of each independent variable on the dependent parameter of the company's operations but it also contributes to the assessment of the connections between the parameters of business performance.

It is important to highlight the fact that the variable of the characteristics of business organizations presented in the study includes such information about the participating organizations as the scope of a business, the industry of operations, and the years they have spent in the business sphere. This variable will not be considered as a key one in the process of results and implications development. It is provided to enable the study to identify the existence of differences in terms the impact of innovations and leadership model of companies in different markets and industries. The application of this variable can contribute to the identification of the differences in terms of the importance of innovations and leadership model parameters for different types of organizations that work in various niches.

The variable of innovation-related investments performed in selected organizations is applied to describe the innovation-related activities that the company has been engaged in during a certain period of time. The application of this variable is supposed to demonstrate the actual level of innovation developing activity in the organizations. In this context, the researcher aims to analyze not only innovation-related investments initiated by the selected businesses but also consider the impact of the innovation spillover that was mentioned earlier. For this reason, it is important to separate the

innovations performed independently from those caused by R&D activity of other players in the market or industry in general.

The variable of leadership model used in the selected organizations is applied to analyze the management and leadership approach of the managers. The presented study targets a sample of managers of the companies in the Middle East region as the participants, so their responses could be considered as a reliable source of information about the utilized leadership model in their organizations. As the end users of a specific leadership model, they are supposed to be able to provide the most detailed and useful information to the researcher. Nevertheless, there is a risk of biases in the selection of such format of data collection since the information about the leadership model utilized in the organizations may not correspond to reality, and the managers are likely to provide false information in certain cases to avoid accusations of unethical business management. Therefore, the attraction of the employees as the opposite side in the assessment of the real management and leadership model in an organization could become an optimal solution. Nevertheless, such solution does not fit the format of the study, which is why the researcher has chosen to accept the assumption that the participants of the study are likely to provide only complete and reliable information.

Finally, the variable of financial and market performance is applied to assess the general results of business performance of the selected organizations. This is the parameter that integrates the main results of such performance for a chosen period of time. In general, it is utilized to assess the operating effectiveness of the chosen organizations and find connections between the observed results and the earlier-identified independent variables. On the basis of the variables analysis, the implications and recommendations can be developed.

3.3. SAMPLE POPULATION

For the aims of the presented study, the researcher seeks for opportunities to guarantee sufficient level of reliability and relevance of the results of the work as well as main recommendations that will be offered to the audience that comprises the management of business organizations. In these conditions, the objective of the sample formatting includes the selection of managers from the widest list of industries and countries in the

Middle East region. The questionnaire form was developed using the resources of MUSIAD. It is important to select and attract people who work in the companies within the different industries of operations, with differing scope and years spent in business. The scope of the existing research makes integration of a gender factor an additional complication that could affect the researcher's ability to provide sufficient results. However, a future study could assess the role of a gender-specific factor in the process of management model development among the managers.

As for the sample size, based on the available database, the target firms include 40 companies from across the Middle East region. At the same time, specific attention is paid to the companies from Turkey because the database includes many Turkish companies. In these conditions, a total of 2 participants from each organization are selected as the sample size norm for the study to make results more reliable within each organization. The choice of a total number of companies that are targeted in the process of data collection is explained by the scope of the project and the researcher's capabilities in the question of participant search and attraction. As a result, the total sample size of 80 participants has been formed, and the objective of this process stipulates that one senior manager and one medium-level manager should be attracted from each organization. While the attraction of senior managers is quite a complex task, the alternative solution included selecting 2 medium-level managers from each chosen company. The final criterion for the sample population is that the industries should be presented equally. It means that the results of the study should describe the situation in the variety of industries operating in the Middle East regional economy, and the recommendations should be reliable and applicable for the conditions of the widest range of organizations of different scopes and different industries. Table 1 provides information about the organizations and managers who were contacted in the process of study realization.

Table 1: Information about Participants of the Study

Industry	Country	Industry	Country
Construction	Egypt	Construction	UAE
Construction	UAE	Financial Service	Turkey
Financial Service	Turkey	Energy	UAE
Informational Services	UAE	Aerospace	UAE
Informational Services	UAE	Financial Service	Turkey
Chemical Industry	UAE	Transportation	UAE
Informational Services	Turkey	Transportation	UAE
Informational Services	Turkey	Transportation	Turkey
Telecommunications	Turkey	Transportation	Turkey
Aerospace	UAE	Financial Service	UAE
Informational Services	UAE	Entertainment	Turkey
Financial Service	UAE	Energy	UAE
Informational Services	UAE	Computer Industry	Turkey
Informational Services	UAE	Financial Service	Turkey
Financial Service	Turkey	Charity	Qatar
Aerospace	UAE	Aerospace	Yemen
Aerospace	UAE	Financial Service	Yemen
Telecommunications	UAE	Financial Service	UAE
Construction	Turkey	Telecommunications	Egypt
Telecommunications	Turkey		
Aerospace	Turkey		

3.4. MATERIALS

For the aims of the presented study, the main utilized data collection tool is the questionnaire form that is delivered to the participants of the study. The use of questionnaires has been proven to be among the most effective means of data collection. The sources utilized for the realization of the presented survey format mainly include the MUSIAD's (2019) organization performance, which is oriented toward the

improvement of business climate and conditions for businesses in Turkey and the Middle East region. The sample questions to be used in the questionnaire will be outlined below (Appendix A). The survey questions have been developed by using the results of the literature analysis that serves as a basis for the understanding of the main factors affecting the research questions. Questions 1-6 gather data on firm and manager characteristics. Questions 7-15 serve for the assessment of the first and second hypotheses of the study. Questions 16-20 serve for the assessment of the third hypothesis of the study.

3.5. PROCEDURE

The procedure of data collection should be divided into several aspects. Firstly, it is important to select and get a commitment from the target population to increase their chances of participation. Therefore, people useful for the study have been selected and contacted to receive their agreement to participate. The researcher has mainly focused on the senior and medium-level management of business organizations in different countries of the Middle East region. While the attraction of the senior management representatives is a complex task due to their role in the business and the lack of interest in cooperation, the medium-level management is considered as the primary object of interest for the researcher. As a result, the development of cooperation with this segment of management inside business organizations can be regarded as the primary objective of the initial phase of data collection procedure.

For search and development of cooperation with the participants, the instrument of social networks is utilized. In particular, the LinkedIn social network can be viewed as the most effective tool of participant search and selection. The advantage of this social media is that it is used mainly for employment objectives, and the primary personal information about the users that is demonstrated there includes the data about their employment and working experience, the company where they work, and their professional qualities. Based on this information, it is possible to select specific companies and managers for cooperation. The selected people are provided with the invitation letter and consent form to inform them about the conditions and offerings of the research. In the consent form, they are provided with the guarantees of personal

information confidentiality as well as the absence of any risks for the participants who have chosen to cooperate with the researcher.

The data collection procedure includes the application of the online survey platform for the aims of its simplification and the creation of additional advantages for the participants from the point of convenience. There is no need for the participants to spend a significant amount of time on filling the questionnaire. The platform utilized in the context of this study is Google Forms. This is a famous survey platform that provides affordable conditions for the users to perform social studies. The participants are provided with the links to the questionnaire form and asked to fill it during a certain period of time. They are free to choose the place and time for filling the form. The results of the performed data collection procedure are also analyzed inside the platform, meaning that the researcher does not have to spend time on basic analysis. Pilot study has been performed with the group of 5 participants in order to assess the general quality of the questionnaire form as well as the ability of the participants to understand the questions and answer them properly. These were the medium-level executives of Turkish construction firms who were first to agree with the offer to participate in the study. Due to their status in the companies, these people obtained sufficient amount of free time and easily agreed to provide support with the study.

3.6. METHODOLOGY FOR THE ANALYSIS OF SURVEY RESULTS

The analysis of the results of the questionnaire format application includes the usage of graphical forms for outcome demonstration and assessment. The format of graphs, figures, and tables is applied for the aims of presentation of the main results of data collection and the participants' responses. Since a certain part of participants' responses is quite personalized, the tool of formalization is applied. In this way, the specific responses of the participants that are written in the multiple-choice format are collected and analyzed from the point of search of similarities of the ideas and arguments. The participants' statements with similar ideas and arguments are formalized by using simple and understandable verbal forms. Later, the graphical presentation of the results is provided based on the summary of the distribution of participants' responses with the help of the developed verbal forms. In this way, the researcher aims to summarize the

findings of the study to present them in a reliable and applicable way and to be able to develop the recommendations on the basis of the application of the multiple-choice-format answers. Altogether, the graphical format of results presentation should contribute to the proper understanding of the study outcomes among the audience of the research and the minimization of risks of misunderstanding and contradictions in the explanation of the specific results as well as implications of the study.

In addition, the results of the study are analyzed by using regression analysis instruments. Specifically, the information from the survey results is summarized in the form of a table, and the responses of the participants are analyzed from the point of specific variables. The regression analysis includes three variables: financial performance as the dependent variable and innovations as well as management as independent variables. This is the main regression equation that will demonstrate the compared impact of the chosen variables on the financial performance of each specific organization. Moreover, a more detailed regression analysis is performed to assess the impact of the certain parameters of innovation integration and personnel management on the financial performance of the company. For the regression equation discussing the impact of innovations on financial performance, the following independent variables are offered: the relevance of innovations in a particular company, the level of personnel's opposition to changes, the quality of experience exchange among the personnel, the role of disruptive innovations in business, and the role of innovations in the financial performance of the company. As for the regression equation assessing the impact of the management model on the financial performance of the organization, the following variables are offered: personnel management quality, the role of transformational leadership in the organization, the level of desire and motivation for changes among the personnel, the employees' autonomy and independence, and the level of innovation integration.

3.7. LIMITATIONS OF THE METHOD

In the context of the chosen research method, several disadvantages and limitations can be mentioned. They could serve as a barrier to the realization of reliable and effective implications of the study and recommendations for the management of business organizations in the Middle East region. Firstly, the earlier-mentioned limitation in the assessment of leadership model inside the business organization should be discussed. The managers are likely to avoid discussion of the negative aspects of the leadership model that is realized in their company. There is no strong assumption that a certain part of the discussed businesses has problems with the leadership model and unethical attitude to the personnel. Nevertheless, the risk of inadequate assessment of leadership model utilized in the workplace is relevant for the chosen study format.

Another limitation of the study is connected to the selection of data collection format and the biases that could be caused by this aspect of the research. Since a major part of the questions in the questionnaire is multiple-choice, the quality of the received responses depends on the concrete terms defined by the researcher in the process of questionnaire development. Such format eases the process of results formalization for the aims of analysis, but also limits opportunities for delivery of expert info from the participants. The quality and importance of these responses for the final decision making and analysis differ, and the detailed answers are more preferable for the researcher. As a result, the limited scope of answers could generate risks were connected with the inability to generate the required quality of implications and recommendations for the audience. To solve this issue, the researcher developed questions for the survey in the way to receive the most reliable and detailed assessments from the participants. Since the participants will receive the recommendations from the study results after the end of the process, they are likely to be motivated to provide as many details as possible. Unfortunately, no more reliable and efficient means of participant motivation could be offered in the context of the study.

The limitations of the performed study include the biases connected with the focus on the management as the main source of information, caused by the current sample size and concentration on the market of the Middle East region, and the risks of results' reliability posed by the selected format of data collection. In terms of the question of the

selection of business organizations' management as the main source of information, it is important to highlight the fact that management should not be considered as the only reliable source. Regarding the effectiveness of the leadership model and innovations developed in business, the discussion of the positions of the common employees could also be important and valuable. The management could demonstrate the subjective approach to the assessment of a company's performance in order to hide the existing issues and weaknesses in its operations.

The second risk and limitation of the study are related to the issue of sample size. Due to the conditions of study realization, there were no sufficient time resources to perform a more detailed and complex data collection procedure. As a result, the sample size was quite limited. This problem can be solved in the future studies through the attraction of a wider scope of participants.

The final risk of the study results realization is connected with the selection of data collection format. The subjective assessment of the businesses' performance provided by the managers of the specific companies can be considered as quite a contradictory approach since it can include the subjective estimations of the participants that do not include real-life information about the situation in the firm. Therefore, the analysis of the financial statements and reports about the expenses for investments and management could be considered as a more reliable source of data for the aims of the study. At the same time, the analysis of the expenses for management and innovations would not provide the required facts about the actual effectiveness of these activities in each company, meaning that they cannot be regarded as a reliable basis for decision making about the recommendations for modern businesses.

4. RESULTS

This section summarizes the results of data collection and analysis. Through the presentation of study results, the main recommendations and implications of the research are developed. Initially, it is important to demonstrate information about the main characteristics of the sample that was created for the aims of the study.

Out of the 80 participants targeted, 57 responded, which is a response rate of over 70 percent. The sample included 57 participants who are managers from different business organizations in the Middle East region. These representatives work in various departments of the companies that include the following: financial department, operations, marketing, and management departments. The distribution of the participants by the sphere of their professional work is presented in Figure 1. Here, the question was the following: “If your answer to the previous question is yes, in which department were you working?” As it can be seen, the majority of the participants represented the financial and management departments. This factor of study sample formation could bring both positive and negative contributions to the results. On the one hand, the inclusion of people from financial and management departments could be considered as beneficial in the context of the stated research questions since the analysis of financial performance and management practices in the company is one of the main targets. On the other hand, the unequal presentation of representatives of other departments could be considered as a source of bias.

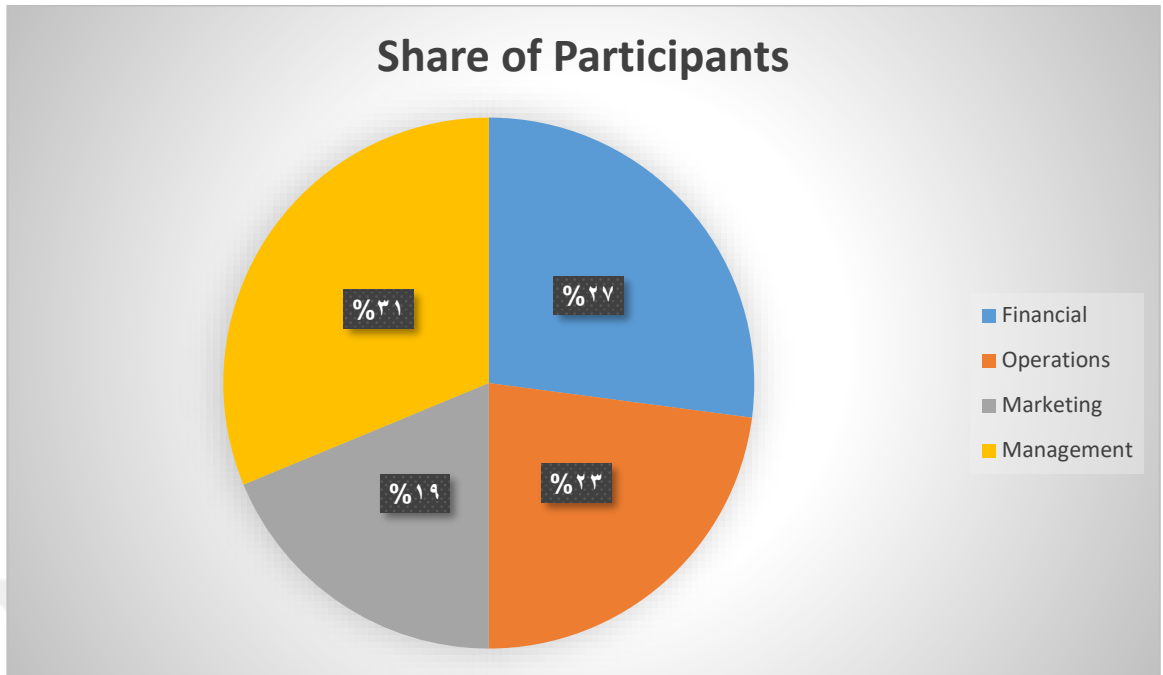


Figure 1. Professional distribution of participants

The next question characterizing the quality of the sample is connected to the experience of the participants in the question of innovations developed in their organization: “In whichever docket you were, did you participate in the decision-making process as it regards to policy making or innovation of new strategies?”. The results of the participants’ replies to this question are presented in Figure 2. 83 % of the managers stated that they had a certain experience with participation in the development of innovations in their organization, with varying levels of the actual integration into the processes of innovation development. In these conditions, it is possible to say that the majority of participants have obtained the required experience and knowledge that could be considered as valuable for the aims of the study.

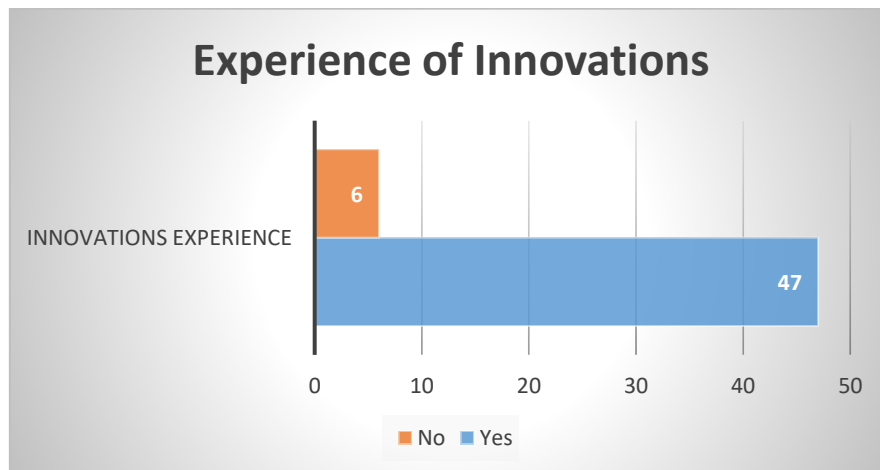


Figure 2. Experience of innovations

The next question is related to the characteristics of the participants and their business organization concerns the actual period they have been working for the chosen organization: “Please identify the age of corporate organization you currently work in”. Here, varied results were demonstrated. The companies with a longer period of operations were considered a more valuable source of information as per the purpose of the study. The results of sample formation by this criterion are presented in Figure 3.

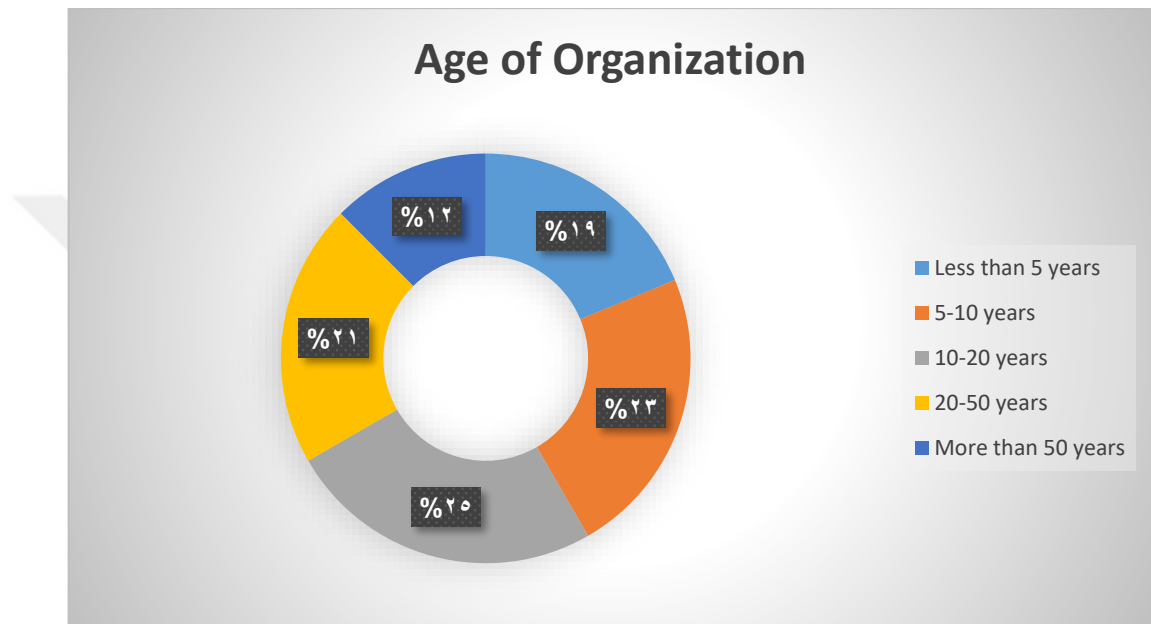


Figure 3. Age of corporate organization

The final question that is important for the development of proper characteristics of organizations and participants is connected to the sphere of their performance or the specific industry where the business is operating: “Please identify the industry that your company operates in”. The researcher aimed to provide an equal presentation of different industries and markets in the study to guarantee the reliability and relevance of study outcomes and recommendations for the organizations in different spheres of performance. The results of the analysis can be seen in Figure 4. Here, the biggest shares of the firms were presented by the financial services, information industry, and telecommunication industry. At the same time, the industries with the lowest level of representation in the sample included the aerospace industry, chemical industry, and energy industry. Such results can be explained by the general comparison of a number of organizations involved in each of these industries. While the computer and financial services are provided by a significant number of firms in the Middle East, the total

number of companies in aerospace and chemical industries is quite limited. In these conditions, the best opportunities for the attraction of a wide list of organizations from different industries were created.

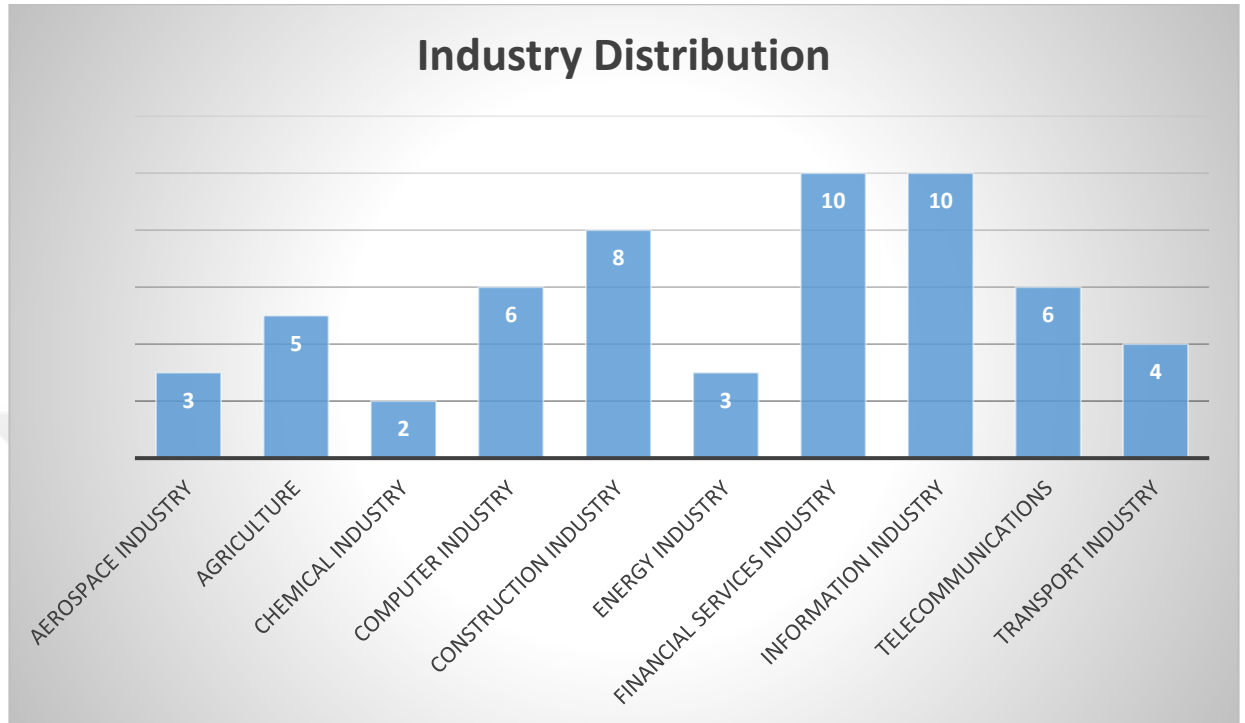


Figure 4. Distribution of organizations by industry

The final question used to characterize the sample qualities is connected to the identification of the specifics of the firm's operations from the points of orientation only toward the internal market or the participation in the international cooperation: "Please identify whether your company performs external trade operations, or works only on the domestic market of your country". The results concerning the distribution of the companies using this parameter are presented in Figure 5. According to the results, the shares of organizations with domestic market specialization and international businesses are quite equal. Therefore, the provided recommendations and outcomes of the study can be considered as reliable for the realization in both types of organizations.

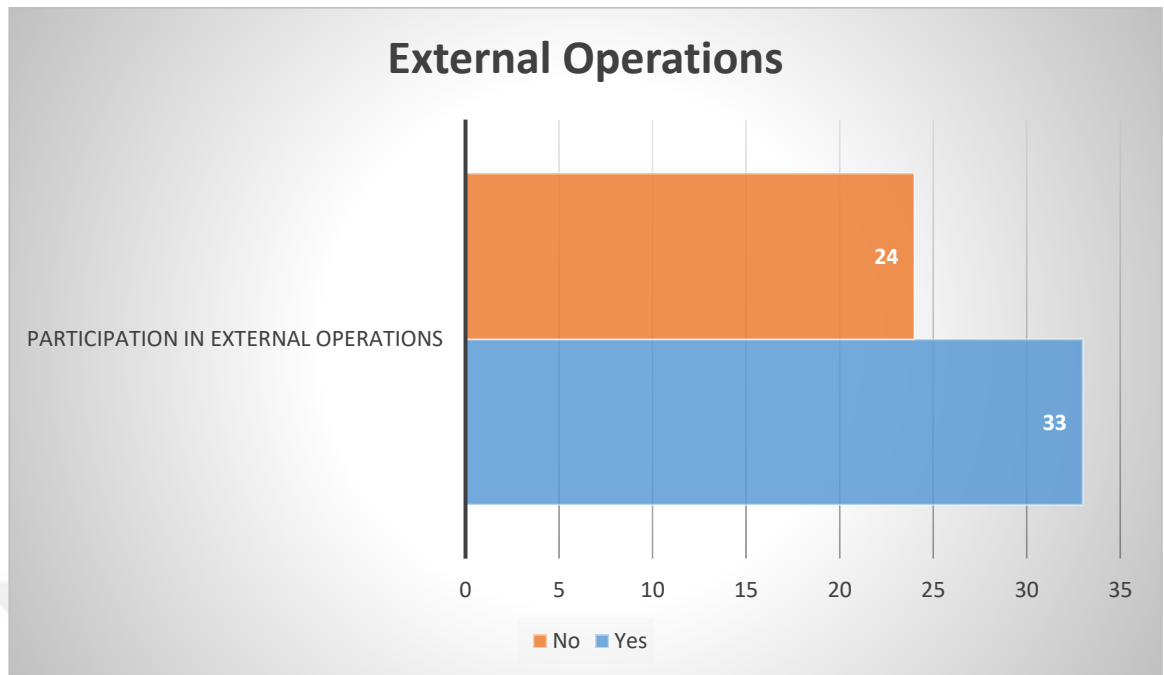


Figure 5. Distribution of businesses

As a result of the analysis of the characteristics of the sample, it is possible to provide a basic understanding of the sample quality. It included 57 organizations or participants performing their operations in the Middle East region and abroad, operating in a wide range of industries and markets and having a high level of experience in the sphere of innovation integration.

Now, it is important to perform a basic analysis of the results of data collection and reveal the characteristics of organizations that were assessed by the participants of the study. Each participant was asked to provide a subjective assessment of the current performance of their organization, its innovativeness, and the quality of personnel management by using the survey form that was presented earlier, in the methodology section of the research. The results for each question were averaged by the parameter of the variable characterized by each question. In the end, the following total number of questions was developed for each variable: financial performance — 4 questions, management — 5 questions, and innovativeness of business — 5 questions. In order to understand the association between the relevance of innovations and the leadership approach to innovations on financial performance, I next run regressions using the results I retrieved from my survey. The results of my regressions are provided in Tables

1 through 4 of this section. In running these models, heteroscedasticity robust standard errors are calculated.

I first categorize the results into three groups and calculate the means for each respondent for the groups that I categorize. The first category is the financial performance which is the average of the answers to questions 7 through 10. The second group calculates the mean of questions related to innovations related investments (questions 11 through 15) and the last group calculates the management's approach to innovations (questions 16 through 20). The average for each respondent can be seen in Appendix B.

I first want to test whether financial performance in general is impacted by innovations related investments and management's approach. As a result, I test the following three models:

$$FIN = \alpha + \beta \cdot I \quad (1)$$

$$FIN = \alpha + \beta M \quad (2)$$

$$FIN = \alpha + \beta_1 \cdot I + \beta_2 \cdot M \quad (3)$$

Here FIN represents financial performance, I – innovations, and M – management.

These are the average values for parameters of innovations and management presented in Appendix B. The results of analysis of these regression models are presented in Table1.

This regression equation is the result of a subjective assessment of the impact of specific parameters in the performance of the organization on the general results. Since these are subjective assessments, the regression equations can integrate the mistakes caused by the subjective factor's impact. At the same time, the orientation toward the primary sources of information, such as the financial performance indicators of a business, expenses for innovations, and personnel management could not be considered as a reliable source of information for the aims of the study. The analysis of the expenses for innovations and management could not lead to a more objective assessment since there are no guarantees that the effectiveness of these expenses is similar for different businesses. In this way, the focus on subjective assessments as the main criterion for implication development was clarified.

The assessment of the general quality of regression equations was performed on the basis of R Square parameter, t-stat assessment, and the assessment of P-values for the specific independent variables. Summary of statistics for regression equations is presented in Table 1. The R Square parameter for equation 3 equaled 0.52, which means that the regression can be considered as reliable for the prediction of future changes in the dependent variable. The results suggest both innovations and management approach are important determinants of financial performance. In all of the three specifications presented in Table 1, there is a statistically significant and positive association between innovation, management and financial performance.

Finally, P-values were assessed to analyze the impact of particular independent variables on the final results. Here, the lower the P-value is, the higher the significance of the variable for the financial performance of the company becomes. According to the outcomes demonstrated in Table 1, the lower P-value is common for the variable of innovation development. Thus, it is possible to say that the performed general regression analysis in equation 3 has demonstrated a higher impact of innovation development on the financial performance of the organization as compared to that of the quality of personnel management. Table 1 indicate Innovations coefficient is 0.57 and Management coefficient is 0.48. Looking at the t-statistic right next to these columns, we see that they are both perfectly high (above 1.96) and the p-values are perfectly low. So, both of these coefficients are statistically significantly related to the financial performance. In fact, in all the three specifications, independent variables are statistically significant at less than 1 percent (p-value). Since the coefficients are positively related to FIN and they are statistically significant, we can deduce, that based on the answers (subjective) innovations and management are positively related to financial performance. As a conclusion, it is possible to say that both innovation and managerial approach to innovation can be considered as an effective on the financial performance of a company.

Table 1: General Regression Results Summary

VARIABLES	(1) FIN	(2) FIN	(3) FIN
INV	0.799*** (6.827)		0.569*** (4.644)
M		0.703*** (5.096)	0.479*** (3.192)
Constant	0.815* (1.860)	0.955 (1.626)	-0.240 (-0.350)
Observations	57	57	57
R-squared	0.385	0.362	0.521

Robust t-statistics in parentheses

*** p<0.01, ** p<0.05, * p<0.1

The results in table 1 are important from the point of objectives of the study and the stated research questions. The outcomes of regression analysis demonstrated the fact that both parameters of innovations and managerial impact should be considered as important during the discussion of the issues of financial development of business. Since these results were based on the subjective assessments performed by the participants of the study, it is possible to say that they are relevant for application in different industries and businesses. As an outcome, it was possible to make a conclusion about relevance of performance of additional regression analysis for assessment of impact of each chosen parameter – innovations and management, on the financial results of business.

Along with the main regression equation, additional regression analyses were performed to analyze the impact of specific parameters inside each independent variable on the financial performance of the organization. Such analysis was conducted to provide more detailed recommendations for businesses to follow. In terms of the regression equation assessing the impact of innovations on the financial performance of the company, certain independent variables were provided. They include the relevance of innovations for business (REL) (Q11), personnel's opposition to innovations (OPP) (Q12), the experience exchange quality among the personnel as a factor of innovation realization (EXP) (Q13), disruptive innovations in organization (DIS) (Q14), and the role of innovations in the financial performance of the company (INN) (Q15). While the

first regression equation used the means assessments for parameters of innovation and management, the following two equations are based on the analysis of the detailed results of each question's responses, without analysis of mean estimations. The results of the regression analysis are presented in Table 2. The regression equation had the following form:

$$FIN = \alpha + \beta_1 \cdot X \quad (4)$$

Here, X represents relevance of innovations (Q11), personnel's opposition to innovations (OPP) (Q12), the experience exchange quality among the personnel as a factor of innovation realization (EXP) (Q13), disruptive innovations in organization (DIS) (Q14), and the role of innovations in the financial performance of the company (INN) (Q15) Statistical results are summarized in Table 2. I run these variables on financial performance one by one to make sure multicollinearity among similar variables does not affect my results.

The parameter of R Square demonstrated the result of 0.31. From this point, the demonstrated regression equation is under question from the point of its general reliability for application in practice. At the same time, Multiple R is equal to 1.65, which is quite a positive result. The t-statistic results for the main variables were the following – 0.39 for REL, 0.539 for OPP, 0.522 for EXP, 0.373 for DIS and 0.572 for INN. At the same time, p-values for chosen variables were the following – 3.32 for REL, 4.016 for OPP, 5.238 for EXP, 2.929 for DIS and 5.115 for INN. The analysis of chosen parameters demonstrated that the most valuable factors in the context of innovation development and their impact on the financial performance of the firm are the following: the opposition of personnel to changes, experience exchange, and disruptive innovations. These results and their practical implications for businesses will be discussed in the following section of the research.

Table 2: Innovation Regression Results Summary

VARIABLES	(1) FIN	(2) FIN	(3) FIN	(4) FIN	(5) FIN
REL (Q11)	0.389*** (3.233)				
OPP (Q12)		0.539*** (4.016)			
EXP (Q13)			0.522*** (5.238)		
DIS (Q14)				0.373*** (2.929)	
INN (Q15)					0.572*** (5.115)
Constant	2.221*** (4.536)	1.889*** (3.781)	1.854*** (4.640)	2.361*** (4.768)	1.655*** (4.186)
Observations	57	57	57	57	57
R-squared	0.124	0.286	0.290	0.168	0.315

Robust t-statistics in parentheses

*** p<0.01, ** p<0.05, * p<0.1

The final part of the regression analysis was based on the assessment of the potential impact of parameters of personnel management on the financial performance of the company. For the aims of the analysis, the following independent variables were identified: the quality of personnel management (PER) (Q16), the role of transformational leadership in organization (TRANS) (Q17), the desire and motivation of personnel to develop innovations (MOT) (Q18), personnel's autonomy level (AUT) (Q19), and innovation integration into the performance of the personnel (INT) (Q20). The results of the regression analysis are presented in Figure 4. The regression equation had the following format:

$$FIN = \alpha + \beta_1 \cdot X \quad (5)$$

Here, X represents the quality of personnel management (PER) (Q16), the role of transformational leadership in organization (TRANS) (Q17), the desire and motivation of

personnel to develop innovations (MOT) (Q18), personnel's autonomy level (AUT) (Q19), and innovation integration into the performance of the personnel (INT) (Q20), respectively. The Multiple R level was equal to 0.62 while R Square was only 0.38. F value demonstrated the significance of the regression equation as compared to the theoretical value of the parameter. The t-statistic results for the main variables were the following – -0.21 for PER, -0.8 for TRANS, 1.26 for MOT, 0.87 for AUT and 3.4 for INT. At the same time, p-values for chosen variables were the following – 0.83 for PER, 0.4 for TRANS, 0.21 for MOT, 0.38 for AUT and 0.001 for INT. Finally, the assessment of P-values for independent variables showed the major impact of the following parameters of the personnel management on the financial performance of organization: the level of personnel's autonomy, their desire and motivation for changes, and the quality of personnel management. All these results will be considered in the final section of the research.

At the same time, it was important to provide more detailed assessment of the final regression. For this aim, each parameter was assessed independently using separate regression equations. The results are demonstrated in Table 3. Here, the results of R Square assessment demonstrated that neither of the chosen parameters can be applied for full description of dependent variable. At the same time, parameters with highest R Square included AUT and INT. The parameters of F and t-stat highlighted the reliability of each chosen regression equation. Nevertheless, it is sensible to say that neither regression equation can be applied independently.

Table 3: Management Regression Results Summary

VARIABLES	(1) FIN	(2) FIN	(3) FIN	(4) FIN	(5) FIN
PER	0.385***				
TRANS		0.444***			
MOT			0.514***		
AUT				0.447***	
INT					0.59
Constant	2.192***	1.925***	1.682***	2.053***	1.421***
Observations	57	57	57	57	57
R-squared	0.203	0.197	0.201	0.224	0.419
Robust t-statistics in parentheses					
*** p<0.01, ** p<0.05, * p<0.1					

Finally, there was also important to discuss the potential risks of multicollinearity in the management regression model. Here, the assessment of risk of multicollinearity among parameters of management model was performed using Tolerance criteria. The lower is the level of Tolerance, the higher is the risk of multicollinearity. The results of analysis are presented in Table 5. Since the level of tolerance lower than 0.2 is considered to be a source of serious concern (Yoo et al, 2014), it is possible to consider following connections as source of multicollinearity – connections between factors of PER and INN, and TRANS and INN. In all other cases, the level of correlation between variables makes it possible to minimize risk of multicollinearity.

Table 4: Multicollinearity Assessment

Tolerance Matrix					
	<i>Personnel Management</i>	<i>Transformational Leadership</i>	<i>Desire and Motivation</i>	<i>Personnel Autonomy</i>	<i>Innovations Integration</i>
Personnel Management	0				
Transformational Leadership	0,349458343	0			
Desire and Motivation	0,538812657	0,460488873	0		
Personnel Autonomy	0,398458866	0,382868075	0,587834032	0	
Innovations Integration	0,299910406	0,277470474	0,461825381	0,361788927	0

The results of the study demonstrated the fact that both innovations and management parameters have positive impact on changes in the level of financial outcomes for business organizations. In these conditions, companies should rely on both parameters in planning of their business activity. Together with this, assessment of concrete parameters for each variable should serve as basis for development of better solutions in future.

5. DISCUSSION

5.1. FINDINGS OF THE STUDY

The main results of the performed study are connected with a clear understanding of the impact of innovations and leadership model on the financial performance of business organizations in the Middle East region. In this way, the results of the regression analysis and the assessment of the participants' responses have demonstrated a significant impact of innovations and chosen management model of the organizations on their financial outcomes. The general regression equation, including independent variables of innovativeness of business and the effectiveness of management model, has made it possible to answer the first research question in a positive way. The majority of the participants of the study clarified that the innovation-related investments can be considered as an instrument of positive change of financial situation in modern organizations. At the same time, the management was also found to have a significant impact on the financial performance of the organization through the increase of the general level of personnel's productivity and the improvement of processes of innovation integration into business. As a result of the performed literature review and the analysis of the participants' responses, it is possible to make a conclusion about the high level of interconnection between the parameters of innovation development and the quality of management in the modern business organizations. In this way, the factors that were initially considered as separate in the context of the study were revealed to be highly connected, affecting each other in the process of financial development of a business. This conclusion is extremely important and should be considered as a basis for the development of recommendations for the management of the companies in the Middle East region. The management should clearly understand that the integration of innovations is the main source of the effective development of modern businesses and that a proper and effective personnel management system is the required basis for the successful development and realization of these innovations. The findings of the regression analysis that can be viewed as even more important are connected with the clear identification of the factors that are most relevant from the point of the impact of innovations and the effective management on modern

organizations. In the process of analysis of regression equation performed to determine the impact of innovations on the financial performance of modern business organizations in the Middle East region, certain factors have been found to be most important. They include the opposition of personnel to changes, experience exchange, and disruptive innovations. Regarding the role of management in the financial growth of the business, the following factors were considered as most meaningful: the level of personnel's autonomy, their desire and motivation for changes, and the quality of personnel management. These findings did not only contribute to a better understanding of mechanisms of innovative development of modern businesses but they can also be regarded as a basis for the formulation of recommendations for these organizations in the future. In terms of the aspect of innovations developed as a factor of financial growth of businesses in the future, it is possible to state that the removal of opposition to changes among the personnel should be considered as an even more important factor of successful changes as compared to the quality of innovations. Without the proper resolution of the issue of personnel's opposition to changes, their successful realization will not be possible. As for the role of disruptive innovations in the process of financial development of businesses, it is possible to make a conclusion that such innovations should be viewed as a priority as compared to supportive innovations that can only improve the current processes in the company. Finally, the potential impact of the factor of experience exchange among the personnel can serve as a basis for making a conclusion about the role played by the effective communications between the employees and their participation in the external experience exchange activities needed for the successful realization of innovations in the company and its financial development.

Regarding the aspect of management model applied for the maximization of the financial performance results of the company, the following factors were found to be most important: the level of personnel's autonomy, their willingness to accept changes, as well as the quality of personnel management. These findings should be considered as a basis for the development of recommendations in the aspect of practical development of management practices in modern businesses in the Middle East region and in other parts of the world. The personnel should be provided with proper motivations and opportunities to fulfill their tasks in a more independent way as compared to the current

norms of management. All these changes should contribute to the increase of the effectiveness of innovation integration and the improvement of the financial performance of business organizations.

In terms of the first research question discussion, it was identified in the process of the literature review that the financial system of organizations can affect the realization of innovative activities. The primary impact on innovations is connected with the fact of the presence of sufficient funds for the implementation of the innovative projects in the company. Along with this, the search for opportunities to improve the financial performance of the company should be considered as the main motivation for the development of innovations. Therefore, the positive connection between these two aspects of business operations of modern companies was identified.

5.2. IMPORTANCE OF FINDINGS

The importance of the study findings can be explained by the presented opportunities for the development of recommendations for organizations to follow in order to improve their financial performance on the basis of innovations and new management strategy. The findings of the analysis of literature sources and the participants' responses should be regarded as a reliable basis for the realization of recommendations that can affect the development of modern businesses in a positive way. The analysis of the sample has demonstrated that a major part of organizations that were analyzed are financially sustainable and profitable, meaning that the outcomes of analysis can be applied to allow other businesses to reach the same results in terms of their development.

At the same time, the results of the study clearly show the interconnection between the factors of innovative development and leadership model in modern business organizations. In this context, it is possible to make a conclusion about the required changes in both aspects of business performance to maximize the financial results of the firms' current operations. The development of innovations is impossible without the realization of adequate and effective leadership and management model in the company. At the same time, the best available solutions in the sphere of personnel management will not lead to the highest potential results for the company without the realization of

innovation development practices. Altogether, the implications of the study are important and valuable for the development of business organizations in the way of optimizing their financial outcomes.

5.3. IMPLICATIONS

The main implications of the study are connected with the identification of specific practical recommendations that should be followed by the companies that aim to reach long-term financial performance success. The recommendations should be divided into two groups, the one comprising suggestions in regard to innovation development and the one related to the aspect of managerial practices development. Firstly, it is important to highlight the fact that the recommendations in both areas of business development should be realized simultaneously since innovations and management model are two pillars of successful development of business finances.

Regarding the realization of innovations in business, the main recommendations include the following. Firstly, it is crucial to remove the sources of personnel's opposition to the innovative changes in businesses. The management should clearly identify the impact of this opposition on the final effectiveness of innovation integration. For each specific situation, it is important to identify the sources of opposition and the barriers generated by the personnel before offering the effective solutions and practices that could persuade the personnel to demonstrate a higher level of support toward innovations. The second recommendation in this aspect is related to the integration of disruptive innovations in modern businesses despite the initial opposition to this idea among all stakeholders of the company. The results of the literature review have demonstrated that the personnel and management are unlikely to support disruptive innovations since they are considered risky and ineffective at an early stage of development. This assumption should be managed and removed from a public discussion in order to avoid affecting the personnel's motivation negatively. Finally, the recommendation for the development of innovations in business is related to the permanent motivation of the personnel to actively experience exchange inside the organization and cooperate with the specialists from the external companies. This mechanism should contribute to the practical realization of the concept of innovations spillover. In this way, the employees and

managers should communicate inside the firm and with the external experts and partners to be able to see and apply the innovative solutions in their work, contributing to the improvement of the general performance of the company.

Regarding the development of the effective management practices in modern business, the following recommendations can be offered as the outcomes of the performed study. Firstly, it is important to improve the effectiveness of personnel management and workers' productivity for the aims of maximization of financial outcomes of the company. Among the practical steps that can be used in this way to increase the productivity and improvement of innovation integration, two processes should be realized, namely, the development of personnel's desire and motivation for work and the provision of better opportunities for personnel's autonomy inside the organization due to cooperation with management. The discussion of a variety of factors of personnel's productivity in the context of literature review has demonstrated that the employees value personalized approach and the creation of proper organizational environment as a basis for the improvement of their performance productivity. All these recommendations are important for practical realization for the company to reach the optimal results.

5.4. FUTURE RESEARCH OPPORTUNITIES

In the context of the earlier-stated arguments and implications of the study, it is possible to offer the effective strategies for the realization of future research in a similar sphere of interest. The results of the study have demonstrated a significant impact of innovations and effective management on the financial performance of modern businesses. At the same time, specific recommendations were offered for practical realization. In this context, it is sensible to develop a research format that would allow the companies to consider the recommendations presented in this study and assess their relevance and effectiveness for practical realization. In addition, it can be crucial to realize the format of primary data analysis, including the financial reports and statements of business organizations. When the main factors of the financial development in the aspects of innovations and management are identified, it is possible to perform a more careful analysis of the real-life financial reports of the companies in

the Middle East. The purpose of this action lies in identifying whether the expenses for innovations and management can truly contribute to the effective financial performance of modern businesses. In this context, it is important to also identify the effectiveness of the proposed recommendations on the basis of the analysis of financial information about the companies that have effectively integrated them as opposed to those businesses that showed no interest in their implementation. The comparison of the specific results of financial development should serve as the main argument for or against the recommendations presented in this research.



6. CONCLUSION

The discussion of the stated research questions has demonstrated a wide list of ideas and findings that can be applied for the aims of improvement of the financial performance of business organizations in the Middle East region. Firstly, the presented study has contributed to the improvement of the understanding of roles of innovation development and management models in the financial performance of modern businesses. It was possible to make a conclusion that the innovations and proper management are two elements of the successful financial performance of organizations. Furthermore, the discussion of the outcomes of the literature review has improved the understanding of the innovation development processes among the researchers and the general audience. The synthesis of findings of the earlier studies allowed presenting a specific model of innovation development in businesses. Namely, innovations are developed inside the organization and lead to the opposition of the personnel to changes; later, these innovations are shared with other players in the market, and the benefits are received until the moment when innovations become the common practice for all industry players. For this reason, innovations should be considered as a permanent process due to the decreasing value of benefits received by businesses that implement them.

The main impacts of the presented study are connected with the identification of key recommendations for the development of modern businesses on the basis of a better understanding of the roles of innovations and proper management model involved in this process. Regarding the recommendations related to the integration of innovations in businesses, it is possible to offer the latter to pay a particular attention to the issue of removal of personnel's opposition to changes caused by innovation implementation. The results of regression analysis have demonstrated that personnel's opposition is one of the main factors connected with innovations that can affect the performance of organizations. Other recommendations included a requirement to focus on the disruptive innovations as the main format of innovation development in modern businesses and the experience exchange as the format of personnel's development for the aims of innovation integration. The management of the modern businesses should pay the highest attention to the issue of professional development of the personnel by

using the tools of experience exchange, especially in cooperation with the external companies and experts. This format will contribute to the effective realization of the innovations spillover effect and the improvement of the financial performance of the companies.

Regarding recommendations in the question of management model improvement in modern businesses as a tool of financial performance improvement, the following ones have been offered. Firstly, personnel management quality should be permanently improved by using the innovative solutions and best practices in the sphere of leadership model modernization. At the same time, it is important to develop desire and motivation for innovations and changes among the personnel. In this context, the management should clearly understand the leading role of the personnel's motivation in the process of innovative development of business and the improvement of its financial performance results. Finally, the management of modern companies should orient toward the increase in the level of personnel's autonomy as one of the means of improvement of their motivation and productivity. The results of the literature review and regression analysis have led to a similar conclusion, emphasizing the leading role of personnel's autonomy in the question of employees' motivation and encouragement for changes.

Altogether, the results of the performed study have contributed to the structuration of the previously existing knowledge. They have also enhanced the provision of additional arguments in support of the stated ideas on the basis of survey analysis of the experience of managers in leading business organizations in the Middle East region. The outcomes of the presented study should stimulate the improvement of the effectiveness of the financial performance of various companies. At the same time, the findings of the study have contributed to the identification of the main purposes for further research.

7. REFERENCES

- Chen, S., Chen, Y., Liang, W., & Wang, Y. (2013). R&D spillover effects and firm performance following R&D increases. *Journal of Financial and Quantitative Analysis*, 48(5), pp. 1607-1634. doi:10.1017/S0022109013000574
- Chen, Y., Tang, G., Jin, J., Xie, Q., & Li, J. (2014). CEOs' transformational leadership and product innovation performance: The roles of corporate entrepreneurship and technology orientation. *Journal of Product Innovation Management*, 31(S1), 2–17. <https://doi.org/10.1111/jpim.12188>
- Christensen, C., McDonald, R., Altman, E., & Palmer, J. (2018). Disruptive innovation: An intellectual history and directions for future research. *Journal of Management Studies*, 55(7), 1043-1078. <https://doi.org/10.1111/joms.12349>
- Denti, L., & Hemlin, S. (2012). Leadership and innovation in organizations: A systematic review of factors that mediate or moderate the relationship. *International Journal of Innovation Management*, 16(03), 1-20. DOI: 10.1142/S1363919612400075
- Kesting, P., Ulhoi, J., Song, L., & Niu, H. (2015). The impact of leadership styles on innovation management - A review and a synthesis. Retrieved from <https://pdfs.semanticscholar.org/d75b/ecabce0175ab63783bfd22d5ea4f3d598cb9.pdf>
- Kumaraswamy, A., Garud, R., & Ansari, S. (2018). Perspectives on disruptive innovations. *Journal of Management Studies*, 55(7), 1025-1042. DOI: 10.1111/joms.12399
- Mokhber, M., Ismail, W., & Vakilbashi, A. (2011). The impact of transformational leadership on organizational innovation moderated by organizational culture. *Australian Journal of Basic and Applied Sciences*, 5(6), 504-508.
- Munshi, N., Oke, A., Stafylarakis, M., Puranam, P., Towells, S., Moslein, K., & Neely, A. (2014). Leading for innovation: The impact of leadership on innovation. Retrieved from https://www.researchgate.net/publication/242737435_Leading_for_Innovation_The_impact_of_leadership_on_innovation.
- Schiavi, G., & Behr, A. (2018). Emerging technologies and new business models: A review on disruptive business models. *Innovation & Management Review*, 15(4), 338-355. <https://doi.org/10.1108/INMR-03-2018-0013>

Slimane, M. (2015). Relationship between innovation and leadership. *Procedia – Social and Behavioral Sciences*, 181, 218-227. <https://doi.org/10.1016/j.sbspro.2015.04.883>

Yoo, W., Mayberry, R., Bae, S., Singh, K., He, Q. & Lillard, J. (2014). A Study of Effects of MultiCollinearity in the Multivariable Analysis. Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4318006/>



CURRICULUM VITAE

Personal Information:

Name and Surname : Mohammed Hebah
Place and Date of Birth : Yemen, 1983

Education

Undergraduate Education : **Master of Finance and Banking, Kadir Has University**
Istanbul Turkey, May '19.

Graduate Education : **Bachelor of Accounting, Sana'a University**
Sana'a-Yemen, June '08.

Foreign Language Skills : English, Turkish

Work Experience

Finance Director, Mas Group Company.	April'19 – Present.
HR Director, Yas Group Company.	Mar'18 – Mar'19
Finance Director, Yas Group Company.	Jan'17 – Mar'18
Internal Auditor, Yemen International Technology.	Nov'14 – May'15
Senior Auditor, Group of Rowaishan Companies.	June'12 – Nov'14
Head of Accounts, Yemeni Chinese Construction Engineering co.	June'11 – May'12
Accounting Manager, Measer for Transportation and Oil Field Services.	Aug'07 – May'11

Contact:

Telephone : +90 5050995000
E-mail Address : m.heba@outlook.com

Appendix A

Questionnaire Form

The questions used in the questionnaire:

Q1.	Have you worked for any corporate organization before?	() Yes.	() No.
-----	--	-----------------	-------------

Q2.	If your answer to the above is yes, in which department were you working?		
1.	() Financial.		
2.	() Operations.		
3.	() Marketing.		
4.	() Management.		
5.	Others (Please specify)		

Q3.	In whichever sector you were engaged in, did you participate in the decision-making process in terms of the policy making or innovation of new strategies?	() Yes.	() No.
-----	--	-----------------	-------------

Q4.	Please identify the age of the corporate organization you currently work for		
1.	() Less than 5 years		
2.	() 5-10 years		
3.	() 10-20 years		
4.	() 20-50 years		
5.	() More than 50 years		

Q5.	Please identify the industry that your company operates in		
1.	() Aerospace industry		

2.	<input type="checkbox"/> Agriculture
3.	<input type="checkbox"/> Chemical Industry
4.	<input type="checkbox"/> Computer Industry
5.	<input type="checkbox"/> Construction Industry
6.	<input type="checkbox"/> Energy Industry
7.	<input type="checkbox"/> Entertainment Industry
8.	<input type="checkbox"/> Financial Services Industry
9.	<input type="checkbox"/> Information Industry
10.	<input type="checkbox"/> Manufacturing
11.	<input type="checkbox"/> Mining
12.	<input type="checkbox"/> Telecommunications Industry
13.	<input type="checkbox"/> Transport Industry

Q6.	Please identify whether your company performs external trade operations or works only in the domestic market of your country
1.	<input type="checkbox"/> Performs import/export operations
2.	<input type="checkbox"/> Works only in the domestic market

Q7.	Please assess the general level of business profitability in your company (1 point – most negative, 5 – most positive)
1.	<input type="checkbox"/> 1
2.	<input type="checkbox"/> 2
3.	<input type="checkbox"/> 3
4.	<input type="checkbox"/> 4

5.	() 5
----	-------

Q8.	Please assess the level of profit margin in your company (1 point – most negative, 5 – most positive)
1.	() 1
2.	() 2
3.	() 3
4.	() 4
5.	() 5

Q9.	Please assess the effectiveness of cash generation and cash sustainability in your company (1 point – most negative, 5 – most positive)
1.	() 1
2.	() 2
3.	() 3
4.	() 4
5.	() 5

Q10.	Please assess the general level of personnel productivity in your company (1 point – most negative, 5 – most positive)
1.	() 1
2.	() 2
3.	() 3
4.	() 4

5.	() 5
----	-------

Q11.	Please estimate the relevance of innovations integrated into your company (1 point – most negative, 5 – most positive)
1.	() 1
2.	() 2
3.	() 3
4.	() 4
5.	() 5

Q12.	Please estimate the level of personnel's opposition to the integration of innovations in your company (1 point – most negative, 5 – most positive)
1.	() 1
2.	() 2
3.	() 3
4.	() 4
5.	() 5

Q13.	Please estimate the quality of experience exchange among the personnel in your organization as a factor of innovation development (1 point – most negative, 5 – most positive)
1.	() 1
2.	() 2
3.	() 3
4.	() 4

5.	() 5
----	-------

Q14.	Please assess the relevance of disruptive innovations in the financial development of your organization (1 point – most negative, 5 – most positive)
1.	() 1
2.	() 2
3.	() 3
4.	() 4
5.	() 5

Q15.	Please estimate the role of innovations in the financial returns of your organization (1 point – most negative, 5 – most positive)
1.	() 1
2.	() 2
3.	() 3
4.	() 4
5.	() 5

Q16.	Please estimate the general quality of personnel management in your organization (1 point – most negative, 5 – most positive)
1.	() 1
2.	() 2
3.	() 3

4.	() 4
5.	() 5

Q17.	Please estimate the relevance of transformational leadership in your organization (1 point – most negative, 5 – most positive)
1.	() 1
2.	() 2
3.	() 3
4.	() 4
5.	() 5

Q18.	Please estimate the current level of personnel's desire and motivation for changes in your organization (1 point – most negative, 5 – most positive)
1.	() 1
2.	() 2
3.	() 3
4.	() 4
5.	() 5

Q19.	Please estimate the current level of personnel's autonomy and freedom in cooperation with the management (1 point – most negative, 5 – most positive)
1.	() 1
2.	() 2

3.	() 3
4.	() 4
5.	() 5

Q20.	Please assess the current level of innovation integration by the personnel in your organization (1 point – most negative, 5 – most positive)
1.	() 1
2.	() 2
3.	() 3
4.	() 4
5.	() 5

Appendix B

Mean Results for Variables in the Sample

Number of Participant	Financial Performance	Innovations	Management
1	3,25	3,6	4,6
2	4,5	3,4	4,8
3	4	4,4	3,6
4	5	4,4	4,8
5	3,75	3,2	4,6
6	4,25	3,8	4,2
7	3,5	4,6	3,6
8	4,5	4	4,8
9	4	4,2	5
10	4	3,8	4,6
11	5	3,6	4,6
12	4	4,6	4,8
13	4,5	3,6	4,6
14	4	4,4	4
15	5	4,2	4,4
16	4,25	4,2	3,8
17	4,5	4,4	4,6
18	4,25	4,2	4,4
19	3,5	3,8	4,2
20	2,5	3,4	3,8
21	2,25	2,6	3
22	5	4,2	4,8
23	4	4,2	4,2
24	4,5	4	3,8
25	4	4,4	4,8
26	3,5	3,8	3,4
27	2,25	2,4	3,8
28	4,5	4,2	3,4

29	3,75	3,6	4,6
30	3,5	3,6	4,4
31	5	4,4	3,6
32	4,5	3,6	4,6
33	2,75	4	3,6
34	3,75	4	4,6
35	5	3,8	4,8
36	3,5	3,4	4,4
37	2,5	2,4	3,6
38	3,5	4,2	3
39	4,75	3,6	4,6
40	5	3,4	4,8
41	2,5	2,8	3,6
42	2,25	2,6	3,6
43	4,5	4	4,8
44	3	2,8	4
45	5	4,6	4,8
46	3,75	4,8	3,6
47	2,25	2,4	3,6
48	3,5	4,4	2,8
49	2	2,2	2,8
50	3	3,4	3,2
51	4	2,8	3,2
52	2,75	2,4	2,8
53	3	3,2	2,6
54	3	2,6	2,4
55	2	3,6	2,4
56	3	4	4
57	4	2,6	2
Mean	3,74	3,66	3,96