

QATAR UNIVERSITY

COLLEGE OF BUSINESS AND ECONOMICS

STUDY OF INTRAPRENEURSHIP IN QATAR: AN EMPIRICAL

STUDY AND STRUCTURAL MODEL

BY

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ABSTRACT

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Title: Study of Intrapreneurship in Qatar: An Empirical Study and Structural Model

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Intrapreneurship has provided great opportunities for organizations that have practiced it in different countries. Intrapreneurship is a process by which employees within an organization take the lead in producing new products or services through innovation. These employees use the company's resources to turn unique ideas into products or services that are profitable to the organization. This research aims to study intrapreneurship in different organizational settings in Qatar, including government, semi-government, and private organizations. The purpose of the study is to understand and explore intrapreneurship in Qatar and to discuss the outcomes and prerequisites for intrapreneurship. The study was conducted in two phases. In the first phase, a questionnaire-based survey was conducted. The study sample included 110 employees working in Qatar in governmental organizations, semi-governmental organizations, and private organizations. Analysis of the data was done using SPSS software to test correlation and conduct an independent sample t-test. Then, in phase two of the study, Interpretive Structural Modeling (ISM) was used to develop a hierarchy-based model to rank the barriers that affect intrapreneurship.

The results of the questionnaire-based study show a significant positive correlation between the prerequisites and outcomes of intrapreneurship. Moreover, the public sector had a lack of support for intrapreneurship as compared to the private sector. The results of the tests showed a significant positive correlation between intrapreneurship and perceived customer satisfaction. In addition, there was a significant positive correlation between intrapreneurship and job satisfaction. The ISM model is composed of four levels of twelve different barriers that affect intrapreneurship, with the most important barriers or root causes at the bottom of the hierarchy-based model. Such a model could help managers to develop suitable strategies to eliminate these root causes and improve overall support for intrapreneurship in Qatari organizations.

Key Words: intrapreneurship, innovation, intrapreneur, employees, entrepreneurship, sustainability, organization, Qatar, employee satisfaction, intrapreneurship dimensions, intrapreneurship prerequisites, intrapreneurship outcomes, ISM model, intrapreneurship barriers.

DEDICATION

I dedicate this research to my father, mother, and my husband as they supported me throughout the whole MBA program. They gave me full support and assisted me in different aspects in overcoming any obstacles I faced. Also, I dedicate this research to Dr. Mohamed Nishat, who supported me during the graduation project and was available whenever I needed support.

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CHAPTER 1: INTRODUCTION

1.1 Overview

Intrapreneurship has developed over a number of years and has had several definitions. The concept originated in 1978 when Pinchot stated that organizations needed to allow entrepreneurial behavior within the organizations. In 1999, Sharma and Chrisman identified intrapreneurship as a process whereby individuals working within an organization create a new organization or innovation within that organization. The definition of intrapreneurship has since evolved to mean organizational entrepreneurship by which employees develop and innovate new products or services inside their organizations. Workers accomplish this by working independently to generate creative ideas, as well as by with collaborating in groups for new product development (Burstrom & Wilson, 2015).

When the environment is creative and the management structure encourages generating new ideas and developing solutions for problems, organizations can help develop employees' skills and reduce the turnover percentage. Moreover, some organizations allow their employees the required time and resources to create and work on their ideas. This was the case in the creation of Gmail, one of the most famous examples of intrapreneurship, which was launched by Google. Google allowed its employees to devote 20% of their scheduled work time to work on personal projects related to the company. As a result, Paul Buchheit launched the idea of Gmail in April of 2004. Today, Gmail is one of the most widely-used email platforms in the world. Another example of intrapreneurship is that of Ken Kutaragi, a junior employee at Sony, who started to enhance Nintendo and later came up with the idea of creating the

PlayStation, which is now one of the world's most recognizable brands. In another example, the company 3M allowed its employees to dedicate 15% of their work time to developing new projects. One of these projects, the Post-It Note, developed by Spencer Silver, became one of the most frequently used items at offices and is sold at almost every office supply store around the world (Deeb, 2016).

These brilliant examples have proven that intrapreneurship is a key factor for innovation, sustainability, income, and low turnover rate.

1.2 Research Purpose

Employees play a dynamic role in the economy of a country, as they are the core of the economy. Intrapreneurship has shown positive effects in different countries around the world. It has increased their income and enhanced their position in the market. In this study, the main purpose is to understand and explore intrapreneurship in Qatar. Also, to explore variables affecting intrapreneurship and to understand the barriers that affect intrapreneurship. Since the practice of intrapreneurship is crucial to organizations, this study examines future opportunities for implementing intrapreneurship in organizations in Qatar.

1.3 Motivation of the Study

This research aims to study intrapreneurship in different types of organizations in Qatar including government, semi-government, and private organizations. The study discusses the concept of intrapreneurship and specifically its outcomes and prerequisites. The participants in the study are employees in Qatar. The study focuses on Qatar as there is no previous study about intrapreneurship in Qatar, and moreover, there is no study comparing intrapreneurship between the private and public sector in Qatar.

Intrapreneurship includes different dimensions, but unfortunately, there is no study that examines it in Gulf Cooperation Council (GCC) countries.

1.4 Benefit of the Study

The study will benefit Qatar by showing the concept of intrapreneurship and how it affects employees and organizations in a positive way. It will benefit both managers and employees of private, governmental, and semi-governmental organizations. In addition, the study will show the potential prerequisites and outcomes of intrapreneurship in Qatar. Furthermore, practicing and implementing intrapreneurship in Qatar will have various positive effects, such as increased revenues, employee satisfaction, innovation, and sustainability.

1.5 Research Objectives

The objectives of the study cover four dimensions:

- 1. To explore the intrapreneurship concept in organizations in Qatar.
- To understand the variables affecting the prerequisites and outcomes of intrapreneurship.
- To examine customer and employee satisfaction in relation to intrapreneurship.
- 4. To develop a relationship model for barriers to intrapreneurship in Qatar.

1.6 Research Question

The research addresses two main questions:

- 1) To what extent is intrapreneurship practiced in organizations in Qatar?
- 2) What are the prerequisites and outcomes of intrapreneurship that affect organizations in Qatar?

This research is composed of six chapters, the first of which contains the introduction. The second chapter contains the literature review in which a variety of journals (including previous studies), articles, and websites are examined. The third chapter depicts the research methodology used to obtain the primary data—specifically the questionnaire study and ISM methodology. The fourth chapter presents the results and research findings that were analyzed using SPSS software. The fifth chapter discusses the implementation of the ISM model in the context of this research. Finally, the sixth chapter presents the conclusions, which are composed of a summary of findings, recommendations, limitations, and scope for future research.

CHAPTER 2: LITERATURE REVIEW

2.1 Defining Intrapreneurship

Intrapreneurship simply means entrepreneurship within an existing organization. Intrapreneurship exists when an individual works inside an organization and uses the organization's resources to pursue an opportunity. Furthermore, it also means creating new organizations within the same organization. It started with a focus on entrepreneurial individuals inside corporations and then was broadened to include entrepreneurial characteristics at the organizational level (Antoncic & Hisrich, 2003).

The intrapreneurial process can exist in any firm regardless its size. It is intended not only to create new business ventures but also to develop new products, technologies, services, competitive postures, and administration techniques. Intrapreneurship is defined as the actions of individuals within organizations that lead to the innovation of products, processes, or services. Moreover, it adds value to the organizations (Gapp & Fisher, 2007). Intrapreneurship is a process conducted within organizations which leads to both new business and marketing orientation that leads to new products or services (Merrill, Chambers, & Roberts, 2008). Intrapreneurship is defined as a process by which individuals inside an organization acquire opportunities using the resources they control. It exists where large businesses enable employees to demonstrate entrepreneurial behavior to benefit the organization (Antoncic, 2007).

Woo (2018) mentioned that intrapreneurship is not a new concept; in fact, it is entrepreneurship established and embraced by employees in current companies. Intrapreneurship affects a company's revenue, growth, knowledge formation, joint venture, innovation, opportunity seizing, new product development, and sustainability.

Intrapreneurial research focuses on three areas, the first of which is intrapreneur individual characteristics. The second area is the formation of new corporate ventures, with emphasis on ventures that fit with the corporate internal environment. The third and last area is entrepreneurial organization, which focuses on organizational characteristics (Antoncic & Hisrich, 2003).

Intrapreneurs are people who get involved in creating new businesses within established firms. Intrapreneurs can be middle managers, CEOs, top managers, or operational managers; thus, intrapreneurs can be any employee within a company (Ma, Liu, & Karri, 2016). Key individuals in existing organizations are referred to as intrapreneurs in that they have the ability to identify opportunities and use organizational resources to satisfy new needs. In addition, intrapreneurs develop business plans, procure required resources, and are key players in managing the organization. Intrapreneurs can turn unique ideas into products or services that are profitable to the organization (Altinay, 2005). Furthermore, they are individuals who work to enhance the organization's products or services through their ability to create and identify new opportunities; consequently, they enhance the value of the firm. Table 1 shows a summary of the main definitions of intrapreneurship.

Table 1: Main Definitions of Intrapreneurship

Serial	References	Intrapreneurship Definition
1	Antoncic and Hisrich (2003)	Intrapreneurship means entrepreneurship in an
		existing organization.
2	Gapp and Fisher (2007)	Actions of individuals within organizations that lead to
		the innovation of products, processes or services.
3	Antoncic (2007)	A process by which individuals inside organizations
		acquire opportunities using the resources they control.
4	Woo (2018)	Intrapreneurship is entrepreneurship established and
		embraced by employees in present companies.
5	Merrill, Chambers, and Roberts	Process that is found inside the organization which
	(2008)	leads to new business and marketing orientation that
		leads to development of new products or services.

2.2 Difference between Intrapreneurship and Entrepreneurship

Intrapreneurship means developing a new business within an existing organization using the organization's resources, whereas entrepreneurship means developing a business outside the existing organization with the entrepreneur's own resources (Parker, 2011). Moreover, it is an entrepreneurial activity developed and executed by employees and managers. In intrapreneurship, entrepreneurial activity is made by employees and managers. The reward goes to the organization, and the risk is taken by the company (Hartmann, 2018). Because the organization's resources are used, there is less risk for the intrapreneur. Intrapreneurs only manage the business, as they do not have ownership (Seshradi & Tripathy, 2006). The advantages of intrapreneurship are that employees will have higher morale, enjoy better access to financial resources, and will be able to get help from their colleagues at work. Also, they can get access to information for which there is larger technology base. On the other hand, the disadvantages include discredit for failure and a lack of prompt recognition, promotions, or incentives. The owners or higher-level managers get the recognition rather than the intrapreneur himself (Felicio, Ricardo, &

Caldeirinha, 2012).

On the other hand, entrepreneurship is a process that entails starting up a business developed by the entrepreneur with the motivation and capacity to get the reward as well as assume the risk in order to achieve economic success (Shane, Locke, & Collins, 2003). The entrepreneur receives the return and profit from the business, has ownership of the business, and funds the business with his own money. The advantages of entrepreneurship are that he or she has personal freedom and satisfaction, makes his or her own decisions, and gains the financial rewards (Parker, 2011). On the other hand, the disadvantages are that he bears the whole financial risk, and the level of competition can be stiff. Finally, there is no guarantee for success, and the entrepreneur takes the whole responsibility (Bruyat & Julien, 2001).

2.3 Intrapreneurship Traits and Purpose

Intrapreneurs are risk-takers, visionary, and passionate. Moreover, they have high aspiration to new achievements (Ma, Liu, & Karri, 2016). The intrapreneurial process is not just about having the idea but also making it available to the organization. Moreover, it should foster creativity and address customer-centered idea generation, problem-centered idea generation, and price centered idea generation (Harms, 2015). The primary driver for intrapreneurship is economic stability. Both social need and altering target population encourage organizations to participate in intrapreneurial activities (Berzin, Pitt-Catsouphes, & Gaitan-Rossi, 2016).

One study demonstrated the probability of becoming an intrapreneur by implementing logistic regression analysis using data from different countries. The results showed that developing an intrapreneur requires company resources and capabilities that

include previous entrepreneurial experience. Also, competences and the ability to detect business opportunities, in addition to influencing intrapreneurial behavior, are essential to developing an intrapreneur (Urbano, Alvarez, & Turró, 2013).

Woo (2018) conducted a study in Korea on four firms with a total of 473 employees which examined personality traits on intrapreneurship through career adaptability. The results showed that career adaptability completely facilitated the relationship between intrapreneurship and openness and conscientiousness from the big five personality dimensions. These dimensions consist of neuroticism, extraversion, openness, agreeableness, and conscientiousness, all of which are highly related to intrapreneurship. Figure 1 depicts the research model used in the study and includes career adaptability, personality traits, and intrapreneurship. Moreover, it shows that the results can offer new insights into the intrapreneurial talents required from employees in organizations; thus, this could help managers to discover potential intrapreneurs and overcome obstacles that can affect the development of intrapreneurial competencies. The results show that the Big Five personality traits have a significant positive relationship with intrapreneurship. Japan's economic system is an intrapreneurial system, has a high degree of stability, and is recognized by large organizations (Lechevalier, Nishimura, & Storz, 2014).

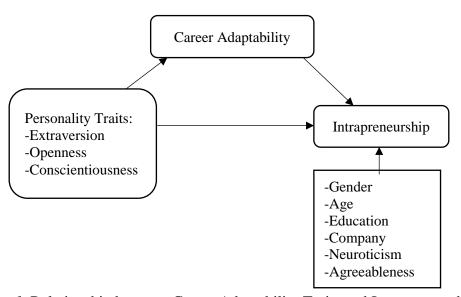


Figure 1. Relationship between Career Adaptability Traits and Intrapreneurship, adapted from (Woo, 2018).

North (2015) selected a sample of 248 industrialists to measure the correlation between key attributes for individual intrapreneurship. The study concluded that three of the big five personality traits (neuroticism, extraversion, and openness) are statistically significant at 99% level.

De Jong, Parker, Wennekers, and Wu (2011) conducted a study on 189 employees at a Dutch company to measure employee intrapreneurial behavior in organizations in relation to proactive personality, job specific items, and demographics. The results showed that the most important variable is the proactive personality trait. On the other hand, the limitation of the study is that it was conducted on a single organization. Table 2 depicts the main contributions about intrapreneurship traits that are provided in different studies.

Table 2: Main Contributions about Intrapreneurship Traits

Serial	References	Main Contribution
1	Ma, Liu, and Karri (2016)	Intrapreneurs are risk-taking, visionary, and passionate and have high aspirations.
2	Urbano, Alvarez, and Turró (2013)	Intrapreneurs should have previous entrepreneurial experience and competencies, as well as the ability to detect business opportunities and influence intrapreneurial behavior.
3	Woo (2018)	Intrapreneurial traits are neuroticism, extraversion, openness, agreeableness, and conscientiousness.
4	North (2015)	Intrapreneur personality traits are neuroticism, extraversion, and openness.
5	De Jong, Parker, Wennekers, and Wu, (2011)	The proactive personality trait is the most important variable.

The concept of intrapreneurship started in 1978. Its main purpose is to improve an organization's performance and macroeconomic development (Merrill, Chambers, & Roberts, 2008). Intrapreneurs work within organizations and can make risky decisions by using company resources rather than using their own as is the case in entrepreneurship. On the other hand, there are similarities between intrapreneurship and entrepreneurship, such as innovation and creativity. Figure 2 demonstrates the model of intrapreneurship in which both the organization and the environment nurtured intrapreneurship, thus improving the organization's performance (Molina & Callahan, 2009). Intrapreneurship enhances the firm's capacity to revitalize its business, innovate, adapt to changes in both external and internal environments, and enhance its performance (Skarmeas, Lisboa, & Saridakis, 2016). Burstrom and Wilson (2015) stated that organizations should be dedicated to supporting intrapreneurial activities since both organizational support and individual competencies are the core to achieving a high level of intrapreneurial activities. Heinonen and Korvela (2014) state

that intrapreneurship is crucial to organizations' survival, growth, profitability, and renewal.

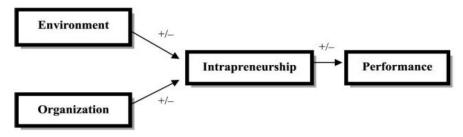


Figure 2. Intrapreneurship Model (Molina & Callahan, 2009).

Vargas-Halabí, Mora-Esquivel, and Siles (2017) conducted a study in Costa Rica to validate a scale used to measure intrapreneurial competencies in an organizational context. SPSS was used to analyze the exploratory factor where a linear regression model was used to gain evidence of external criterion-related validity. It showed that the five employee attributes of proactivity, flexibility, drive, risk-taking, and opportunity promotion are related to intrapreneurial competencies. Moreover, the employee innovative behavior scale provided evidence of discriminant, convergent, and criterion-related validity. The intrapreneurial competency is related to employee disposition to contribute to innovative development and create new businesses for the company. This could be useful to businesses engaged in predicting and using diagnostic instruments to promote innovation and create new businesses for themselves.

2.4 Organizational Need for Successful Intrapreneurship

In order to have successful intrapreneurship, managers should mentor their employees to support them and help them achieve the desired goals. Clear communication between different levels of the organizational hierarchy should be clear. Managers should encourage employees who demonstrate new ideas. The organization should develop innovation and creativity among its employees. Innovation is the core of intrapreneurship and is considered a mechanism to revive the organization. Moreover, a reward system should be applied in which financial and other incentives are provided for innovative employees. Finally, the resources of the organization are the basis of the proposed project to be accomplished, so the organization should have the capability to finance and support the project in different aspects (Urban & Wood, 2015).

Rivera (2017) conducted a study in the USA which showed that many organizations do not have the human resource capabilities that are required to establish new growth. Instead, managers are only focusing on their current work without ever looking forward to improving their knowledge and experience by opening new businesses. Moreover, when maintaining intrapreneurship operational skills related to problem solving, process implementation should be developed for both employees and managers to overcome obstacles. Organizations need intrapreneurial leaders who have the knowledge and have practiced their skills in the market. Finally, intrapreneurial leaders should have sustained commitment to turn that knowledge into a valid source that organizations can take advantage of to create growth. Individuals and managers can drive the future growth of organizations when unfamiliar circumstances occur by developing and maintaining intrapreneurship.

A study showed that developing an intrapreneurial leader requires a three-phase model of innovation which focuses on demonstrating the relationships between product development, service delivery, and application of intrapreneurship-focused teams in the manufacturing and healthcare industries. The model begins with effective teambuilding and encompasses the relationship between product and service as a platform to develop effective innovation. In addition, the model emphasis is on service and manufacturing environments. The first phase is composed of developing and establishing an effective intrapreneurial team. This comprises four levels: personal (linked to trustworthiness), interpersonal (linked to trust), managerial (related to empowerment), and finally, organizational (linked to alignment). In the second phase the team applies the PDSA (plan, do, study, and act) model as a knowledge-based method of innovation where at each stage questions are being asked to employees. In the third phase, product development is attained through emerging knowledge until the level of development is maintained. The results of the study showed that effectively developed intrapreneurial teams are lacking in investigating service delivery, but when this is resolved, it will lead to new and enhanced services. Consequently, new development services will lead to a revolution of new products. The Deming's PDSA cycle model was conducted to show the required time for each stage of innovation. Moreover, it combines the development of knowledge, innovation, and management (Gapp & Fisher, 2007).

Felicio, Ricardo, and Caldeirinha, (2012) conducted a study in 217 medium-sized Portuguese companies, the purpose of which was to study the influence of intrapreneurship on the companies' performance. The findings of the study supported the hypothesized relationships between intrapreneurship, job satisfaction, and growth.

There are different ways to encourage and facilitate intrapreneurship where employees should be provided with a specified time during which they can develop new business-innovative ideas with their managers. Organizations should build cross-functional teams where they supervise innovative projects through different steps. Finally, organizations must develop competition between their employees in order to get others involved and at the same time generate more innovative ideas (Wagner, 2012).

Alpkan, Bulut, Gunday, Ulusoy, and Kilic (2010) conducted a study in Turkey on 184 manufacturing companies which showed that organizations should establish a suitable internal environment for intrapreneurship and recommended the following:

- 1. Management should support employees to generate and develop new ideas.
- 2. Companies should allocate free time for employees.
- 3. Managers should decentralize the level of decision making to their subordinates.
- 4. Incentives and rewards must be used in an appropriate way.
- Companies should encourage intrapreneurs to implement their projects even if they fail.

Whitney (2018) revealed that organizations should apply effective project management tools to manage the risks of intrapreneurial activities and to mentor their employees. In addition, recruiting cross-functional teams that are fully aware of intrapreneurship will help organizations to find and implement innovative ideas.

2.5 Potential Elements and Outcomes of Intrapreneurship

Heinonen and Korvela (2014) conducted a study to discuss the concept of intrapreneurship, specifically the outcomes and prerequisites. The objective of the study was to examine the potential elements and outcomes of intrapreneurship based on previous

research where 184 employees were surveyed. Correlation analysis was conducted to study the relationship between the potential elements of intrapreneurship prerequisites and outcomes. The results showed a positive relation of 0.4 between the prerequisites and outcomes of intrapreneurship.

Figure 3 shows the intrapreneurship prerequisites, outcomes, and phenomena. Environment is an important factor impacting intrapreneurship. Management can facilitate and participate within intrapreneurship. Organizational culture is comprised of the risk taking, innovation, creativity, learning, and change found within the organization. Moreover, organizational setting includes how the work is organized in the company, how the power is divided, and how work is divided. The potential intrapreneur has the individual skills and capabilities that are required from him in intrapreneurship.

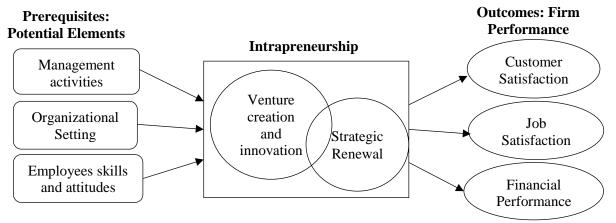


Figure 3. Intrapreneurship Prerequisites and Outcomes, adapted from Heinonen and Korvela (2014).

2.6 Intrapreneurship Dimensions

Anotonic and Hisrich (2003) stated that the intrapreneurship characteristics dimensions are:

- Business venturing. This is a noticeable characteristic in intrapreneurship since
 it results in the creation and formation of new businesses within an existing
 organization.
- 2. Product or service innovation. This refers to product and service innovation that stresses growth and innovation in technology. It consists of new product development, product improvement, and new production procedures.
- 3. Self-renewal. This consists of transforming the organization through renewing the keys ideas underlying the formation of the organization.
- 4. Proactiveness. This means taking the initiative to conduct new marketing and engage in new opportunities.
- 5. Risk taking. This dimension refers to the fast commitment of resources, the agility to take actions, and recognizing opportunities and responding to them.
- 6. Competitive aggressiveness. This is related to how a firm challenges its competitors and how it competes with its rivals aggressively.

Antoncic (2007) demonstrated that intrapreneurship has four dimensions: new business venturing, innovativeness, self-renewal, and proactiveness.

Haase, Franco, and Félix (2015) examined the interface between organizational learning and intrapreneurship and the relationship between them. The results showed that there are four dimensions of intrapreneurship and organizational learning, which are organizational culture, organizational structure, knowledge sharing, and leadership. Table

3 demonstrates the relation between organizational learning and intrapreneurship, and it reflects the attitudes that firms can implement in their organizations.

Table 3: Relation Between Organizational Learning and Intrapreneurship, adapted from (Haase, Franco, & Félix, 2015)

	Dimensions	Attitudes and Behavior
Organizational Learning	Organizational culture	
Intrapreneurship	-Environment open to change -Proactiveness -Creativity and innovation -Risk taking	Involvement, participation, decision making, trust, dialogue, communication, adaptation to change, experimentation
Organizational Learning	Organizational structure	Teamwork, interaction, close
Intrapreneurship	Informal organization structure	relationship, collaboration, flexibility, networking

Skarmeas, Lisboa, and Saridakis (2016) stated that there are four intrapreneurial dimensions, which are new business venturing, innovativeness, self-renewal, and proactiveness. There are also crucial market-learning capabilities, which are export market exploitation and exploration. Figure 4 is a research model that depicts the four intrapreneurship dimensions and depicts how market learning capabilities result in high export market efficiency as well as projected export performance. The study results support the theoretical framework.



Figure 4. Intrapreneurship Dimensions, adapted from (Skarmeas et al., 2016).

A study was conducted in Slovenia in 149 firms, and 671 employees responded to questionnaires sent to them. The findings showed that there is a hypothesized relationship between intrapreneurship, employee satisfaction, and testing the impact of employee satisfaction on firm growth. The questions were based on the dimensions of general employee satisfaction comprising working hours, work conditions, and reputation. Moreover, employee relationships primarily include the relationship with co-workers. The dimension benefits and organizational culture include salary, remuneration in the form of benefits, promotion, job stability, education, organizational climate, and culture. The fourth dimension is employee loyalty. The employee satisfaction construct was examined through the R-type factor dimension using the SPSS software. The study showed and confirmed the importance of employee satisfaction for intrapreneurship and firm growth (Antoncic & Antoncic, 2011).

A study was conducted in Pakistan that was concerned with intrapreneurship and contained two dimensions: relationship between organizational factors and intrapreneurship and individual antecedents of entrepreneurship. These will be evaluated using the dimensions of innovativeness, which means generating new ideas, and risk

taking, which is defined as a person who takes the risk of loss or profit. The study used the partial least square tool using structural equation modeling. Composite reliability, average variance, and discriminant validity were used in this study. The results showed a positive relationship between affective commitment and normative commitment (Farrukh, Chong, Mansori, & Ramzani, 2017). Table 4 shows different intrapreneurship dimensions that are discussed in different studies.

Table 4: Intrapreneurship Dimensions

Serial	References	Context of Study	Intrapreneurship Dimensions
1	Anotonic and Hisrich	USA	Six dimensions: business venturing, product or service innovation, self-renewal,
	(2003)		proactiveness, risk taking, competitive, aggressiveness
2	Antoncic (2007)	Slovenia	Four dimensions: new business venturing, innovativeness, self-renewal, proactiveness
3	Haase, Franco, and Félix (2015)	Portugal	Four dimensions: organizational culture, organizational structure, knowledge sharing, and leadership
4	Skarmeas, Lisboa, and Saridakis (2016)	Portugal	Four dimensions: new business venturing, innovativeness, self-renewal, and proactiveness
5	Antoncic and Antoncic (2011)	Slovenia	Four dimensions: employee satisfaction, employee relationships, organizational culture, and employee loyalty

2.7 Intrapreneurship Barriers

Intrapreneurship barriers contain two major forms internal and external barriers.

There are different internal barriers that affect intrapreneurial development:

2.7.1 Intrapreneurship Internal Barriers

1-Internal Resistance:

This refers to resistance on the part of management and/or employees. It occurs when they completely disregard the idea of innovation or partially resist it (Bridge, O'Neil, & Crombie, 1998). Individuals sometime refuse to change, as they have already put their effort into their assigned job (Devarajan, Ramachandran, & Ray, 2006). Moerdyk and Fone (1987) mentioned three main factors that affect resistance, which are individual self-interest, personality structure, and persuasion of social psychology. Hill (2003) stated that another reason to resist change is that the future is uncertain, and resistance can affect the structure of the existing power.

2-Lack of Training:

Lack of training is another obstacle that employees face, especially when there is an opportunity for them to become intrapreneurs. This can be overcome in some aspects, such as training them in creativity and how intrapreneurs launch and accomplish their projects successfully (Zimmerman, 2010).

3-Organization Policies:

Robert (1998) mentioned that within the organization there are some policies that stand as an obstacle for intrapreneurs to develop, such as bias against younger employees to mentor new projects and difficulty providing financial support and sponsorship.

4-Lack of Required Support:

Whitney (2018) argued that intrapreneurs can be perceived as a threat to managers and leaders, so they will not have the required support; hence, it will negatively affect their innovative ideas.

5-Inflexibility:

There are well established organizations that are not flexible with regard to intrapreneurship (McDermott & O'Connor, 2002). The organization may be reluctant to enter a new and unfamiliar field, and they may fear the risk of failing (Salarzehi & Forouharfar, 2011).

6-Lack of Incentive:

McDermott and O'Connor (2002) stated that there are organizations that do not provide rewards for intrapreneurs, even though employees see them as an incentive to develop and find new ideas. Moreover, not compensating the thoughts of intrapreneurs stands as a barrier to intrapreneurship.

7-Static Nature of Organization:

It is hard to get support from organizations if they support only low-risk opportunities and radical innovations (McDermott & O'Connor, 2002). Whitney (2018) mentioned that innovative projects are risky compared to non-innovative projects in that they are difficult to maintain financially and psychologically; consequently, this can lead to project delay.

8-Lack of Financial Resources:

Hoskisson, Hitt, and Hill (1993) stated that lack of financial resources within organizations affects support for innovations as well as intrapreneurship.

9-Organization Inherent Nature:

Fry (1993) stated that another factor is the inherent nature of large organizations, as intrapreneurs might face difficulty in demonstrating their ideas if the firm has been established for a long time.

10-Lack of Intrapreneurial Talent:

Fry (1993) mentioned that lack of intrapreneurial talent is a barrier since it is difficult for non-intrapreneurs to work on projects and drive them to success.

11-Culture:

Meg and Roberts (2011) stated that culture is a major issue in organizations where an individual might be blamed in the future for the failure of the project that he or she has proposed.

2.7.2 Intrapreneurship External Barriers:

On the other hand, intrapreneurship is affected by external barriers such as regulatory barriers and market forces.

1- Regulatory Barriers:

Regulatory barriers include government regulations and policies for evaluating innovation (Michalski, 2006). When the government has certain regulations that affect intrapreneurship, companies will be reluctant to apply it. Political factors constitute another regulatory barrier and are a major issue to consider; these include political stability, currency stability, and legal restriction (Michalski, 2006). This will affect the decisions for applying intrapreneurship in a company. Sadler (2000) stated that in public sector organizations, there is a lack of intrapreneurship compared to private sectors.

2-Market Forces:

Market forces are composed of market sales, population demographics, industry structure, and barriers to entry (Piatier, 2004). When there is weak industry structure, and high barriers to entry; hence, level of demand in intrapreneurship will be affected.

2.8 Intrapreneurship Enablers:

Intrapreneurship has crucial enablers which support organizations and their position in the industry. It has numerous competitive advantages, such as increasing the revenue of the organization by establishing innovative products and services for which the company gains the greater portion of the revenue.

1-Creativity:

In order for organizations to be innovative, harmony between organizations' aims and employees' creativity should be established (Daft, 2005). Organizations will save on research and development costs since they will have intrapreneurs who are eager to work and search for new products or services instead of investing copious amounts of money training and developing R&D for staff. Intrapreneurship helps the company to be innovative; consequently, the company will sustain itself in the future (Gursoy & Guven, 2016).

2-Intrapreneurial approach:

When a company has an intrapreneurial approach, it develops employees' talents in such a way that they will be committed to the organization's projects, products, or services (Brigic & Umihanić, 2015).

3-Organization Support:

Organizations that support the intrapreneurial mindset attract external talent to the company. These employees will search for companies that support creativity and innovation; hence, they will choose to work with intrapreneurial companies rather than ordinary organizations (Kenney & Mujtaba, 2007).

4-Proactive Employees:

Employees who are proactive seek benefits and add them to the business by taking initiative and recognizing new opportunities (Darling, Gabrielsson, & Seristo, 2007). Intrapreneurs will be responsible for the research on their intrapreneurial ideas, so this will save the company money compared to spending it on marketing research. Furthermore, organizations are afforded the opportunity from intrapreneurs to expand their product lines, and this will increase product differentiation and profitability (Kenney & Mujtaba, 2007).

2.9 Research Hypothesis

To evaluate the research objectives of this study, the following hypotheses are proposed:

H01: There is no significant correlation between intrapreneurship prerequisites and outcomes.

Ha1: There is a significant correlation between intrapreneurship prerequisites and outcomes.

H02: Public sector organizations in Qatar have no lack of intrapreneurship implementation compared to private sectors.

Ha2: Public sector organizations in Qatar have a lack of intrapreneurship implementation compared to private sectors.

H03: Intrapreneurship does not positively influence perceived customer satisfaction.

Ha3: Intrapreneurship positively influences perceived customer satisfaction.

H04: Intrapreneurship does not positively influence job satisfaction.

Ha4: Intrapreneurship positively influences job satisfaction.

CHAPTER 3: RESEARCH METHODOLOGY

This research was conducted in two phases. The first phase focused on three objectives and utilized a questionnaire-based survey. In the second phase, the last objective of the research was achieved utilizing an Interpretive Structural Modeling approach.

3.1 Questionnaire Study

A questionnaire is a research tool that contains set of questions intended to collect information and data from the participants for a study purpose. It can be quantitative or qualitative and is a mix of closed-ended questions and open-ended questions. A questionnaire is a subset of a survey that is conducted on a target audience (Ponto, 2015). On the other hand, a survey is a collection of data from a sample of people based on their responses to questions. Closed-ended questions are analyzed using pie charts and bar charts, whereas open-ended questions are analyzed using qualitative methods and analyses without using numbers (Dudovskiy, 2018).

3.1.1 Types of Questionnaire

- 1. A structured questionnaire collects quantitative data. Its purpose is to collect specific data, and it contains a formal enquiry to validate the hypothesis.
- An unstructured questionnaire collects qualitative data. It has a basic structure and
 does not limit the participant response since it is composed of open-ended
 questions.
- 3. In a telephone questionnaire, the researcher calls participants to ask them the questions. It is expensive, and respondents do not feel comfortable.
- 4. With an in-house questionnaire, the researcher visits the participants at their workplaces or houses. It is more focused toward the questions, but it is time

- consuming, and respondents may not participate.
- 5. A mail questionnaire takes place when the researcher sends the questions through the mail to the participants. It is inexpensive, and the timing is efficient. The researcher gets more accurate answers since respondents answer the questions in their free time. On the other hand, some participants may not respond to the questionnaire (Dudovskiy, 2018).

The main types of questions in the questionnaire are as follows:

- 1. Open-ended questions: These are used to collect qualitative data, and respondents can answer freely without any restrictions.
- 2. Dichotomous questions: These are closed-ended questions where the participants answer either yes or no.
- 3. Multiple-choice questions: These are closed-ended questions where the participants can choose one or multiple answers depending on the question requirement.
- 4. Scaling questions: These widely used where the respondents rank the answers on a scale from 1 to 5 (Dudovskiy, 2018).

3.1.2 Issues to Consider

1. Order of questions and wording of items: Questions that include emotions should not be placed at the beginning. The wording of the questions should not include abbreviations, technical jargon, or slang. Moreover, each question should include a single idea and be short and simple. Participants prefer to answer simple questions rather than complex questions. Questions that are biased, double-barreled, personal, and ambiguous should be avoided, as respondents will get confused and the answers will not be accurate (Colosi, 2006).

- 2. Formatting and arranging items: With open-ended questions it is hard to group the information, as answers will be based on the participants' own perspectives, whereas closed-ended questions provide a summary of information collected and reduce bias. In addition, they are easy to analyze compared to open-end questions. Questions should be ordered based on general information first followed by specific information, then from factual to abstract, and from easy to difficult (Stehr-Green & Nelson, 2003).
- 3. Questionnaire administration: The questionnaire can be distributed by email, interviews, or telephone. The best method of distributing the questionnaire depends on the participants. It is crucial to collect the right information from the right participant, in the right time, and using the right method (Leung, 2001).
- 4. Using an existing questionnaire: In order to increase reliability and validity, it is recommended to use an existing questionnaire along with the same instruments to fit the situation with regard to time, place, and population. The pros of this approach are that it is cost effective and knowledge is accumulated. Moreover, it should correspond to the specific population characteristics, setting, time, and place (Youngshin, Youn-Jung, & Doonam, 2015).

This study used an existing questionnaire from a study titled 'How about Measuring Intrapreneurship,' conducted by Heinonen and Korvela in 2014, and paraphrased the content of it to fulfill the study objectives.

3.1.3 Study Sample

This research focused on employees who work in governmental, private, and semi-governmental organizations in Qatar. Cluster sampling was used were various segments of the population were treated as clusters. Each cluster had represented employees that work in different organizations in Qatar. A questionnaire was prepared that was characterized by closed-end questions in which all of the above issues stated in this research were considered. The questionnaire included demographic information and measured intrapreneurship. The questionnaire was prepared online using Qualtrics software and was distributed to workers in Qatar in different organizations, of which 114 responded. Four of the questionnaires were excluded, as some the questions were not answered, which yielded to a total of 110 responses.

3.1.4 Questionnaire Validity

The QU-IRB Committee verified and reviewed the questionnaire to make sure that it met the desired ethical standard. This research paper has the ethical approval number QU-IRB 1046-E/19. The questionnaire was conducted from a previous study and was reviewed by two academics and two industry people.

3.1.5 Questionnaire Reliability

To measure the reliability of the main dimensions of this study and the questionnaire in general, Cronbach's alpha was calculated (Laerd, 2019). Cronbach's alpha measures internal consistency or reliability and is commonly used for scale questions. Table 5 shows that the Cronbach's alpha is 0.973, which is more than 0.7, and it indicates a high level of internal consistency for the scale questions with the specified sample of 110. This means that the scale questions that were used in the questionnaire are reliable.

Table 5: Cronbach's Alpha Reliability Statistics

Reliability Statistics							
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items					
.973	.972	63					

3.1.6 Data Sources

This research paper includes primary data collected through the distributed online questionnaire and demonstrating ISM model. In addition, secondary data was fulfilled through extensive research on previous studies, journals, websites, and articles. The questionnaire's purpose was to measure the intrapreneurship level of organizations in Qatar and to find the correlation between the potential prerequisites and outcomes of intrapreneurship. The questionnaire was composed of two parts. The first part collected demographic information, and the second part measured intrapreneurship on a scale from one to five. The second part was composed of two subparts, which were potential prerequisites of intrapreneurship and potential outcomes of intrapreneurship. The potential prerequisites of intrapreneurship contained seven variables: measuring encouragement by management and organization, individual motivation, transparency and openness, individual capability, working environment, innovation encouragement, and development. On the other hand, the potential elements of intrapreneurship included the following variables: job satisfaction, perceived customer satisfaction, and external satisfaction in work. The questionnaire that was used in this study is available in Appendix A.

3.1.7 Data Collection Method

The data was collected using Qualtrics, which is a web-based survey tool that can be distributed online through a link. Qualtrics is used to write surveys containing different types of questions and then distribute them, analyze the responses, and make reports. The main advantage of Qualtrics is that the data collected can be directly exported into SPSS, Word, and Excel so that further analyses can take place.

3.1.8 Statistical Methods

The following statistical tools were used in this project in conjunction with the software IBM SPSS Statistics 25:

- Cronbach's alpha was used to measure the reliability of the scaling questions on a specified sample.
- 2. Descriptive statistics was used to determine the mean, frequency, and percentage of the available data.
- 3. Pearson's correlation coefficient was used to determine if there was a correlation between the variables, as well as the strength and direction of the correlation.
- 4. An independent sample t-test was used to compare the means of two unrelated groups in which there was a dependent and independent variable. The dependent variable should be measured on a continuous scale, whereas the independent variables included two category groups that were independent.

3.2 ISM Methodology

In this research the ISM methodology was used to determine the relation and link between the barriers affecting intrapreneurship. An ISM model is developed based on the effect direction of each variable. First, the barriers are identified with numbers, then each relation is represented by one of these letters based on the effect direction: A, V, O, and X, as shown in the SSIM table. Moreover, each letter is converted to binary numbers, either 0 or 1. The next step is to establish the transitivity matrix followed by the final reachability matrix that computes the driving power and dependence power. In addition, each level of barriers depends on the intersection between the reachability set and antecedent list. When the intersection contains the same barriers as the reachability set, then the first level is determined. Then these barriers that are in the intersection are removed. The steps are repeated until the final level of barriers is presented. Figure 5 presents the flow chart for ISM model.

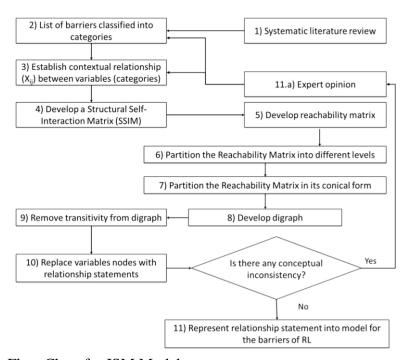


Figure 5. Flow Chart for ISM Model

3.2.1 General Discussion on ISM:

ISM is used in different industries around the globe. A variety of studies was conducted using interpretive structural modeling to identify the barriers or risks that affect the study and the dominant factor. Bouzon, Govindan, and Rodriguez (2015) mentioned that ISM modeling is used to evaluate the barriers that affect reverse logistics in Brazil's mining and mineral industry. Reverse logistics refers to reducing the raw materials used in the production system. Policy barriers have the greater influence in reverse logistics. Valmohammadi and Dashti (2016) developed an ISM model to evaluate the barriers affecting the implementation of e-commerce in Iran. Venkatesh, Rathi, and Patwa (2015) conducted a study in India to analyze the risks that affect the retail supply chain. Yadav and Barve (2015) determined the dominant factor that affects the humanitarian supply chain in India using an ISM model. Panahifar, Byrne, and Heavey (2014) used an ISM model to determine the barriers that affect collaborative planning, forecasting, and replenishment (CPFR) implementation in organizations where a lack of visible and effective leadership is the dominant factor. Table 6 depicts the application of ISM in different areas.

Table 6: The Application of ISM in Different Areas

Serial	References	Context of Study	Application of ISM in Different Areas
1	Bouzon, Govindan, and Rodriguez (2015)	Brazil	ISM evaluated the barriers that affect reverse logistics in Brazil's mining and mineral industry. The ISM model showed that the policy barrier has the greater influence among all other barriers that affect reverse logistics implementation in Brazil.
2	Valmohammadi, and Dashti (2016)	Iran	ISM was used to identify the barriers that affect the implementation of e-commerce in an Iranian industrial group. Lack of awareness regarding the benefit and nature of electronic commerce was the most crucial barrier that affects e-commerce implementation.
3	Venkatesh, Rathi, and Patwa (2015)	India	The ISM model analyzed the risks that affect the retail supply chain in India. The strong drivers that affect the retail supply chain are globalization, behavioral aspects of employees, and security and safety.
4	Yadav, and Barve (2015)	India	The ISM model was used to determine the dominant factor that affects the humanitarian supply chain that improves disaster relief practices. It has proved that governmental policies and organizational structures plays a dominant factor.
5	Panahifar, Byrne and Heavey (2014)	Ireland	The ISM model was implemented to analyze the barriers that affect CPFR implementation in organizations. It showed that the lack of visible and effective leadership was the dominant factor.

CHAPTER 4: RESEARCH FINDINGS

4.1 Demographic Analysis

This chapter shows the research findings for which statistical tools that were described in the previous chapter are implemented. Table 7 shows the demographic analysis of the study in which there are seven variables and each variable measures a certain demographic aspect. The first variable is gender, where 28% are males and 72% are females. The second variable depicts that 46% of the sample are Qatari and 54% are non-Qatari.

Moreover, the level of education is divided into four levels: high school, undergraduate degree, graduate degree, and any additional qualification. The study showed that most of the sample (50%) holds a graduate degree, 28% holds an undergraduate degree at 28%, and finally PhDs represent 14% of the sample. The least represented is high school, at only 8% of the sample. This shows that the sample is highly educated and therefore will show a good combination of answers related to intrapreneurship. The age group demographics showed that the largest group is between 36 and 46 representing 39% of the sample. This is similar to the 25–35 group, which constitutes 38%. The age group 47–57 represents 16% of the data, and age 58 or above represents 5%. The age group 18–25 is the lowest, representing only 2%. This shows that the majority of the employees are relatively young, which suggests that there is time for intrapreneurship to be developed in organizations in Qatar.

Table 7: Demographic Variables of Study Sample

Variable		Frequency	Percentage
Gender	Male	31	28.18%
	Female	79	71.82%
Nationality	Qatari	51	46.36%
	Non-Qatari	59	53.64%
Level of Education	High school	9	8.18%
	Undergraduate degree	31	28.18%
	Graduate degree	55	50.00%
	Any additional qualification	15	13.64%
Age	18–25	2	1.82%
	25–35	42	38.18%
	36–46	43	39.09%
	47–57	18	16.36%
	58 or above	5	4.55%
Years of experience	Less than 5 years	18	16.36%
	5–10	19	17.27%
	11–15	29	26.36%
	16–20	21	19.09%
	More than 20 years	23	20.91%
Job Level	Staff	43	39.09%
	First-level management	13	11.82%
	Middle-level management	35	31.82%
	Executive management	19	17.27%
Type of Organization	Private	52	47.27%
	Government	38	34.55%
	Semi-government	20	18.18%

Figure 6 indicates the years of working experience of the employees. The sample of the study shows that the largest group has 11–15 years of experience, representing 26%, and the next largest group has more than 20 years of working experience at 21% of the sample. Workers with 16–20 years represent 19%, those with 5–10 years represent 17%, and the last group has less than five years of working experience at 16% of the sample. It can be concluded that the employees who participated in this questionnaire are knowledgeable and experienced in their working environment.

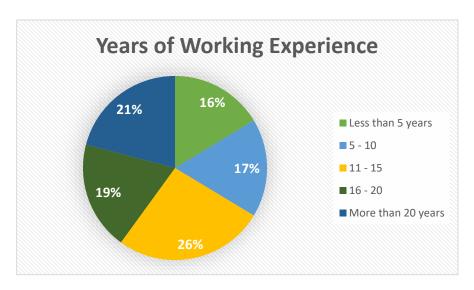


Figure 6. Years of working experience

Job level is another variable that is important to intrapreneurship represented in Figure 7, where 39% of the employees are staff, 32% are middle-level management, 17% are executive management and 12% are first-line management. The middle and executive management are well represented, hence; the possibility of implementing intrapreneurship can be increased as their levels of authority within their organizations are high. This indicates that the job level is also diversified in this research.

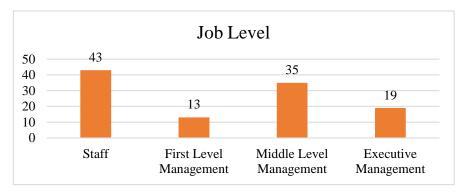


Figure 7. Job Level

Figure 8 represents the types of organizations where the employees work. The types of organizations are private, governmental, and semi-governmental organizations. Most of the participants (47%) work in private organizations, 35% work in the government sector, and 18% work in the semi-government sector.

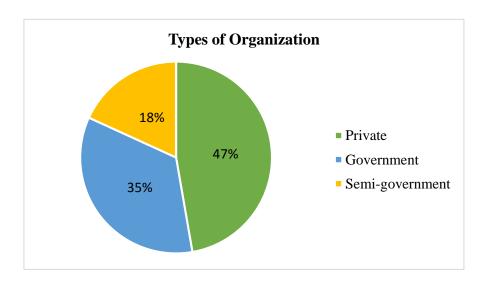


Figure 8. Type of organization

4.2 Analysis of Questionnaire Based Study

The empirical study includes the means for each of the potential prerequisites and outcomes of intrapreneurship, and they are ranked based on the variable with the higher mean. In addition, a statistical analysis using SPSS software was conducted in this study to analyze the variables and test the hypotheses using correlation coefficient and an independent sample t-test. Tables 8 and 9 depict the means of each variable where the highest mean in the potential prerequisites is the development variable, with a mean of 4.2, and the lowest mean is the innovation encouragement variable, which is 3.484. On the other

hand, the mean potential outcomes of intrapreneurship are in the range between 3.74 and 3.96. It can be shown that the mean of the sample size of 110 represents a majority of positive answers whether they agree or strongly agree for both potential prerequisites and outcomes of intrapreneurship.

Table 8: Mean of Potential Prerequisites of Intrapreneurship

Potential prerequisites of intrapreneurship: n = 110, scale 1 to 5	Mean	Rank
First Variable: encouragement by management and organization	3.6	5
Second Variable: individual motivation	4.167	2
Third variable: transparency and openness	3.561	6
Fourth Variable: individual capability	3.869	3
Fifth Variable: working environment	3.704	4
Sixth variable: innovation encouragement	3.484	7
Seventh variable: development	4.2	1

Table 9: Mean of Potential Outcomes of Intrapreneurship

Potential outcomes of intrapreneurship n = 110, scale 1 to 5	Mean	Rank
First Variable: job satisfaction	3.9636	1
Second variable: perceived customer satisfaction	3.7403	3
Third variable: external satisfaction in work	3.7545	2

To test the validity of the data and to find the relation between the prerequisites and outcomes of intrapreneurship, the Pearson correlation coefficient is applied using software IBM SPSS Statistics 25. The variables are intervals so the correlation test can be applied. Moreover, Table 10 shows that all correlation results between the prerequisites and outcomes of intrapreneurship is significant at the 0.01 level two-tailed, which indicates that

there is a relation between them. The sample size N is 110 and the p-value is less than 0.05, which means it is statistically significant. The correlation shows the strength and the direction between the variables. The correlation is positive for all the prerequisites of intrapreneurship variables and the outcomes of intrapreneurship variables.

Table 10: Pearson's Correlation Between the Prerequisites and Outcomes of Intrapreneurship

	Job Satisfaction	Perceived Customer Satisfaction	External Satisfaction in Work					
Encouragement by management and organization	.675**	.592**	.569**					
Individual motivation	.552**	.402**	.364**					
Transparency and openness	.780**	.664**	.680**					
Individual capability	.740**	.602**	.549**					
Working environment	.748**	.608**	.701**					
Innovation encouragement	.694**	.624**	.684**					
Development	.763**	.721**	.670**					
**. Correlation is significant at the 0.01 level (2-tailed)								

From the Pearson correlation test in Table 10, it can be shown that the highest correlation is 0.78, which is between the prerequisite transparency and openness and the intrapreneurship outcome job satisfaction, and it is a strong and positive correlation. The lowest positive correlation is 0.364, which is a weak correlation between the intrapreneurship prerequisite of individual motivation and the intrapreneurship outcome of external satisfaction in work.

The strong positive correlation ranges from 0.6 to 0.8. From Table 10, a number of strong correlations is shown between the prerequisites and outcomes of intrapreneurship.

The correlation between prerequisite transparency and openness and intrapreneurship outcome job satisfaction is 0.78. The correlation between the prerequisite development and intrapreneurship outcome job satisfaction is 0.763. Then, the correlation of prerequisite working environment and intrapreneurship outcome job satisfaction is 0.748. Moreover, there is a strong positive correlation of 0.740 between the prerequisite individual capability and intrapreneurship outcome job satisfaction. Another strong correlation of 0.721 is found between prerequisite development and intrapreneurship outcome perceived customer satisfaction. Working environment and external satisfaction in work have a correlation of 0.701, and between innovation encouragement and intrapreneurship outcome job satisfaction there is a correlation of 0.694. Innovation encouragement and external satisfaction in work have a correlation of 0.684, which is similar to the correlation 0.680 between the intrapreneurship prerequisite of transparency and outcome openness and external satisfaction in work. Encouragement by management and organization and job satisfaction have a correlation of 0.675. In addition, development and external satisfaction in work have a correlation of 0.670. Transparency and openness and perceived customer satisfaction have a correlation of 0.664. The innovation encouragement and perceived customer satisfaction correlation is 0.624. Working environment and perceived customer satisfaction correlation is also strong at 0.608. The last strong correlation is 0.602, and that is between the intrapreneurship prerequisite of individual capability and the outcome of perceived customer satisfaction.

There are also positive moderate correlations that range between 0.4 and 0.6, which is the case in the following variables: encouragement by management and organization and perceived customer satisfaction have a correlation of 0.592; encouragement by

management and organization and the outcome of intrapreneurship perceived customer satisfaction have a correlation of 0.569; The variable individual motivation and job satisfaction have a correlation of 0.552; the prerequisite individual capability and the outcome external satisfaction in work have a correlation of 0.549; and finally, individual motivation and perceived customer satisfaction show a positive moderate correlation of 0.402.

Weak correlation occurs within the range of 0.2 to 0.4. For instance, the correlation between individual motivation and the intrapreneurship outcome external satisfaction in work is 0.364.

4.3 Hypothesis Testing:

The first null hypothesis states that there is no significant correlation between intrapreneurship prerequisites and outcomes, while the alternate hypothesis states that there is significant correlation between intrapreneurship prerequisites and outcomes. By using the Pearson's correlation coefficient in Table 10, it can be concluded that there is a significant correlation between the intrapreneurship prerequisites and outcomes. The p-value is less than 5%, and there is significant correlation between the intrapreneurship prerequisites and outcomes, so the null hypothesis is strongly rejected. The correlation is positive for all variables and it is a strong correlation for most of the variables since the correlation is between 0.6 and 0.8. To conclude, there is significant correlation between intrapreneurship prerequisites and outcomes in Qatar.

The second null hypothesis states that public sector organizations in Qatar have no lack of intrapreneurship implementation compared to private sectors. On the other hand, the alternative hypothesis states that public sector organizations in Qatar have a lack of

intrapreneurship implementation compared to private sectors. To evaluate this hypothesis, the independent sample t-test is conducted since there are two groups: the private sector and the public sector. The intrapreneurship variable is calculated in two steps. The first step is composed of computing the total answers to all questions under each variable. The second step is to sum up all the variables including both the prerequisite and outcome variables to get the intrapreneurship. Moreover, the independent variable is the type of organization, which is either private or public, and the dependent variable is the intrapreneurship. Levene's test is used to assess the equality of variances for variables of two groups. The t-test for equality of means compares the means and depicts whether they are different from each other.

By performing the independent sample t-test that is shown in Table 11A, the following variables are statistically significant since they are less than 5%: encouragement by management and organization (0.024), individual motivation (0.012), and individual capability (0.038). These three variables have higher means in the private sector compared to the public sector as provided in Table 11B. For instance, the mean of encouragement by management and organization for private organizations is 37.8846, which is higher compared to the mean of public organizations at 33.7895. The mean of individual motivation for private organizations is 21.7308, which is higher compared to the mean of public organizations at 19.7368. Finally, the mean of individual capability for private organizations is 20.1346, and it is higher compared to the mean of 18.4474 of public organizations. The null hypothesis is rejected since the public organizations have a lack of intrapreneurship implementation compared to private organizations. To conclude, there is a difference in the intrapreneurship level between private and public sector in Qatar.

Table 11A: Independent Sample t-test

	Inde	pendent Sa	mples Test				
		Levene's Equality o	Equality o	f Means			
		F	p-value	t	df	p-value	Mean Difference
Encouragement by management and organization	Equal variances assumed	.167	.684	2.298	88	.024	4.09514
Individual motivation	Equal variances assumed	.075	.785	2.561	88	.012	1.99393
Transparency and openness	Equal variances assumed	.937	.336	.694	88	.490	.73381
Individual capability	Equal variances assumed	.114	.736	2.103	88	.038	1.68725
Working environment	Equal variances assumed	.434	.512	.276	88	.783	.29960
Innovation encouragement	Equal variances assumed	.007	.935	.220	88	.827	.18522
Development	Equal variances assumed	.029	.864	.517	88	.606	.25506
Job satisfaction	Equal variances assumed	1.231	.270	1.525	88	.131	1.54656
Perceived customer satisfaction	Equal variances assumed	.001	.974	659	88	.512	68927
External satisfaction in work	Equal variances assumed	2.345	.129	057	88	.954	02126

Table 11B: Group Statistics

	Governmen	t			
Mean	Std. Deviation	Std. Error Mean	Mean	Std. Deviation	Std. Error Mean
37.8846 8.19769		1.13681	33.7895	8.55241	1.38738
21.7308	3.62516	0.50272	19.7368	3.6811	0.59715
21.8654	5.16788	0.71666	21.1316	4.6509	0.75448
20.1346	3.52598	0.48896	18.4474	4.05834	0.65835
26.1154	5.15886	0.71541	25.8158	4.98026	0.8079
17.7115	3.89236	0.53977	17.5263	4.02517	0.65297
12.8077	2.35179	0.32613	12.5526	2.25049	0.36508
24.7308	4.88742	0.67776	23.1842	4.5551	0.73893
25.9423	4.667	0.6472	26.6316	5.20613	0.84455
7.5577	1.83018	0.2538	7.5789	1.60458	0.2603
	37.8846 21.7308 21.8654 20.1346 26.1154 17.7115 12.8077 24.7308 25.9423	Mean Deviation 37.8846 8.19769 21.7308 3.62516 21.8654 5.16788 20.1346 3.52598 26.1154 5.15886 17.7115 3.89236 12.8077 2.35179 24.7308 4.88742 25.9423 4.667	MeanStd. DeviationStd. Error Mean37.88468.197691.1368121.73083.625160.5027221.86545.167880.7166620.13463.525980.4889626.11545.158860.7154117.71153.892360.5397712.80772.351790.3261324.73084.887420.6777625.94234.6670.6472	MeanStd. DeviationStd. Error MeanMean37.88468.197691.1368133.789521.73083.625160.5027219.736821.86545.167880.7166621.131620.13463.525980.4889618.447426.11545.158860.7154125.815817.71153.892360.5397717.526312.80772.351790.3261312.552624.73084.887420.6777623.184225.94234.6670.647226.6316	MeanStd. DeviationStd. Error MeanMeanStd. Deviation37.88468.197691.1368133.78958.5524121.73083.625160.5027219.73683.681121.86545.167880.7166621.13164.650920.13463.525980.4889618.44744.0583426.11545.158860.7154125.81584.9802617.71153.892360.5397717.52634.0251712.80772.351790.3261312.55262.2504924.73084.887420.6777623.18424.555125.94234.6670.647226.63165.20613

The third null hypothesis states that intrapreneurship does not positively influence the perceived customer satisfaction, while the alternate hypothesis states that intrapreneurship positively influences the perceived customer satisfaction. To test this hypothesis, the Pearson correlation test is conducted to measure the correlation between intrapreneurship and perceived customer satisfaction. From the results in Table 12, it is shown that the correlation between intrapreneurship and perceived customer satisfaction is significant at 0.01 level, and the correlation is 0.777, which is a strong and positive correlation. The p-value is less than 5% and the correlation is significant, strong, and positive so the null hypothesis is rejected. To conclude, intrapreneurship positively influences perceived customer satisfaction in Qatar.

Table 12: Pearson's Correlation Between Intrapreneurship and Perceived Customer Satisfaction

	Correlations					
		Intrapreneurship				
Perceived	Pearson Correlation	.777**				
customer satisfaction	Sig. (2-tailed)	0				
	N	110				
**. Correlation is significant at the 0.01 level (2-tailed).						

The fourth null hypothesis states that intrapreneurship does not positively influence job satisfaction, whereas the alternative hypothesis states that intrapreneurship positively influences job satisfaction. Table 13 shows that the correlation test is conducted to measure the correlation between job satisfaction and intrapreneurship. The correlation is significant at 0.01 level. In addition, the correlation between intrapreneurship and job satisfaction is 0.872, which is a very strong positive correlation since it is higher than 0.8. Also, the p-value is less than 5% and there is a very strong positive significant correlation, so we can reject the null hypothesis. To conclude, intrapreneurship positively influences job satisfaction in Qatar.

Table 13: Pearson's Correlation between Intrapreneurship and Job Satisfaction

Correlations						
		Intrapreneurship				
	Pearson Correlation	.872**				
Job satisfaction	Sig. (2-tailed)	0				
	N	110				
**. Correlation is significant at the 0.01 level (2-tailed).						

CHAPTER 5: ISM MODEL ANALYSIS

5.1 ISM Model

The Interpretive Structural Modeling (ISM) approach is a methodology used to identify relationships between different items that define a specific issue whereby a set of direct and indirect linked elements are structured into an inclusive systematic model. It starts with recognizing the variables that are stated as either (i) or (j), which are the risks or barriers around a certain issue and then depicting the interrelationship between each one of them through four different aspects. The four aspects demonstrate the relationship between each barrier through the structural self-interaction matrix (SSIM). Within this matrix, (V) means that the variable barrier (i) leads to variable (j), (A) means that the variable barrier (j) leads to variable (i), X means that the variable barrier (i) leads to variable (j) and vice versa, and (O) means that there is no relationship between the variables (i) and (j). Then the SSIM is converted to a reachability matrix (RM) that has two steps. The initial step is the reachability matrix, where the (V) and (X) are converted to binary number one (1). On the other hand, (A) and (O) are converted to the binary number zero (0). In the next step, the initial reachability matrix is converted to a transitivity matrix. The transitivity matrix means that if variable (A) is related to (B) and (B) is related to (C), then (A) is certainly related to (C) (Attri, Dev, & Sharma, 2013).

The final reachability matrix includes the summation of each row to get the driving power as well as the sum of each column to get the dependence power. Then the level partitions are derived from the final reachability matrix where the reachability set includes the factor itself and another factor that it may affect. On the other hand, the antecedent set includes the factor itself and another factor that may impact it. Another column is derived

that is composed of the intersection of these sets for all the different factors (Attri, Dev, & Sharma, 2013).

The top level in the ISM hierarchy is determined where the factors in the reachability and intersection set have the same occupy level. When it is recognized, then the barriers are removed from the other barriers. Moreover, the process is repeated to determine the next level till each level is found. When each level is determined then the ISM model can be developed (Attri, Dev, & Sharma, 2013).

5.2 ISM Model Analysis

In this research paper the ISM model is applied to the barriers that stand as an obstacle to intrapreneurship. Each barrier is defined below as a barrier number listed to twelve different barriers in Table 14.

Table 14: ISM Barrier Variables

Barrier number	Barrier
B1	Internal resistance
B2	Lack of training
B3	Organization policies
B4	Lack of required support
B5	Inflexibility
B6	Lack of incentive
B7	Lack of financial resources
B8	Static nature of organization
B9	Lack of intrapreneurial talent
B10	Culture
B11	Regulatory barriers
B12	Market forces

The relationship between each barrier is shown below in Table 15 in the structural self-interaction matrix. For instance, each relation is presented by a letter where (V) shows that internal resistance (B1) leads to inflexibility (B5).

Table 15: Structural Self-Interaction Matrix (SSIM)

	B12	B11	B10	В9	B8	В7	B6	B5	B4	В3	B2	B1
B1	V	A	A	A	V	X	A	V	X	A	V	-
B2	O	A	A	A	V	A	A	X	A	A	-	
В3	V	X	X	V	V	V	V	V	V	-		
B4	V	A	A	A	V	X	A	V	-			
B5	X	A	A	A	X	A	A	-				
B6	V	X	A	O	V	A	-					
B7	V	A	A	A	V	-						
B8	X	A	A	A	-							
B9	V	A	A	-								
B10	V	X	-									
B11	V	-										
B12	-											

The initial reachability matrix is demonstrated in Table 16 where (V) and (X) are converted to binary number one (1), whereas (A) and (O) are converted to the binary number zero (0).

Table 16: Initial Reachability Matrix

	B1	B2	В3	B4	В5	B6	В7	B8	В9	B10	B11	B12
B1	1	1	0	1	1	0	1	1	0	0	0	1
B2	0	1	0	0	1	0	0	1	0	0	0	0
В3	1	1	1	1	1	1	1	1	1	1	1	1
B4	1	1	0	1	1	0	1	1	0	0	0	1
B5	0	1	0	0	1	0	0	1	0	0	0	1
B6	1	1	0	1	1	1	1	1	0	0	1	1
B7	1	1	0	1	1	0	1	1	0	0	0	1
B8	0	1	0	0	1	0	0	1	0	0	0	1
B9	1	1	0	1	1	0	1	1	1	0	0	1
B10	1	1	1	1	1	1	1	1	1	1	1	1
B11	1	1	1	1	1	1	1	1	1	1	1	1
B12	0	0	0	0	1	0	0	1	0	0	0	1

The transitivity matrix is shown in Table 17 where it is represented as 1*. For instance, there is no relationship between lack of incentive (B6) and lack of intrapreneurial talent (B9) where it is represented by the letter (O). Then the relation between internal resistance (B1) and lack of financial resources (B6) is (A), and the relation between internal resistance (B1) and lack of intrapreneurial talent (B9) is also (A). Consequently, if variable (B6) is related to (B1) and (B1) is related to (B9), then (B6) is certainly related to (B9).

Table 17: Transitivity matrix

	B1	B2	В3	B4	В5	В6	В7	B8	В9	B10	B11	B12
B1	1	1	0	1	1	0	1	1	0	0	0	1
B2	0	1	0	0	1	0	0	1	0	0	0	0
В3	1	1	1	1	1	1	1	1	1	1	1	1
B4	1	1	0	1	1	0	1	1	0	0	0	1
B5	0	1	0	0	1	0	0	1	0	0	0	1
B6	1	1	0	1	1	1	1	1	1*	0	1	1
В7	1	1	0	1	1	0	1	1	0	0	0	1
B8	0	1	0	0	1	0	0	1	0	0	0	1
B9	1	1	0	1	1	0	1	1	1	0	0	1
B10	1	1	1	1	1	1	1	1	1	1	1	1
B11	1	1	1	1	1	1	1	1	1	1	1	1
B12	0	0	0	0	1	0	0	1	0	0	0	1

The final reachability matrix is provided in Table 18 where the summation of each column is shown in the dependence power and the summation of each row is included in the driving power.

Table 18: Final Reachability Matrix

	B1	B2	В3	B4	В5	B6	В7	В8	В9	B10	B11	B12	Driving Power
B1	1	1	0	1	1	0	1	1	0	0	0	1	7
B2	0	1	0	0	1	0	0	1	0	0	0	0	3
В3	1	1	1	1	1	1	1	1	1	1	1	1	12
B4	1	1	0	1	1	0	1	1	0	0	0	1	7
B5	0	1	0	0	1	0	0	1	0	0	0	1	4
B6	1	1	0	1	1	1	1	1	1	0	1	1	9
В7	1	1	0	1	1	0	1	1	0	0	0	1	7
B8	0	1	0	0	1	0	0	1	0	0	0	1	4
B9	1	1	0	1	1	0	1	1	1	0	0	1	8
B10	1	1	1	1	1	1	1	1	1	1	1	1	12
B11	1	1	1	1	1	1	1	1	1	1	1	1	12
B12	0	0	0	0	1	0	0	1	0	0	0	1	3
Dependence Power	8	11	3	8	12	4	8	12	4	3	4	11	

In Table 19, the first-level barrier variables are lack of training (B2), inflexibility (B5), static nature of organization (B8), and market forces (B12), since the reachability set has the same variables as the intersection at this level.

Table 19: Level 1 of Barrier Variables

		Reachability set	Antecedent set	Intersection	Level
B1	IR	1,4,2,5,7,8,12	1,3,4,6,7,9,10,11	1,4,7	
B2	T	2,5,8	1,2,3,4,5,6,7,8,9,10,11	2,5,8	1
В3	P	1,2,3,4,5,6,7,8,9,10,11,12	3,10,11	3,10,11	
B4	S	1,2,4,5,7,8,12	1,3,4,6,7,9,10,11	1,4,7	
B5	I	2,5,8,12	1,2,3,4,5,6,7,8,9,10,11,12	2,5,8,12	1
B6	LI	1,2,4,5,6,7,8,11,12	3,6,10,11	6,11	
B7	F	1,2,4,5,7,8,12	1,3,4,6,7,9,10,11	1,4,7	
B8	N	2,5,8,12	1,2,3,4,5,6,7,8,9,10,11,12	2,5,8,12	1
B9	IT	1,2,4,5,7,8,9,12	3,9,10,11	9	
B10	C	1,2,3,4,5,6,7,8,9,10,11,12	3,10,11	3,10,11	
B11	RB	1,2,3,4,5,6,7,8,9,10,11,12	3,6,10,11	3,6,10,11	
B12	M	5,8,12	1,2,3,4,5,6,7,8,9,10,11,12	5,8,12	1

In Table 20, the second-level barrier variables are internal resistance (B1), lack of required support (B4), and lack of financial resources (B7).

Table 20: Level 2 of Barrier Variables

		Reachability set	Antecedent set	Intersection	Level
B1	IR	1,4,7	1,3,4,6,7,9,10,11	1,4,7	2
В3	P	1,3,4,6,7,9,10,11	3,10,11	3,10,11	
B4	S	1,4,7	1,3,4,6,7,9,10,11	1,4,7	2
B6	LI	1,4,6,7,11	3,6,10,11	6,11	
B 7	F	1,4,7	1,3,4,6,7,9,10,11	1,4,7	2
B9	IT	1,4,7,9	3,9,10,11	9	
B10	C	1,3,4,6,7,9,10,11	3,10,11	3,10,11	
B11	RB	1,3,4,6,7,9,10,11	3,6,10,11	3,6,10,11	

In Table 21, the third-level barriers are composed of lack of incentive (B6) and lack of intrapreneurial talent (B9).

Table 21: Level 3 of Barrier Variables

		Reachability set	Antecedent set	Intersection	Level
В3	P	3,6,9,10,11	3,10,11	3,10,11	
B6	LI	6,11	3,6,10,11	6,11	3
B9	IT	9	3,9,10,11	9	3
B10	C	3,6,9,10,11	3,10,11	3,10,11	
B11	RB	3,6,9,10,11	3,6,10,11	3,6,10,11	

In Table 22, the fourth level includes organization policies (B3), culture (B10), and regulatory barriers (B11).

Table 22: Level 4 of Barrier Variables

		Reachability set	Antecedent set	Intersection	Level
В3	P	3,10,11	3,10,11	3,10,11	4
B10	C	3,10,11	3,10,11	3,10,11	4
B11	RB	3,10,11	3,10,11	3,10,11	4

The ISM model in Figure 9 shows different levels of barriers that affect intreapreneurship. The first level includes four barriers, which are lack of training, inflexibility, static nature of organization, and market forces. The second level is composed of three barriers, which are internal resistance, lack of required support, and lack of financial resources. The third level includes two barriers, which are lack of incentive and lack of intrapreneurial talent. Finally, the fourth level of variables includes organization policies, culture, and regulatory barriers, which represent the dominant barriers that affect intrapreneurship in Qatar. Each barrier is categorized on a certain level depending on its link and relation to intrapreneurship.

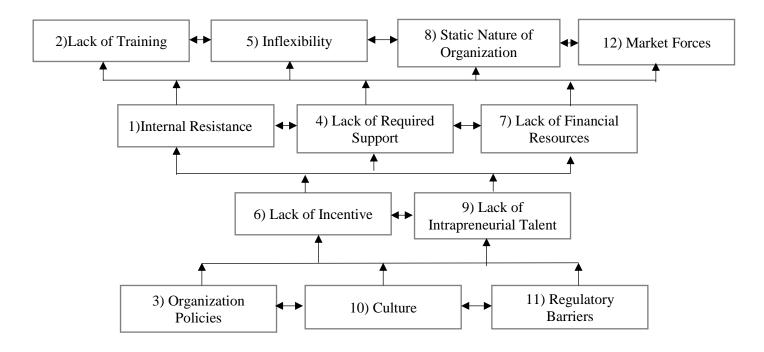


Figure 9. ISM model for the barriers affecting intrapreneurship

CHAPTER 6: CONCLUSIONS, RECOMMENDATIONS, LIMITATIONS AND SCOPE FOR FUTURE RESEARCH

In conclusion, from the results and analysis of the study it can be concluded that intrapreneurship is not practiced in Qatar; however, the level of effect of the potential prerequisites and outcomes of intrapreneurship varies in organizations in Qatar. Moreover, the potential prerequisites show a positive effect on intrapreneurship in Qatar where development has had a high effect compared to other prerequisites. The individual motivation is the second highest effect where employees have the motivation to develop in intrapreneurship aspect. Then the individual capability has an average of 3.869, which shows that employees in Qatar have the capability to be intrapreneurs. Also, the working environment has a positive effect on employees where they have a supportive working environment for developing intrapreneurship. Furthermore, employees are satisfied about the encouragement provided by management and the organization. Transparency and openness are important variables because when employees have an idea related to intrapreneurship, then they will be encouraged to share it with their management. The innovation encouragement variable had an average of 3.484, which is a positive effect, and it measures the aspect of taking risks and developing new ideas at the organization. This shows that employees are willing to bring new ideas to their companies and develop intrapreneurship.

The outcomes of intrapreneurship in Qatar showed a high score of job satisfaction, suggesting that employees are satisfied in their work and so are enthusiastic to bring new ideas to their organizations. The external satisfaction at work measures the favorable work atmosphere and work load. The results show that employees in Qatar have a favorable atmosphere and can handle a higher work load in the case of intrapreneurship. In addition,

perceived customer satisfaction results show that organizations react to customer needs and have long-term relationship with their customers. This shows that customer needs are satisfied and would not be an issue with intrapreneurship.

The study has fulfilled the research objectives of examining the intrapreneurship concept in organizations in Qatar. Different variables that affect the prerequisites and outcomes of intrapreneurship were inspected and each variable was measured in different organizations in Qatar whether they were private, public, or semi-governmental organizations. Finally, the level of customer satisfaction as well as employee satisfaction were examined through correlation in which the results were statistically significant, and it had a strong positive correlation between intrapreneurship level and employee satisfaction as well as customer satisfaction.

The following are the main conclusions for the study:

- 1. Heinonen and Korvela (2014) mentioned in their study that intrapreneurship is crucial to organizational survival, growth, profitability, and renewal, so organizations in Qatar will benefit from implementing intrapreneurship.
- 2. The study that Urbano, Alvarez, and Turró (2013) conducted indicates that developing an intrapreneur requires company resources and capabilities; therefore, Qatar can develop intrapreneurs using company resources and capabilities.
- 3. There is a significant positive correlation between the prerequisites and outcomes of intrapreneurship, and it is significant at 0.01 level two-tailed. The majority of the intrapreneurship variables have a strong positive correlation, which confirms the results that are found in the study conducted by Heinonen and Korvela (2014).
- 4. Public organizations have a lack of intrapreneurship compared to private

organizations, especially in the variable's individual motivation and individual capability. It might be because of employees' diversification background. Also, it had been shown that the levels of managerial encouragement to employees are higher in public organizations compared to private organizations. The results in this study are similar to the study conducted by Sadler (2000), where he mentioned that there is lack of intrapreneurship in the public sector compared to private sector.

- 5. The correlation between intrapreneurship and perceived customer satisfaction is strong and positive, which means that when intrapreneurship is practiced then customer satisfaction will increase.
- 6. There is a very strong positive correlation between intrapreneurship and job satisfaction which proves that when intrapreneurship is practiced in Qatar then the level of job satisfaction will increase subsequently. This supports the study of Antoncic and Antoncic (2011) and Felicio, Ricardo, and Caldeirinha (2012) when they stated the relationships between intrapreneurship, job satisfaction, and growth.
- 7. The Anotonic and Hisrich (2003) study, along with the Vargas-Halabí, Mora-Esquivel, and Siles (2017) study in Costa Rica, proves that risk-taking and flexibility are related to intrapreneurial competencies. This is related to the positive correlation of questionnaire findings where risk taking and flexibility that are included in innovation encouragement are positively related to intrapreneurship.
- 8. Woo (2018) found that the openness trait is related to intrapreneurship. In addition, North (2015) measured the correlation between teamwork and openness in relation to intrapreneurship and found it to be 99% statistically significant. The

questionnaire results also demonstrate that openness had a significant correlation with intrapreneurship.

9. The ISM model is composed of four levels of twelve different barriers that affect intrapreneurship. The first level includes four barriers, which are lack of training, inflexibility, static nature of organization, and market forces. The second level is composed of three barriers: internal resistance, lack of required support, and lack of financial resources. The third level includes two barriers, which are lack of incentive and lack of intrapreneurial talent. Finally, the fourth level of variables include organizational policies, culture, and regulatory barriers. It shows how each variable and intrapreneurship barrier is related to the others and creates a logical link between them. Moreover, it shows the rank between the intrapreneurship barriers.

2.8 Recommendations

Organizations in Qatar will gain numerous benefits from implementing intrapreneurship in their organizations. Intrapreneurship is a key for innovation, growth, and change where the organizations have the possibility to gain benefits. Moreover, when organizations implement intrapreneurship, employees will be engaged and committed to their workplace. Leadership skills will be developed in the organizations. From the questionnaire results, it has been shown that employees have the potential prerequisites of intrapreneurship and that they are ready and have the expertise to try implementing it in their organizations. Job satisfaction had a very strong positive correlation with intrapreneurship, and this suggests that organizations in Qatar can increase the level of job satisfaction of their employees through implementing intrapreneurship at their workplace.

6.2 Research Limitations

The limitations of this study are the following:

- 1. The sample size was small as it is difficult to collect a large sample size within a short period of time.
- 2. Intrapreneurship is a broad concept, so it is difficult to narrow the concept and measure it in only two aspects, which are prerequisites and outcomes.
- 3. There is a lack of previous studies in intrapreneurship especially intrapreneurship in Qatar and Middle East countries.

6.3 Scope for Future Research

The future research directions for this study, "Study of Intrapreneurship in Qatar: An Empirical Study and Structural Model," would be to conduct a study on the enablers of intrapreneurship. Also, a case study can be done to get deep insight about intrapreneurship in organizations in Qatar.

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APPENDIX

Appendix A: Questionnaire

Questionnaire الاستبانة Dear Sir/ Madam, أخي الفاضل/ أختي الفاضلة،

My name is Maram Al-Mannaei, I am a student of MBA program at Qatar University, supervised by Dr. Mohd Nishat Faisal. This research is part of my graduation project. The data collected will only be used for academic purposes and will not be shared with any agency.

This questionnaire is to study the intrapreneurship in the organizations in Qatar. The purpose of the study is to understand and explore intrapreneurship in Qatar.

The questionnaire will be used to collect the primary data needed for a research study. Therefore, we seek your assistance to be open, fair, and honest as possible as you can in your responses. The survey will take approximately 10 minutes from your valuable time.

Your participation is voluntary, the researcher assures you that no individuals will be identified from their responses and there are no requests for confidential information included in the questionnaire. The results of the analysis will be strictly used by the researchers for study purposes only.

This questionnaire consists of two parts:

- 1) Demographic Information
- 2) Measuring Intrapreneurship

Kindly click on "Yes" to start the survey. If you do not wish to participate, kindly click "No" to exit.

أنا اسمي مرام المناعي، طالبة في برنامج ماجستير إدارة الأعمال في جامعة قطر، يشرف على هذا البحث د. محمد نشأت فيصل. وهذا البحث جزء من مشروع تخرّجي. ولن تُستَخدَم البيانات الّتي سيتم جمعها إلا لأغراض أكاديميّة، ولن تتمّ مشاركتها مع أيّة جهة أخرى.

تدرس هذه الاستبانة ريادة الأعمال في المؤسّسات داخل دولة قطر. والغرض الرّئيسي لهذه الدّراسة هو فهم واستكشاف الرّيادة (روح المبادرة) في قطر.

سيتم استخدام هذا الاستبانة لجمع البيانات الأولية اللازمة لإعداد دراسة بحثية. وعليه نطلب مساعدتكم في الإجابة على الأسئلة بكل وضوح وحرية وصدق قدر المستطاع. يستغرق الاستبيان حوالي 10 دقائق من وقتكم.

مشاركتكم تطوعية، ويؤكد لكم الباحث بأنه لن يتم التعريف أو الإشارة إلى الأفراد من خلال الإجابات المقدمة ولن يكون هناك أية إجابات تستوجب السرية تتضمنها هذه

الاستبانة. سيتم استخدام نتائج التحليل من قبل الباحثين لأغراض الدراسة فقط.

تتكوّن هذه الاستبانة من جزئين هما:

- 1) المعلومات الشّخصيّة.
- 2) قياس الرّيادة (روح المبادرة).

يرجى الضغط على "نعم" لبدء الاستبيان. وإذا كنت لا ترغب بالمشاركة، يرجى الضغط على "لا."

Kindly note that the study is approved by the Qatar University Institutional Review Board with the approval number QU-IRB 1046-E/19; If you have any question related to ethical compliance of the study you may contact them at QU-IRB@qu.edu.qa.

Thank you for your valuable time.

Researcher

Maram Almannaei

Email: ma1001341@qu.edu.qa PI: Dr. Mohd Nishat Faisal Email: nishat786@qu.edu.qa يرجى العلم بأن هذه الدراسة تمت الموافقة عليها من قبل QU-IRB 1046-E/19 ورقم الموافقة 91-1046 والمحالفة وإذا كان لديكم أي سؤال له علاقة بالامتثال الأخلاقي يرجى التواصل عن طريق الإيميل: QU-IRB@qu.edu.qa

مقدّرًا لكم وقتكم وجهدكم. الباحث مرام المناعي الايميل: ma1001341@qu.edu.qa

مشرف البحث: د. محمد نشأت فيصل الأيميل: nishat786@qu.edu.qa

Dout 1 Domogworkie Information	الجزء الأول: المعلومات الشَّخصيَّة
Part 1 Demographic Information: Please tick one box for each item	الجرع الاون: المعلومات السخصية يُرجى وضع العلامة (٧) إزاء البديل مناسب فيما يأتي: الجنس:
Gender:	يرجى وصع العرف (٧) إراء البين منسب بيد ياي.
() Male	ر . نکر () نکر
() Female	() انثى () أنثى
() I chiaic	() اسی
Nationality:	الجنسيّة:
() Qatari	() قطريّ
() Non Qatari	() غير قطريّ () غير قطريّ
() I voii Quinii	<u> </u>
Level of Education:	المستوى التّعليمِيّ:
() High school	() ثانُويَّة عامُةٌ ۗ
() Undergraduate degree	() جامعیّ
() Graduate degree	() در اسات عليا ()
() Any additional qualification	() مستوى تعليميّ آخر
() J	
Age:	العمر:
() 18- 25	() 18- 25 سنة
() 25 - 35	35 - 25 ()
() 36 - 46	46 - 36 ()
() 47 - 57	57 - 47 ()
() 58 or above	ُ) 58 فأكثر
Years of experience:	عدد سنوات الخبرة:
() Less than 5 years	() أقل من 5 سنوات
() 5 - 10	() 5 - 10 سنوات
() 11 - 15	() 11 - 15 سنة
() 16 - 20	() 16 - 20 سنة
() More than 20 years	() أكثر من 20 سنة
Job Level:	المستوي الوظيفي:
() Staff	() موظف
() First Level Management	() مستوى الإدارة الدّنيا
() Middle Level Management	() مستوى الإدارة الوسطى
() Executive Management	() مستوى الإدارة التّنفيذيّة
True of Ougon!4!	3 - A 11 - 1
Type of Organization:	نوع المؤسسة:
() Private	() قطاع خاص () قبالی یک . "
() Government	() قطاع حکوميّ () قطاع شبه حکوميّ
() Semi-government	() قطاع سبه حدومي

Part 2 A: Measuring Intrapreneu Potential prerequisites of intrap Please tick one box for each item	-					الجزء الثاني (أ): قياس الرّيادة (روح المبادرة) – المتطلّبات الأساسية لريادة الأعمال (المبادرة) يُرجى وضع العلامة (٧) إزاء الدّرجة المناسبة فيما يأتي: لا أوافق بشدة (1)، لا أوافق (2)، محايد (3)، 1 2 8 4 5					
Strongly Disagree (1), Disagree (2), Neutral (3), Agree (4), Strongly Agree (5)	1	2	3	4	5	5	4	3	2	1	لا أوافق بشدة (1)، لا أوافق (2)، محايد (3)، أوافق (4)، أوافق بشدة (5)
First Variable: encouragement	by	man	agem	ent	and			-1	سة	لمؤست	المتغيّر الأوّل: التشجيع من قبل الإدارة وا
organization	•		Ü							•	
Management activity generates trust in employees											عمل الإدارة يولّد الثّقة لدى الموظّفين.
Management considers employees' point of view											تأخذ الإدارة وجهات نظر الموظفين
Management influence employees to work for the favor of the organization											بعين الاعتبار. تؤثّر الإدارة في الموظّفين للعمل لصالح المؤسسة.
Management encourage operating in new ways											تشجّع الإدارة العمل بطرق جديدة.
Innovativeness and creativity are important at the organization											الإبداع والابتكار مهمّان في المؤسّسة.
Change is identified as an opportunity at the organization											يُنظَر إلى التّغيير في المؤسّسة على أنّه فرصة
Feedback is provided at the organization											فرصة. يتمّ تقديم التّغذية الرّاجعة في المؤسسة.
Employees state their opinions freely											يُبدي الموظّفون آراءهم بحرّيّة.
The organization offers training											تقدّم المؤسّسة التّدريب.
The vision of the organization guides me											رؤية المؤسّسة ترشدني.
Second Variable: individual motiv	atior	1									المتغير الثاني: الدّافع الفرديّ/ الدّاخليّ
I am confident about my abilities											أثق في قدراتي.
I am prepared to make responsible decisions at the organization											أنا على استعداد لاتّخاذ قرارات مسؤولة
I have the ability to manage problems											في المؤسسة. لديّ القدرة على إدارة المشاكل.
It is exciting to find new ways to solve unmet needs in the organization											من المثير إيجاد طرق جديدة لتلبية احتياجات غير ملبّاة في المؤسّسة.
I am motivated to improve the existing system and activities at the organization											أنا متحمّس لتحسين نظام العمل والأنشطة الحاليّة في المؤسّسة.
Third variable: transparency and	open	ness	1	1	-1		-1	1	1	1	المتغيّر التَّالث: الشّنفافية والانفتاح
Difficult decisions are reviewed											يتم مراجعة القرارات الصنعبة علانية.
openly											,
I am rewarded for productive activities											أنا مُكافَأ على الأنشطة الإنتاجيّة.
At the organization teamwork is implemented											العمل الجماعيّ مطبّق في المؤسّسة.
I know what is expected from me at the organization											أعرف ما هو متوقّع منّي في المؤسّسة.
I can easily get advice at the organization											يمكنني الحصول على المشورة بسهولة في المؤسسة.

	the state of the s
The organization responds quickly	تستجيب المؤسّسة بسرعة لتحسين
to improve work methods that are	أساليبِ العمل الَّذي يتمّ تطويرها من قِبَل
developed by employees	الموظفين.
Fourth Variable: individual capability	الموظَفين. المتغير الرابع: القدرة الفرديّة
I am familiar with the organization vision	أنا على وَ عْيِ برؤية المؤسّسة.
I feel enthusiastic to present new	أشعر بالحماس لتقديم أفكار جديدة.
ideas	
I have variety of skills	لديّ مجموعة متنوّعة من المهارات.
I progress at my work	أحقُّق تقدّمًا في عملي. يُعتَبَر مصطلح (تحمّل المخاطر) سمةً
At the organization the term 'risk-	يُعتبر مصطلح (تحمّل المخاطر) سمة
taker' is considered a positive	إيجابيّة في المؤسّسة.
attribute Eith Voriobles working environment	المتغير الخامس: بيئة العمل المتغير الخامس: بيئة العمل
Fifth Variable: working environment	- " " "
I have authority to do my duties well	لديّ سلطة للقيام بو اجباتي بشكل جيّد.
I have responsibility to do my job	أنا مسؤول عن القيام بعملي على
at the expected level	المستوى المتوقّع.
I can work spontaneously at the	المستوى المتوقّع. يمكنني العمل بشكل تلقائيّ في المؤسّسة.
organization	
When I have good idea, I get free	عندما تكون لديّ فكرة، فإنّني أحصل
time to develop it	على فسحة من الوقت لتطوير ها.
Employers are encouraged to	على فسحة من الوقت لتطوير ها. يتم تشجيع أصحاب العمل على المناقشة
discuss with other employees in	مع الموظّفين الأخرين في مختلف
different departments about ideas	الأقسام حول أفكار لمشاريع جديدة.
for new projects	,
I receive special recognition from	أتلقّى تقديرًا خاصًّا من مديري عند أداء
my manager when my work	عملي بشكل جيّد.
performance is well	the tell and the section to
I have enough time to do the required work	لديّ ما يكفي من الوقت للقيام بالعمل المطلوب.
Sixth variable: innovation encouragement	المطلوب. المطلوب. المطلوب. المطلوب. المطلوب. المتعير السادس: تشجيع الابتكار المجتني المؤسّسة على تحمّل المخاطر المدارد المرارد المرار
I am encouraged to take risks at the	تشدّعني المؤسّسة على تحمّل المخاطر
organization	المخاطرة).
Mistakes are considered as learning	(المخاطرة). تُعَبَّر الأخطاء تجارب للتَعلَّم.
experiences	
I am able to develop at the	أنا قادر على التّطوير في المؤسّسة.
organization	•
I enjoy searching for new ideas and	أستمتع بالبحث عن أفكار وخدمات
services at the organization	جديدة للمؤسسة.
Organization facilitate financial	جديدة للمؤسسة. تسهّل المؤسّسة الدّعم الماليّ لأفكار
support for employees' innovative	الموظَّفين الإبداعيّة.
ideas	
Seventh variable: development	المتغير السابع: التطوير
Developing my skills is important to me	المتغير السابع: التطوير تطوير مهاراتي أمر مهم بالنسبة لي.
I do not face difficulty to ask for	لا أواجه صعوبةً في طلب المساعدة في
help at the organization	
I enjoy teamwork	المؤسّسة. أستمتع بالعمل الجماعيّ.
	= =

Part 2 B: Measuring Intrapreneurship- Potential outcomes of intrapreneurship					الجزء الثاني (ب): قياس الرّيادة (روح المبادرة)- المخرجات المحتملة للرّيادة						
Please tick one box for each item					المحتملة للريادة يريده يريده الدرجة المناسبة فيما يأتي:						
Strongly Disagree (1), Disagree (2), Neutral (3), Agree (4), Strongly Agree (5)	1	2	3	4	5	5	4	3	2	1	لا أوافق بشدة (1)، لا أوافق (2)، محايد (3)، أوافق (4)، أوافق بشدة (5)
First Variable: work appreciation and job satisfaction									Č	وظيفي	المتغير الأول: تقدير العمل والرّضا الم
I am satisfied at my work											أشعر بالرّضا في عملي.
I appreciate my work											أقدّر عملي.
Others appreciate my work											أقدّر عملي. يقدّر الأخرون عملي.
I enjoy my work											أستمتع بعملي.
I have variety of duties											أستمتع بعملي. لديّ مجموعة متنوّعة من الواجبات.
I feel I am important to the organization											أشعر أنّني مهمّ بالنّسبة للمؤسّسة.
Second variable: perceived customer satisfaction							1			1	المتغير الثّاني: إدراك رضاً الزّبائن
Our customers are satisfied with the provided services											زبائننا راضون عن الخدمات
The organization react to the customers' needs better than the competitors											المقدَّمة لهم. استجابة المؤسسة لاحتياجات الزّبائن أفضل من استجابة المنافسين.
The organization recognize the customers' needs											تقدّر المؤسّسة احتياجات الزّبائن.
The organization have long term relationships with the customers											لدى المؤسسة علاقات طويلة الأمد مع الزّبائن.
Customers are satisfied with our price- quality relation											مع الزَّبائن. الزِّبائن راضون عن العلاقة بين أسعارنا ومستوى الجودة.
I enjoy hearing feedbacks from our customers											أسعارنا ومستوى الجودة. أستمتع بتلقي التغذية الرّاجعة من الزّبائن.
I enjoy enhancing the organization new ideas based on customers feedback											الزّبائن. أستمتع بتعزيز أفكار المؤسّسة الجديدة استنادًا إلى تعليقات الزّبائن.
Third variable: external satisfaction in work							المتغير الثالث: الرّضا الخارجيّ في العمل				
The organization has a favorable atmosphere											تتمتّع المؤسّسة بأجواء مناسبة.
I feel convenient with my workload											أشعر بالرّاحة مع عبء العمل الخاصّ بي.