



**Arab American University
Faculty of Graduate Studies**

**The Impact of Service Innovation on
Employee Performance: The Mediating
Role of IC at Palestinian Banking**

By

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Supervisor

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**This thesis has been submitted in partial fulfillment of
the requirements for a master's degree in human
resource management**

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Thesis approval

“The impact of service innovation on employee performance: the mediating role of IC at Palestinian Banking Sector”

by

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This Thesis was defended successfully on 8/04/2023 and approved by:

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Declaration

I declare that all the work in this thesis titled “The impact of service innovation on employee performance: the mediating role of IC in Palestinian Banking Sector” has been done to fulfill the requirements for the degree of Master’s in Human Resources Management and submitted to Arab American University Palestine. All work is original and it has been written by me and I have duly acknowledged all the sources of information have been used in this thesis.

This thesis has also not been submitted to any other degree or university.

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Congratulations

Thank God for the communication and completion, thank God in Word and deed, thank
you and satisfaction

I dedicate my letter to the one whom God has exalted with reverence, to the one whose
name I proudly bear, to the one whose darkness has illuminated my prison, " my
father."

To the bliss of life and the secret of existence, and to the love and tenderness
with us to those who provided me with light in the darkness of my prison "
Mother"

To my dear sisters and brothers

To everyone who supported me in my life's journey

Thanks and Appreciation

Praise be to Allah, by whose grace good deeds are done, praise be to Allah, the Almighty of Destinies, the creator of night and day, may Allah bless and grant peace on our Prophet Muhammad, on his good gods, and on his righteous and pure companions.

In this regard, I can only express my sincere thanks to the sincere people who spared no effort in helping me in the field of scientific research, and throughout the period of study at the university, especially "Dr. Emad Wild Ali ", who accompanied me from the beginning of this study and directed me to compile this research material, revise it and show it in the appropriate form, may Allah be well rewarded.

Thanks also go to my family, who stood by me with all love and sincerity, until the realization of a dream that I had after many years, by completing my mission, in which I endured a lot to achieve and complete it to come out into the light in full.

“The Impact of Service Innovation on Employee Performance: the Mediating Role of IC at Palestinian Banking Sector”

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Abstract

This study aimed mainly to show the impact of service innovation on employee performance, taking into consideration the mediating role of intellectual capital in the Palestinian-banking sector. Therefore, the study adopted the descriptive and analytical approach, using the questionnaire as the main tool of gathering the needed data from employees in the Palestinian Banking Sector. However, the population of the study consists of employees in the Palestinian Banking Sector, and the sample of the study was (150) employees. The sample has been selected by using the random sampling technique, and data were analyzed using SPSS v.25 and AMOS V.24.

Accordingly, the study revealed that the service innovation has a positive significant impact on employee performance ($R^2=0.434$), in which intellectual capital has a low significant mediating role in the relationship between service innovation and employee performance. Moreover, the overall service innovation was low in the Palestinian banking sector (operation innovation low, and technology innovation). In addition, the study shows that regarding employee performance, the dimension of adaptive performance, task Performance, and contextual performance was low. However, the study shows a low level of intellectual capital implementation in the banking sector in Palestine. Whereas, the study shows a significant statistical evidence for the positive relationship between service innovation and employee performance

Based on the results, the study recommends that Banks in Palestine should take into consideration the importance of existed services innovation, and should invest in the existed intellectual capital, toward improving their performance. In addition, under the shadow of high competition, banks in Palestine must allow employees to apply their innovation-based services, toward maintaining their existence. Moreover, managers at banks should concern highly on raising up their employees performance, throughout service innovation, and generate the intellectual capital of the banks.

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Chapter One

Introduction

1.1 Introduction

Recently, the importance of the service industry is increasing at an unprecedented rate, and this has been strongly coupled with the increasing expectations of customers towards the quality of performance of the services provided, in addition to the intense competition that has forced organizations to provide distinguished services to meet customers need and survive in such environment. no service can continue for a long time without change or improvement, especially when there are competing or alternative services as marketing success services do not depend only on a good performance in providing existing services, but rather depend on the further development of new services, Therefore, innovation in the field of services has become one of the strategic necessities that achieve for the organization many of the goals it seeks to achieve.

The shift and change to a knowledge-based economy, from a production-based one, has given the importance to Intellectual Capital as the main asset and source of competitive advantage, as well as the main driver of innovation and wealth and value creation. Intellectual Capital could be defined as the company's intellectual ability which presents the efficiency of physical capital use and the intellectual potential in value creation. In other words, Intellectual capital could be considered any intangible resources, such as knowledge, information, experience, etc., that enable a company to create value and gain a competitive advantage (Nassar, 2020).

The Service Innovation Department plays an important role in serving development in all countries of the world without exception, as it is the backbone of any stable and

sustainable development that adds to the strength and progress of nations. Global interest in service innovation has increased in the wake of the international trend toward globalization with the required quantitative and qualitative accumulation of intellectual capital. To be able to innovate, develop technological innovation, and invest in information for the cornerstone of science and knowledge and its use in economic activity, which is one of the strategic directions that countries aim at in general. This is what prompted most countries of the world to allocate huge sums of money to restructure education and develop its order to improve the characteristics of intellectual capital and make it more appropriate and in line with the requirements of sustainable development (Tarus & Sitienei,2015).

Based on that, this study deals with the impact of service innovation on employee performance, in which the intellectual capital at the banks considered a mediator factor in the relationship between service innovation and employee performance.

1.2 Problem Statement

Business organizations face difficult challenges to survive in a changing world, where competition and market pressures prevail, which requires a renewed view of new ideas that encourage innovation. Innovation is the most capable source of competitive advantage.

Many people believe that innovation and creativity are the most significant factors because of how advanced science and technology are in our environment. As a result, innovation and creativity are now crucial components in ensuring the survival and growth of companies. A company that doesn't invest in modern technology

advancement, especially informatics, and uses it in all of its operations is doomed to failure and leaves the commercial world.

Innovation and invention are the pillars of the individual's cognitive field, and therefore the set of information represented in the knowledge and experiences has a clear impact on the individual performance behavior, and this in itself is reflected in the individual's performance, proficiency and professionalism, whether within the context of the group or group, and therefore this study will attempt to reveal On the impact of innovation in providing services and its reflection on the performance of employees, and working to find programs and plans through which services are created and improved on the one hand, and the performance of employees in the organization on the other hand.

In Palestine, there are huge number of innovative services provided by the banking sectors, such as: ATM, Mobile Banking etc. While the banking sector in Palestine is restricted according to the surrounding circumstances such as instability of economic situation. Where the intellectual capital could be one of the most important elements of the banking sector, which serves the service innovation, due to the lack of control over the economic components.

Based on the foregoing, we can crystallize the study problem by trying to answer the following question:

What is the impact of service innovation on employee performance, and what is the effect of the mediating role of intellectual capital in this impact on the Palestinian-banking sector?

1.3 Research Questions

What is the impact of service innovation on employee performance, and what is the effect of the mediating role of intellectual capital in this impact on the Palestinian-banking sector?

The following sub-questions are derived from it:

1. Do Palestinians banks implement service innovation practices?
2. What is the reality of employee performance in banks?
3. Do Palestinians' banks implement Intellectual Capital practices?
4. What is the impact of service innovation on employee performance development in the presence of intellectual capital as a mediator variable in the Palestinian banking sector?

1.4 Significance of the Study

The goal of performance management, which is regarded as one of management's most crucial functions, is to pinpoint the performance's reality and understand the variables that influence and define it so that any flaws may be found and fixed. Because performance is merely a reflection of individual success in their departments, this is done to attain the highest realities of performance across the organization. (Kwon, 2020)

The rise of the significance of knowledge and information in the current knowledge-based economy, which replaced the traditional production-based economy, as well as the rise of the importance of creativity and innovation as the main determinants of competitiveness, has emphasized the role and importance of Intellectual Capital. Businesses and companies (Petty & Guthrie, 2000). In this knowledge-based economy, have to rely on their intellectual capital, comprised of intangible assets, such as

knowledge, experience, talents, etc. as a driver of creativity and innovation. Otherwise, these businesses and companies will not be able to create an added value, and hence, compete in this setting (Nassar, 2020). The importance of Intellectual Capital is becoming more realized around the globe.

Therefore, the significance of this study represents in the following:

Practical Significance: Intellectual capital, which comprises Intangible assets, are one of the most important assets for businesses looking to build a long-term competitive edge. For company success, intellectual capital is also a critical strategic resource. It provides enterprises with creative solutions and improves their performance. Enterprises aspire to better their methods and processes, fulfill the expectations of internal and external stakeholders, and benefit from the support of innovation while evolving their plans in an ever-changing and globalizing environment. Enterprises that use essential resources like intellectual capital also wish to reap the benefits of innovation activities' healing and development. Because knows about what it owns, but not about, the procedures that help it get there, measuring intellectual capital is critical. Human capital, structural capital, and relational capital are all examples of intellectual capital, which is a broader notion with three subcategories.

The significance of the study is derived from the prominence of the variables mentioned in contemporary administrative philosophy. This is a representation of intellectual capital, which is a resource derived from the resources of industrial firms and displays a characteristic of the companies as well as its value. Companies must be more creative in their industrial and technological features to keep up with the changing and rapid evolution of the environment in which they compete. As a result, for the adoption of

innovation, organizations must make use of their internal resources, particularly intangible resources, which account for three-quarters of total resources.

Scientific Significance: as mentioned the topic of service innovation and the mediating role of intellectual capital has not been explored extensively yet; additionally, this study will be the one of the studies to be conducted in Palestine and other developing countries, hence, it is anticipated that this study will yield results that are still unknown to the researcher; this will not only add to the obtainable literature and knowledge, but it will also help to inform and direct future research around service innovation and intellectual capital importance. Furthermore, inter-generational issues, national culture, HR strategy, and the bank's strategy.

1.5 Objectives of the Study:

The study mainly aims to show the impact of service innovation on employee performance, taking into consideration the mediating role of intellectual capital in the Palestinian-banking sector. **The following sub-objectives are derived from this goal:**

- To explore the reality of implementing the service innovation practices at Palestinians banks.
- To identify the reality of employee performance in banks.
- To investigate whether the Palestinians' banks implement Intellectual Capital practices.
- To investigate the impact of service innovation on employee performance development in the presence of intellectual capital as a mediator variable in the Palestinian banking sector.

1.6 Research Hypotheses

To achieve the objectives of the research, answer the research questions and develop solutions for the research problem, the following hypotheses were developed after carefully discussing and choosing them.

Ho1: There isn't significant statistical effect of service innovation on employee performance at the significance level ($\alpha \leq 0.05$).

Sub hypotheses

Ho1.1: There isn't significant statistical effect of product innovation on employee performance at the significance level ($\alpha \leq 0.05$).

Ho1.2: There isn't significant statistical effect of Operation innovation on employee performance at the significance level ($\alpha \leq 0.05$).

Ho1.3: There isn't significant statistical effect of Technology innovation on employee performance at the significance level ($\alpha \leq 0.05$).

Ho2: IC mediates the impact of service innovation on employee performance.

H3.0: There aren't significant statistical differences in employee performance level ($\alpha \leq 0.05$) due to demographic variables (gender, educational qualification, and years of experience).

H3.1: There aren't significant statistical differences in employee performance level ($\alpha \leq 0.05$) due to gender.

H3.2: There aren't significant statistical differences in employee performance level ($\alpha \leq 0.05$) due to educational qualification.

H3.1: There aren't significant statistical differences in employee performance level ($\alpha \leq 0.05$) due to years of experience.

1.7 The Limits of the Study

Objective limits: The study limited on service innovation and its influence on workers' performance, and mediation IC role.

Time limits: The study conducted during the year 2023.

Human limits: The study limited to all workers in the Palestinian banking sector

Spatial limits: The study conducted at the headquarters of the Palestinian banking sector

1.8 Thesis Structure

The entire study is divided into several chapters. Each chapter has a different role to perform the search properly. These chapters and their explanations are presented briefly as follows.

Chapter One: Introduction to the Study - It paints a complete picture of the study. It provides an overview of the research background and a brief description of the research issues, including research objectives, research questions, and study significance. Finally, the thesis structure is then presented.

Chapter Two: Literature Review - Focuses on the literary background to identify a gap in existing knowledge. This chapter explores the major disciplines of intellectual capital through service innovation and their impact on employee performance.

Chapter Three: Research Design and Methodology - deals with the formulation of research methodology and quantitative research method. The rationale for using this method is explained in this chapter, and data collection techniques, as well as data analysis techniques, are thoroughly explained in this chapter.

Chapter Four: Data Presentation and Analysis - This chapter covers the presentation and style of data, analytical findings, and discussions of findings and findings.

Chapter Five: Conclusions and Recommendations - This chapter discusses and summarizes the main findings, and highlights the contribution of research to the current body of knowledge. It also addresses the limits of the study and recommendations for future research.

Chapter Two

Literature Review

2.1 Introduction

This chapter aims to revisit literature about service innovation, employee performance, and intellectual capital at the organization in general, and in the banking sector in particular. Those components are particularly significant for this study since they will provide the basis of the relationship between service innovation and employee performance, which the mediating role of intellectual capital in this relationship.

2.2 Service Innovation

Since Barras (1986) first coined the phrase "service innovation," academics have written a significant amount of material on the topic. To adapt and enhance already-existing services and products, to boost service quality and efficiency, to broaden service scope, to update service content, to add new service items, to create new value for customers, and ultimately to increase service innovation to give an organization a competitive edge (Oke, 2007). The main areas of focus in service innovation theories are the connotation and dimension of service innovation.

For instance, Toivonen and Tuominen (2009) found that the core of service innovation is that businesses profit by creating new services or upgrading existing services and utilizing them. Oke (2007) came to the conclusion that service innovation is a process by which organizations convey core service products to clients by establishing new service activities in order to boost customer delight. The viewpoints of academics on the traits of service innovation have also differed. Service innovation was broken down into

four primary categories by Gadrey et al. (1995): service output, service provider competitiveness, service provider technology, and consumer competitiveness. Many terms were used by Den Hertog et al. (2003) to describe service innovation, which also had four components: the innovation concept, the customer interaction interface, the service delivery, and the technology choice. On studies on knowledge-intensive service organizations, these phrases were developed.

Technology innovation and organizational innovation were the two categories into which Wietze and Elfring (2002) classified service innovation. These findings have laid a strong theoretical platform for further research by elucidating the fundamental meaning of service innovation as well as the significance of customers, technology, services, and other aspects in the process.

As the service economy has grown, academics have started to concentrate on the actual use of service innovation. The study of the connection between service innovation and business performance has gained popularity. Scholars have studied this link from a variety of angles and contexts. An email poll of 228 service organizations found that the unstable economic climate makes service innovation more successful in boosting business performance (McDermott et al., 2012).

Using the Chinese electronics manufacturing sector as their research sample, Daugherty et al. (2011) discovered that organizational culture is helpful in establishing service innovation capabilities and realizing market performance. Additionally, an empirical study of 105 UK service firms revealed that a strong corporate innovation culture aids in developing service innovation capabilities and new service development performance (Storey and Hughes, 2013).

Chuang and Lin (2015) came to the additional conclusion that open innovation was necessary to increase service innovation's performance. Based on this discovery, Grawe et al. (2009) discovered that customer involvement motivates businesses to execute service innovation, which will aid these businesses in achieving gains in market performance.

According to Casidy et al. (2020), service innovation has been defined as the introduction of new or enhanced processes, goods, or services based on new scientific or technological knowledge and/or organizational know-how. There are various sorts of service innovations in business, including new services, new production methods, new marketing strategies, and new organizational or administrative structures (Randhawa & Scerri, 2015). Technology, intellectual property, business, or physical activity can all play a role in service innovation (Sundbo, 2003). Another way to describe service innovation is as a process whereby a business establishes and creates challenges before actively pursuing new knowledge to address those problems.

2.3 Types of Innovation

Open versus Closed

Crossing corporate lines is a key component of open innovation. By combining internal and external valuable innovation resources, businesses can promote internal innovation and expand their exterior commercialization strategy (Helfat and Quinn, 2004). Numerous empirical studies have supported the idea that open innovation has a favorable promotion effect on business innovation performance (Keupp and Gassmann, 2009). However, several studies have shown that open innovation may not directly improve performance (Nieto and Santamara, 2007). Faems et al. (2010) contend that

while open innovation will have a detrimental effect on performance due to an increase in the cost of open processes for businesses, traditionally closed innovation can guarantee technology secrecy and exclusivity, which is essential to boosting core competitiveness and maintaining the competitive advantage.

Enterprises only possess a certain number and variety of innovation resources. The market demand, however, is varied and ever-changing. As a result, when businesses innovate their services, they can't just rely on their own resources to satisfy customer demand. Enterprises' external resources must participate in innovation more and more (Keupp and Gassmann, 2009). The favorable impact of open innovation on firm performance has been verified by studies including 558 businesses in seven different European nations (Caloghirou et al., 2004) and an examination of data from a Swiss innovation survey (Keupp and Gassmann, 2009).

2.4 Customer Factors: Customer Participation VS Non-Participation.

Customer engagement has a significant impact on enterprise service innovation as market competition grows and customer demand shifts quickly. According to Kelley et al. (1990), customer participation refers to the actions and resources customers offer in the process of service production and delivery. Customers can contribute in a variety of ways, including by working with businesses to design, develop, even test, utilize, and build new services in addition to contributing important ideas, information, and knowledge. Researchers have accumulated a sizable body of knowledge about the effect of customer participation on service innovation since Lovelock and Young (1979) initially presented the idea.

In a further study, 807 service businesses were polled by Carbonell et al. (2009), and they discovered that increasing consumer participation increases firms' sales performance and competitive advantage by increasing their innovation pace and technology level. According to Verma et al. (2012), customer value creation encourages corporate service innovation and ultimately leads to market success. Laursen and Salter (2006) came to the conclusion that enterprise innovation success has an inverted U-shaped relationship with both the depth and breadth of customer participation.

Services cannot be produced beforehand or kept in storage as physical goods can. In other words, because services are indivisible, invisible, and perishable, customers should be present during the process of service innovation in order for them to be active in service production (Alam and Perry, 2002). Jian and Wang (2013) stated that service innovation is an intangible activity generated in the process of service, which adopts a variety of new approaches to meet customers' wants. They viewed customers as the destination of service innovation. Additionally, businesses find it challenging to manage increasingly diverse client needs by relying just on their own resources and competencies. Encouragement of consumer involvement in service innovation initiatives has emerged as a key strategy for businesses to increase their competitive edge.

According to Matthing et al. (2004), client involvement is crucial in service innovation, and sometimes the impact of customer learning on the creation of new services is even bigger than that of professional learning.

2.5 Company Type: Manufacturing Enterprise Versus Service Enterprise.

Early studies on service innovation focused mostly on service providers. For instance, Bello et al. (2016) discovered when analyzing Indian professional service companies that service innovation significantly affects a company's financial performance. Manufacturing firms have increasingly expanded the service sector in recent years due to the expansion of the notion that services are predominant. According to Yang et al. (2018), service innovation in manufacturing businesses can increase the value of enterprise services and support businesses in maintaining a long-term competitive edge. Although it is simple to copy the product's appearance, function, quality, and other characteristics in order to minimize or eliminate differences, the difference between the service and the product is sustainable because the service is a powerful tool for enhancing product differentiation and gaining sustainable competitiveness (Oliva and Kallenberg, 2003). Thus, service innovation facilitates the acquisition of distinct competitive advantages by manufacturing firms. Additionally, industrial organizations frequently build their service innovation efforts on their current technical superiority. This makes the service innovation used by manufacturing businesses harder to copy, hence assisting businesses in maintaining their profitability.

2.6 The Importance of Service Innovation

The term "service innovation" now refers to innovation taking place in the various contexts of services, such as the launch of new services or alterations to existing services. Although it is a potential setting for service innovation in the service sector, there is no requirement for it. Non-service industries like manufacturing firms who want to add value to their supply chains can also provide new and improved services. Service

innovation frequently lacks the observable characteristics of product advancements, much like how a "product" and a "service" are essentially different from one another. Services may be highly customized and involve a number of stakeholders depending on the needs of the client or consumer. The idea of service innovation is likely to be very different from that of product innovation, particularly in the knowledge-intensive industry where it is vital.

There have been numerous attempts to define service innovation. For instance, the "four-dimensional model of service innovation" put forth by Den Hertog in 2000 reflects the concept of service innovation in a knowledge-based economy. The following dimensions make up the model (pp. 494–498): (1) Service concept, which is a brand-new service on the market; (2) Client interface, which describes new ways that clients are involved in the service production; (3) Service delivery system, which includes new ways that the actual services are delivered to the customers; and (4) Technology, which must ensure that the services can be delivered effectively.

In addition to the fact that service innovation is multifaceted, there are various ways in which the process can proceed. For instance, Toivonen and Tuominen (2009) categorized five service innovation methods according to how formal and collaborative they were. These processes are listed from less formal to more formal in the following order: (A) Internal procedures not related to a particular project. (B) In-house innovation initiatives. (C) Innovation projects with pilot customers; and (D) Innovation projects specifically designed for a customer.

Service innovation, however, is a vague phrase in the literature. It can be viewed as a process as well as an intangible good (Grönroos, 2007). An addition to its tangible

products, a manufacturing company might sell service agreements, whereas a service company might launch new service products.

However, both are inventive when it comes to services. As a result, the term "service innovation" can be used to describe both new facilities, regardless of their uniqueness level and the industry in which they are introduced, as well as innovation in the service sector as a whole. Aside from this ambiguity problem, there hasn't been much study focused on services and service innovation, which is surprising given the growing importance of facilities among economies, in terms of added-value and hiring. In the Organization for Economic Cooperation and Development (OECD) countries, the value added to GDP from services increased by nearly 18 percentage points during the previous four decades and reached 73 percent in 2020 (OECD, 2021).

Today, the bulk of jobs in OECD nations are created by the service sector. Despite being widely acknowledged as a driver of growth and competitiveness, research into and understanding the effects of innovation in the service industry are still lacking in comparison to those of the manufacturing sector (Thakur & Hale, 2013).

2.7 Effect of Innovating Services

One of the problems behind the information shortage on innovating services is still the sovereignty of industrial and technological innovation tactic. Djellal and Gallouj (2010) claim that the industrialist approach's continued dominance in the study of innovation in services results in two gaps: an innovation gap and a productivity gap. The innovation gap, in the author's opinion, is a measurement of the discrepancy between innovation as it actually occurs in a service economy and as it is observed and assessed by conventional measures.

This finding is consistent with Salter and Tether's (2006) findings, which state that services' low levels of development intensity and patenting are part of the reason they did not receive the proper credit for their innovativeness. It might be argued, more generally, that the traditional scientific and technology lenses cause us to ignore innovation in services. The service economy "probably innovates more than these measures would show," claim Djellal and Gallouj (2010, p. 6), and as a result, in service economies, there is unseen innovation that should, if at all possible.

The gap of performance or productivity "reflects the disparity between performance as assessed by traditional economic methods (i.e., productivity and growth) and performance as measured in a service economy" (Djellal & Gallouj, 2010, p. 8). These writers claim that Smith's work, which "compared the productive effort involved in manufacturing with the unproductive work involved in services, which vanished at the very instant they were generated," is where this performance gap first emerged in economics theory (Djellal & Gallouj, 2010, p. 8).

This perspective stresses the intangible characteristics of services, which make measuring them more difficult when contrasted to conventional, physical outputs like goods. Vargo and Lusch (2004) claim that the conventional good-centered dominating logic, which focuses on tangible resources, transactions, and production processes, which is still a major influence in economics and business thought, is to blame for academics' contempt for innovation in services. On the other hand, the prevailing logic of economies dominated by services should be concentrated on intangible resources, connections, and production methods that co-create value through performance (Chesbrough, 2011).

Additionally, a "one-size-fits-all" strategy may not be appropriate to investigate innovation in services because services encompass a wide range of sub-industries that vary, for example, in the amount of expertise required to function. The primary differences in innovation patterns between service sector enterprises were clarified by Vence and Trigo (2009).

High innovation expenditures, extensive intramural Research & Development (R&D), and the mobilization of a sizeable portion of their highly trained workforce are characteristics of business services, which are known for their high level of innovation. Their research also demonstrates that, in comparison to their manufacturing counterparts, service firms generally have a stronger predisposition to collaborate during the innovation process. This is especially true for the business and financial intermediation subsectors.

To avoid falling into the commodity trap and keep their competitiveness, manufacturing companies need to transition from a product-oriented business strategy to a service mindset, according to Chesbrough (2011). Although several case studies (such as the Xerox case in Chesbrough, 2011) illustrate and corroborate this evidence of joint product and service offers, data addressing innovative professional prototypes embracing packages of services are limited, if at all, available.

A process approach may hold promise for measuring of service innovation. The measurement of this type of innovation as a "result," frequently found with product innovations, may be judged insufficient since it ignores the insubstantial nature of innovating services and the resources by which the authentic service is given in nearly form of cooperation with the customer. Understanding of innovation and a firm's

"competitive profile" is influenced by the change from a one-time act of selling (physical) things to clients to an ongoing process of customer interaction. (Miles, 2008)

2.8 Employees' Performance

Because the concept is crucial at the level of the individual and the institution, as well as for the intervention of influences that affect performance and its diversity, performance is one of the most important concepts that have attracted a lot of attention in administrative studies in general and human resource studies in particular. (Obeidat, et al. 2020)

Performance of employees has been a top priority for businesses and studies. Researchers have been looking for more effective ways to reward employees' work performance for many years. The phrase "behaviors or acts that are related to the aims of the [specific] company" is used to describe job performance (Wiemann, et al. 2019). Performance may be a multi-dimensional variable, having unique performance components for each job. Fu et al. (2019) made the case that performance is influenced by attitudes.

For instance, Wiemann, et al. (2019); Shin & Hur, (2020) provided proof that job satisfaction—an attitudinal variable—influences job performance—a behavioral variable. They also stated that "fulfillment of higher order wants will be the foremost closely connected with performance" in their empirical investigation. Even so, the relationship between job satisfaction and productivity is still not clear. According to Tay, et al. (2016), there is a high estimated real link between job performance and satisfaction.

Today, all kinds of institutions seek to maximize productivity and raise the level of employees' performance to the highest levels, in order to ensure their survival and continuity in the practice of their activities. To achieve the goals and the organizational and service message. (Kwon, 2020)

In addition to the previous elements, there are other additional elements for performance that are the amount of work done, persistence and reliability, and the quality of work. (Ajibola, et al. 2019)

According to Lin & Kellough (2019), the performance standards can be summarized as following:

- Precise and clear performance standards are established through several methods, the most important standard: Using brainstorming technique and creative thinking.
- Organize priorities based on its importance and degree of difficulty.
- Setting priorities within priorities.
- Using the elements of quality, quantity, time and process in formulating tasks and defining methods for measuring implementation therein.
- Reviewing the previous performance standards used and work to evaluate their usefulness in measuring work performance.
- Discussing standards with managers.
- Elements of Total Quality Management: Total Quality Management consists of five basic elements or layers that are guidance, basic concepts, processes of receipt and delivery, organizational impact, rewards and recognition of the credit.

2.9 Information and Communication Technology Relation with Service Innovation

The paradoxical necessity for the organization to acquire exploration and exploitation capacities has mostly been highlighted by research on knowledge-intensive enterprises (Junni et al., 2013). Companies that effectively mix their exploitation and exploration capacities are sometimes referred to as "ambidextrous organizations" in the literature (Stettner & Lavie, 2014). This paradigm has been utilized in innovation research to better understand the dynamics of technological innovation (Lafuente et al., 2018). However, there is a school of thought that holds that these frameworks for the dynamics of innovation need to be updated because digital technologies are altering both the processes and the results of innovation (Majchrzak et al., 2018).

ICT is a crucial element enabling businesses' overall performance (Yunis, et al., 2018). ICT has altered the corporate landscape by leveraging the potential of ICT processes to integrate, plan, execute, and control operational processes. ICT is widely recognized as an essential component for accelerating innovation in manufacturing operations (Soto-Acosta et al., 2016). These business-related procedures involve people, groups, software, documents, and other information sources (Neubauer, 2009).

ICT procedures are currently viewed as a key component in advancing firms' core competencies since they facilitate internal communication and speed up network connectivity (Giannakis & Papadopoulos, 2016). Additionally, operations professionals can classify, index, search, and retrieve data in real time thanks to ICT processes because they are carried out in an integrated (joined) variety of technologies that include database systems, the internet, data analytics, and a wide range of software applications (Zhao et al., 2017). These technical advancements allow businesses to precisely record, process, and distribute data (Gupta & Misra, 2016).

As a result, businesses can use the data and the useful information it yields for a variety of purposes, such as improved management monitoring and control, quicker and more accurate decision-making, greater human resource performance, and quicker and better fulfillment of client needs (Coreynen et al., 2017).

According to the literature, ICT processes are becoming a more crucial part of innovation (Parida & Ortqvist, 2015). Prior studies have highlighted the value of ICT processes at the intrafirm level in reorganizing work procedures, integrating regular operations, and bridging departmental barriers to improve information flows and knowledge exchange within firms (Majchrzak & Malhotra, 2016). In this context, ICT processes are in charge of allowing information and knowledge exchange between various functional groups and departments, which enhances the organization's innovation speed and quality as well as innovation flexibility.

ICT operations have the ability to enhance information flows between businesses, acquiring comprehensive knowledge of clients, partners, and suppliers (Gressgard & Hansen, 2015). ICT processes in this context enable businesses to increase their knowledge bases through deliberate inflows and outflows of knowledge from staff, suppliers, customers, and partners to spur innovation and open up new markets for it (Arvanitis et al., 2013). The body of research demonstrates that ICT processes - internal or external - act as catalysts for the firm's innovation goals, primarily by facilitating knowledge exchange within the company or across business networks (Parida & Ortqvist, 2015).

The relationship between ICT process and innovation is the subject of an expanding corpus of quantitative research, but the majority of these studies only look at product and process innovation. In terms of products, current studies demonstrate that ICT

procedures enhance supply chain collaboration and the firm's innovation orientation, as well as making it easier to create new product configurations (Mazzola et al., 2015). According to recent research, ICT processes influence process innovation by integrating organizational practices, promoting intra- and inter-organizational openness, and improving business process management strategies. (Trantopoulos et al., 2017)

The impact of ICT processes on Product-Service Innovation (PSI) has been studied in the past, but in a hazy way and without a clear indication of the specific ICT processes that must be developed for the PSI distinctive orientation in which two interacting dimensions (products/services) determine the firm's innovation. Innovation is co-produced in product-service environments through interactions between vendors and clients (Bigdeli et al., 2018). Customers thus become operant resources in the co-creation of value, driving businesses to develop increasingly innovative and challenging-to-copy solutions (Benedettini et al., 2015). Therefore, the success of these actors' interactions and the degree to which the business is fulfilling the demands of the consumer are key factors in achieving PSI aims (Parry et al., 2012).

However, it is necessary to redefine internal structures and processes to achieve greater customer closeness (Opazo-Basaez et al., 2019), primarily because PSI offerings rely on the fusion of traditional manufacturing products and customer knowledge to achieve fluid PSI co-production and customer satisfaction. Thus, it is crucial to guarantee adequate communication between "front-end" or customer-focused operations and "back-end," or logistics-focused operations, in order for PSI to succeed (Oliva et al., 2012).

When managing PSI efforts, such engagement avoids organizational structure misalignment and helps the company resolve internal cross-functionality issues

(Coreynen et al., 2017). According to literature, ICT procedures act as essential connectors that allow businesses to gather real-time information from suppliers and consumers for PSI advancements (Opresnik & Taisch, 2015). These procedures make it easier for customers to participate in co-creation projects for PSI products. According to Raja et al. (2018), ICT procedures are essential for coordinating information flows across organizational "front- and back-end" operations. This allows PSI execution to take into account both customer-based and logistical operating viewpoints. This study utilizes the ICT processes approach rather than concentrating on a specific ICT technology or software platform (Tarhan et al., 2016).

This strategy is not meant to replace the company's current ICT infrastructure; rather, it aims to encapsulate business operations carried out by a variety of software platforms and systems, regardless of their scope (such as those used by the business units of finance, purchasing, marketing, human resources, and production, among others), and concentrate on how they affect PSI.

Accordingly, this argument contends that ICT processes in PSI initiatives serve as a communication link between suppliers and customers (Cenamor et al., 2017), enabling closer coordination between organizational structures within the business, specifically between front- and back-end operations (customer- and logistics-based ICT processes, respectively) (Parida et al., 2015). The corporation must identify—and then adopt—the IT processes it deems acceptable for its innovation strategy aim and to better connect the organizational front-end and back-end divisions because adopting ICT procedures largely rely on the firm's strategic direction (Jovanovic et al., 2019).

On the basis of this logic, it is possible to draw the conclusion that ICT operations contribute to the innovation process of businesses that aim to achieve PSI as a result.

2.10 Information and Communication Technology Relation with Employee Performance

In order to understand how businesses that utilize ICT are better organized and managed, researchers and managers must do research on the consequences of ICT use at the worker level. Although it is obvious that these effects may change depending on organizational changes regarding human resources concerns (Black and Lynch, 2001), research that look at the consequences of technology use at the level of employees and managers are scarce (Sun, 2016). A model of the hierarchical organization of decision making in an economy where knowledge is a key input in production and agents have a wide range of abilities is presented by Bloom et al. (2014).

The productivity of agents and principals is affected differently by IT and CT, according to this model, which compares the effects of these two types of technology in the workplace. Bloom et al. (2014) suggest that the implementation of ICT use at the workplace has two key aspects that impact the decision making in firms differently, in contrast to Acemoglu et al. (2007) who claim that the implementation of ICT will result in the decentralization of decision making within the firm. To further understand how ICT use affects workers' performance, Information and Communication Technologies must be viewed individually. (Bloom et al., 2014)

Information technologies are the first important factor (IT). This sort of technology, such as ERP (Enterprise Resource Planning), gives a variety of information about production, including energy use, inventories, and human resources (Bloom et al., 2014). Information technologies make it easier for agents to record and store information while also lowering the cost of information access. Because workers can quickly obtain more information than they need to make decisions, information

technologies therefore delay decision-making (Garicano and Rossi-Hansberg, 2006). By enabling agents to handle more of the issues they encounter without having to rely on the manager, these technologies have a "empowering impact" (Bloom et al., 2014).

Information and communication technologies have extremely varied effects on decision-making at each level of an organization, according to this theoretical model. Both enhance productivity by resolving issues, though in different ways: While communication technologies reduce workers' discretion in decision-making, information technology boost workers' autonomy, which has a favorable impact on productivity. The principal's performance may suffer as a result of CT since he will spend a lot of time assisting other staff members. (Sun, 2016)

Moreover, the utilization of information technologies is predicted to boost employee performance (Bloom et al., 2014). Information technologies make it easier to learn since they reduce the cost of instruction, boost output, and allow more workers to solve problems (Garicano and Rossi-Hansberg, 2006). This is in line with earlier research that found that the benefits of ICT are more apparent in a decentralized work environment that gives employees more autonomy and gives them a bigger say in decision-making (Bertschek and Kaiser, 2004).

Sliwka (2001) shown that when agents have the freedom to choose how to carry out their task in the sense that they make their own decisions regarding how to carry it out, their drive to work hard improves. His motivation to gather knowledge is increased by a work environment that delegated decision-making to the employee level. According to Charness et al. (2012), agents feel more independent, their feeling of responsibility rises, and they reciprocate by improving performance when they have a wider range of decision-making authority. ICT's favorable impact on business performance can be

partially ascribed to its advantageous use in coordination and inclination to nurture more autonomy, according to Sun (2016), who focuses on how the use of ICT impacts decision-making at the level of workers.

2.11 Intellectual Capital

Purchasing knowledge and intangible resources is turning into a crucial issue for business growth, survival, and market standing maintenance in line with the knowledge-based economic trend (Enz et al., 2006). In this study, I defined intellectual capital as intangible resources that can give a business a competitive edge, such as human competencies, a common understanding of the organization's goal, and the nature of employee relationships. Human capital, organizational capital, and relational capital are all components of the multidimensional concept known as intellectual capital. The single most crucial non-financial component for an organization's success is intellectual capital (Iranmahd et al., 2014).

Human capital, which denotes individuals' knowledge, skill, competence, and attitudes that can influence business performance, is the cornerstone of intellectual capital. Organizational capital describes the company's operating philosophy and vision as they relate to the individual identities of its personnel (Youndt et al., 2004). The value that a consistent set of relationships between coworkers might produce is known as "relational capital". In order to realize relational capital, organizations typically use mechanistic structures and organic structures. (Cheng et al., 2017)

In the early 1990s, intellectual capital (IC) became a subject deserving of scholarly and applied inquiry (Kim et al. 2011). Despite being a very recent field of study, IC is defined in a variety of ways, and the term has no accepted definition (Bontis et al.,

2015). Similar definitions that briefly define slightly different topics are provided in the literature. According to Walsh et al., (2008), IC is a collection of modern value drivers that effectively convert resources into tangible assets with added value. The development of intellectual competitive advantage, which is the primary source of long-term sustainable competitive advantage, is directly attributed to IC.

However, according to most definitions (Eszter and Jo'na's 2012), IC is invisible and intimately tied to employees' knowledge, experiences, and abilities in the organization's external relationships and processes. We must be able to recognize a concept's constituent parts in order to comprehend it. These parts can be grouped into three main categories: relational capital, structural capital, and human capital (Eszter and Jo'na's 2012).

2.11.1 Human Capital:

The basis of IC is human capital, which is the knowledge, aptitude, skills, and experience of people (Cheng et al., 2017). Employee competence, which includes education, professional skills, know-how, and experimental knowledge, attitude, which includes behavior and motivation toward work, and intellectual agility, which is represented by innovativeness, openness to change, creativity, and flexibility, are all components of human capital (Khalique et al., 2015). Employers must support employees in demonstrating their competence by continuing to engage in employee training and education programs.

Competence is the capacity of a person to accomplish a certain task (Kim et al., 2011). Attitude values each employee's unique commitment, as well as their expertise and skills, as well as elements like motivation, identity, and job happiness (Kim et al.,

2011). According to Kim et al., (2012), human capital must use creativity, aptitude, and innovation to meet customer needs. Employees may apply their expertise flexibly and continuously innovate thanks to their ingenuity. It is one of the most important aspects of creating an enterprise's IC (Chen et al., 2004). Organizations must continue to engage in employee training and education programs in order to assist employees in demonstrating their competence (Kim et al., 2011).

2.11.2 Structural Capital:

Structural capital refers to the systems and frameworks that support workers. Indeed, it is organizational practices that turn individual human resources into group resources (Bollen et al. 2005). After extensive collection and testing, the operational process, which enables a business to perform its different operational responsibilities, reflects the most efficient working procedures and processes (Chen et al. 2004). Organizational capital also comprises managerial principles for maximizing an organization's potential. (Kim et al. 2011)

How staff members connect with customers, collaborate with other departments, and uphold high standards of service are determined by a defined management philosophy. This ideology is owned by the company even if it was created with employee involvement (Kim et al. 2011). According to Kim et al. (2012), organizations can build employee competency and inspire people to serve the company and its clients by having strong organizational cultures. Employees are happier, more inclined to stay with the company, and more eager to give their all to assist consumers when they feel like they are a part of the organization (Kim et al. 2011, 2012). Company managers have also given attention to renewal and development.

For businesses to establish excellent service and product development, continuous renewal and development is required for their long-term survival and growth (Kim et al. 2012). Information technology is a component of structural capital, according to Nemec and Mihalic (2007). The business environment of modern organizations benefits greatly from information technology since it increases employee productivity and client focus.

2.11.3 Relational Capital:

A business with clients is the owner of relational "customer" capital (Stewart 1999). Customer capital is the knowledge that a firm has built up through its interactions with its customers and in its marketing channels (Bontis et al., 2015). Additionally, understanding current and future customer service needs can be built on customer capital (Kim et al. 2011).

Through the relationships that are established between an organization's internal management, employees, and customers, customer capital is created (Kim et al. 2011). Therefore, businesses should work very hard to increase consumer happiness and foster client loyalty (Kim et al. 2012).

Cheng et al., (2017) observed that innovation happens when many types of information and experience are combined, and that for it to be successful, it requires some sharing between the persons involved. Common values, culture, conventions, language, vocabulary, visions, and goals can all be examples of this sharing. These aspects of shared cognition enable the development of RC, a value based on interpersonal connections.

RC denotes the interactions between joint ventures that allow for gains or "relational rents" to be realized (Marzo & Scarpino, 2016). The common goals, values, shared

language, and codes between a buyer and supplier inside a SC might be conceptualized as the RC. This enables them to reduce the variations and potential disputes that arise from cooperative operations (CanevariLuzardo et al., 2019).

2.12 Intellectual Capital and Innovation

IC denotes the interactions between joint ventures that allow for gains or "relational rents" to be realized (Nair, Narasimhan, & Bendoly, 2011). The common goals, values, shared language, and codes between a buyer and supplier inside might be conceptualized as the IC. This enables them to reduce the variations and potential disputes that arise from cooperative operations (Ali et al., 2021).

The connections between IC and innovation have been identified in some empirical investigations. Few studies, though, concentrate on the hotel sector. According to Marzo & Scarpino (2016), businesses with higher levels of IC also tend to foster higher levels of innovation. Human capital and innovation are found to have a positive association by Dakhli and De Clercq (2004). Teamwork performance is determined by the accumulation of human capital; higher employee quality leads to better innovation performance. (Ali et al., 2021)

2.13 Study Gap

The current study has profited from the literatures by selecting the most connected and common variables associated to service innovation and intellectual capital based on the above extensive literature review presentation, either in the theoretical part or the empirical literatures. Additionally, the development of the conceptual framework, including its variables and components, in the current study is made possible by earlier

literature. The literatures did not emphasize intellectual capital as a mediator into the cause-and-effect link between service innovation and employee performance, which is crucial. As a mediator, intellectual capital will be the main focus of this study. This is what was discovered in the literatures and what the current study will carry out.

Furthermore, the current study benefits from previous literatures in order developing the instrument of the study, which has been used into the field data's collection process. As this study depends on number of literatures throughout benefiting from their scales, design, methodology, and the variables and factors that have been examined in the current study. However, the current study has differed from previous literatures in terms the place of conducting the study, in which examines the service innovation subject in Palestine, which makes this study distinct from other literatures. In addition, the current study is considered one of the studies that investigated the intermediary role of intellectual capital into the impact of service innovation on performance of employees in a comprehensive manner. Moreover, it is worth mentioning that the subject of the current study is considered new subject entered into the academic literatures, according to its importance into running and managing the organizations under uncertain conditions might face the organizations, which revealed in the global pandemics and other circumstances.

Accordingly, this study is considered a leading study in the field of service innovation in Palestine, as it opens the scope for future research, related to service innovation and its importance on employee performance and productivity. In addition, to provide vision for decision makers into the organizations in general, and banks in particular toward adopting the service innovation approach, and to provide them with skills and processes needed toward successful innovation and intellectual capital to be invested into the

overall banking performance and its important relation with the performance of employees within the mediating role of intellectual capital.

Chapter Three

Research Methodology

3.1 Introduction

The researcher demonstrates in this chapter the techniques she employed to represent and describe the appropriate research methodology, as well as all the procedures taken toward conducting the study. In addition, the population, sampling, instrument validity and reliability have been presented in this chapter.

3.2 Research Methodology

In this study, the descriptive analytical approach is used to test the relationship between the study variables. The quantitative method has been used, focuses on gathering, condensing, and organizing the data used in this study. The descriptive approach used toward describing the phenomenon of study, in which the analytical approach used toward analyzing the relationships between variables. Throughout using the methods and tools that have been convenient to those approaches. (Asaf, 2012)

3.3 Population and Sampling

3.3.1 Study Population

The research population consist of all workers in the Palestinian banking sector.

3.3.2 Study Instrument

Questionnaires used by the researcher, and have been distributed among the research samples, which target the workers in the Palestinian banking sector.

3.3.3 Pilot Research

The pilot study consisted of (30) questionnaires to validate the survey. After the distribution of those pilot questionnaires, which have been analyzed statistically and ensuring the validity of them in order to proceed with distribution.

3.3.4 Study Sample

The researcher conveniently selected the sample of the study to be total of (150) banking sector employees, from a total of (4000) employees working at the banking sector, in particular the commercial banks in the West Bank. In which the representative sample is (346) employees, in which the researcher has distributed 346 questionnaires, but 150 employees have fulfilled the questionnaire, in which the response rate was 43%.

3.4 The research Tool

In order to gather the data for this study, the researcher mostly used a paper-based questionnaire. The questionnaire was divided into four sections and contains a series of questions about the topic of the study that participants are asked to respond to in order. The first component of the questionnaire is for demographic data, while the second is for study-related information. The following themes emerged:

- **Part 1:** "Service innovation" which consists of (3) axis: "Product innovation", which includes (5) items. "Operation innovation", which includes (4) items. And "Technology innovation", which includes (4) items.
- **Part 2:** "Employee performance" which consists of (3) axis. "Adaptive Performance", which consists of (5) items. "Task Performance", which consists of (5) items. "Contextual Performance", which consists of (4) items.
- **Part 3:** "Intellectual capital" which includes (6) items.

3.5 Scale Used

A 1–5 Likert scale (1=Strongly Disagree to 5=Strongly Agree) were used, the highest score indicates a high level of service innovation, employee performance, and intellectual capital. Descriptive statistics gauged the levels of service innovation, employee performance, and the intellectual capital.

The levels of agreement based on three levels are displayed in table # 1: (Low, Medium, High)

Table (1): Level Of Agreement About Items According To Value Of Answers Mean

| Agreement Level | Low | Medium | High |
|------------------------|---------------|---------------|---------------|
| <i>Mean</i> | 1.00 – 2.34 | 2.35- 3.67 | 3.68 – 5.00 |
| <i>RII</i> | 20.0% - 35.8% | 51.9% - 67.8% | 67.9% - 83.8% |

Table # 1 shows that mean scores between (1.00-2.34) are considered low mean scores that means low agreement or level of degree. The mean scores of between (2.35-3.67) indicate for medium level of agreement on the dimensions of the questionnaire. While, the mean scores between (3.68-5.00) show a high agreement of the dimensions. This classification is chosen in accordance with a 5-degree Likert Scale that is used to correct the research tool.

3.6 Instrument Validity and Reliability

The validity can be defined as “the extent to which the scale can describe or evaluate what is designed to measure” (Qndiljy, 2007). The high validity reflects the nonexistence of the statistical errors, which means that the researcher can proceed with distributing the rest of questionnaires for the overall sample. While reliability means the

degree which indicates the consistency of the instrument that means other researchers can use the same instrument in similar topics, and to generalize the results of the study.

3.6.1 Validity of Instrument

3.6.1.1 Content validity

The process of evaluating the research tool's validity starts with its content. It is an assessment of how certain metric components fit into the main body of the content in relation to the structure that we are attempting to measure. While the appropriateness of the tool's contents for the study topic under consideration and their form are referred to as the validity of the content. The initial round of the instrument's content validation involved a group of referees and expert arbitrators, who offered their feedback on the instrument's items (Appendix #2). This allowed the researcher to arrive at a content validation of the instrument (Appendix # 1).

3.6.1.2 Internal Validity

Internal coherence correlations have been measured among the degree of each item in the instrument, and correlations with the total degree of the instrument to statistically confirm the validity. The correlation results of the items and overall degree, indicate that the instrument is valid and consistent, due to that results of the correlation coefficient fluctuated for all items between 0.405 and 0.859, as shown in tables # 2, 3 and 4:

Table (2): Internal Consistency for the First Theme “Service Innovation”

| No. | Item | Corr. Coefficient | Sig |
|------------------------------|--|----------------------|------|
| Product innovation | | | |
| 1 | The bank takes a high risk to find innovative products/services | .405* | .026 |
| 2 | The innovative product is an added value for the bank | .644** | .000 |
| 3 | The bank seeks to introduce fundamental modifications to its products compared to the main competitors | .730** | .000 |
| 4 | The bank is keen to replace old products with modern and distinctive products compared to the main competitors | .831** | .000 |
| 5 | The bank introduces a new product significantly before entering the competition | .840** | .000 |
| Operation innovation | | | |
| 1 | The bank introduces a new product significantly before entering the competition | .811** | .000 |
| 2 | Bank operations are characterized by flexibility, which means the ability to move appropriately from one place to another quickly, not to be strict, and to adhere to one viewpoint. | .688** | .000 |
| 3 | The bank opens communication channels for all 1 persons, regardless of job level, in order to contribute to the innovation of operations | .792** | .000 |
| 4 | The bank improves its operations according to innovative working methods | .790** | .000 |
| Technology innovation | | | |
| 1 | Technological innovation in banks focuses on the integration of finance and technology and the use of modern technologies | .685** | .000 |

| | | | |
|---|--|--------|------|
| | to improve the efficiency of the bank | | |
| 2 | The Bank keeps abreast of the latest technical developments related to the technological revolution and the opportunities and challenges associated with it. | .739** | .000 |
| 3 | The Bank has an IT Steering Committee | .779** | .000 |
| 4 | The Bank is aware of the sources of technological innovation and takes advantage of investment and market opportunities | .850** | .000 |

Table (3): Internal Consistency for the Second Theme “Employee Performance”

| No. | Item | Corr. Coefficient | Sig |
|-----------------------------|---|-------------------|------|
| Adaptive Performance | | | |
| 1 | I can handle multiple assignments to achieve the bank's organizational goals. | .657** | .000 |
| 2 | I handle the change in my job well whenever the situation requires it. | .799** | .000 |
| 3 | I can deal effectively with my staff in the face of a career change. | .859** | .000 |
| 4 | I am used to completing tasks on time. | .670** | .000 |
| 5 | I always believe that mutual understanding could lead to a workable solution in the bank. | .661** | .000 |
| Task Performance | | | |
| 1 | I offer help to my co-workers when requested or when it is needed | .670** | .000 |
| 2 | I actively participate in group discussions and business meetings. | .535** | .002 |
| 3 | Express my sympathy to a co-workers when they are in trouble. | .581** | .001 |
| 4 | I share knowledge and ideas between myself and my team | .629** | .000 |

| | | | |
|-------------------------------|---|--------|------|
| | members. | | |
| 5 | I draw new colleagues outside of my job | .822** | .000 |
| Contextual Performance | | | |
| 1 | I maintain a high standard at work. | .804** | .000 |
| 2 | My colleagues think that I am highly worthy in my work. | .593** | .001 |
| 3 | Very excited about my work. | .756** | .000 |
| 4 | Able to handle special tasks without much supervision. | .649** | .000 |

Table (4): Internal Consistency for the Third Theme “Intellectual Capital”

| No. | Item | Corr. Coefficient | Sig |
|-----|--|----------------------|------|
| 1 | The Bank seeks to involve all employees in specialized courses that are compatible with the nature of the work entrusted to them | .856** | .000 |
| 2 | are experts in their jobs | .398* | .029 |
| 3 | Innovation and Change are Strategic Objectives of Bank Management | .690** | .000 |
| 4 | Bank management influences the 1 to implement their innovation orientations | .744** | .000 |
| 5 | The bank applies all innovation tools in dealing with customers | .802** | .000 |
| 6 | The Bank cooperates with all institutions of knowledge (research centers, universities, etc.) for innovation | .709** | .000 |

3.6.2 Reliability

3.6.2.1 Cronbach's Alpha Test

Table (5) lists the reliability indicator values, with Cronbach's Alpha values ranging from 0.636 to 0.782. The reliability coefficients for employee performance, service innovation, and intellectual capital were all over 0.872. These findings show that the data are highly reliable.

Table (5): Cronbach's Alpha to Measure the Reliability of The Instrument

| Main and sub dimensions | | No. of items | Cronbach Alpha (α) |
|-----------------------------|------------------------|--------------|-----------------------------|
| Service innovation | Product innovation | 5 | 0.744 |
| | Operation innovation | 4 | 0.759 |
| | Technology innovation | 4 | 0.744 |
| | all | 13 | 0.872 |
| Employee performance | Adaptive Performance | 5 | 0.782 |
| | Task Performance | 5 | 0.665 |
| | Contextual Performance | 4 | 0.636 |
| | all | 14 | 0.862 |
| Intellectual capital | | 6 | 0.767 |

The reliability was tested using Cronbach's Alpha to ascertain reliability and consistency of the survey. Respectively, indicating very good reliability and consistency, as indicated in table no. 5.

3.7 Statistical Treatment

After the survey's quantitative data collection, the data were examined for any response errors, missing values, and consistency issues. Manually created coding that provided general guidelines for how each variable should be coded. The Statistical Package for

Social Science (SPSS) was used for the input and analysis of quantitative data. The coded data were examined once more visually to look for any potential data entry mistakes. For the purpose of determining the accuracy of the inputs, descriptive statistics were computed for each variable in the following ways: frequency counts, distribution analysis, checking each variable's range for out-of-range values, computing means and standard deviations, and checking each variable's distribution for cases with extreme values.

The researcher used statistical package for social science (spss v.26) and (AMOS v.24) to extract the results of the study, throughout calculating Frequencies & Percentages, in addition to the Means of Answers and standard deviations. Moreover, the researcher conducted Cronbach's Alpha test for reliability, and Person correlation coefficients for validity. As well as, the hypothesis have been examined using One sample T-test and path analysis.

3.8 Study model

The research model was built and prepared to include all aspects and variables of the research and to fit with the established research hypotheses. Several models were proposed and discussed by literatures, and the attached model was adopted for its comprehensiveness and relevance, and for its reflection on the research topic and its variables.

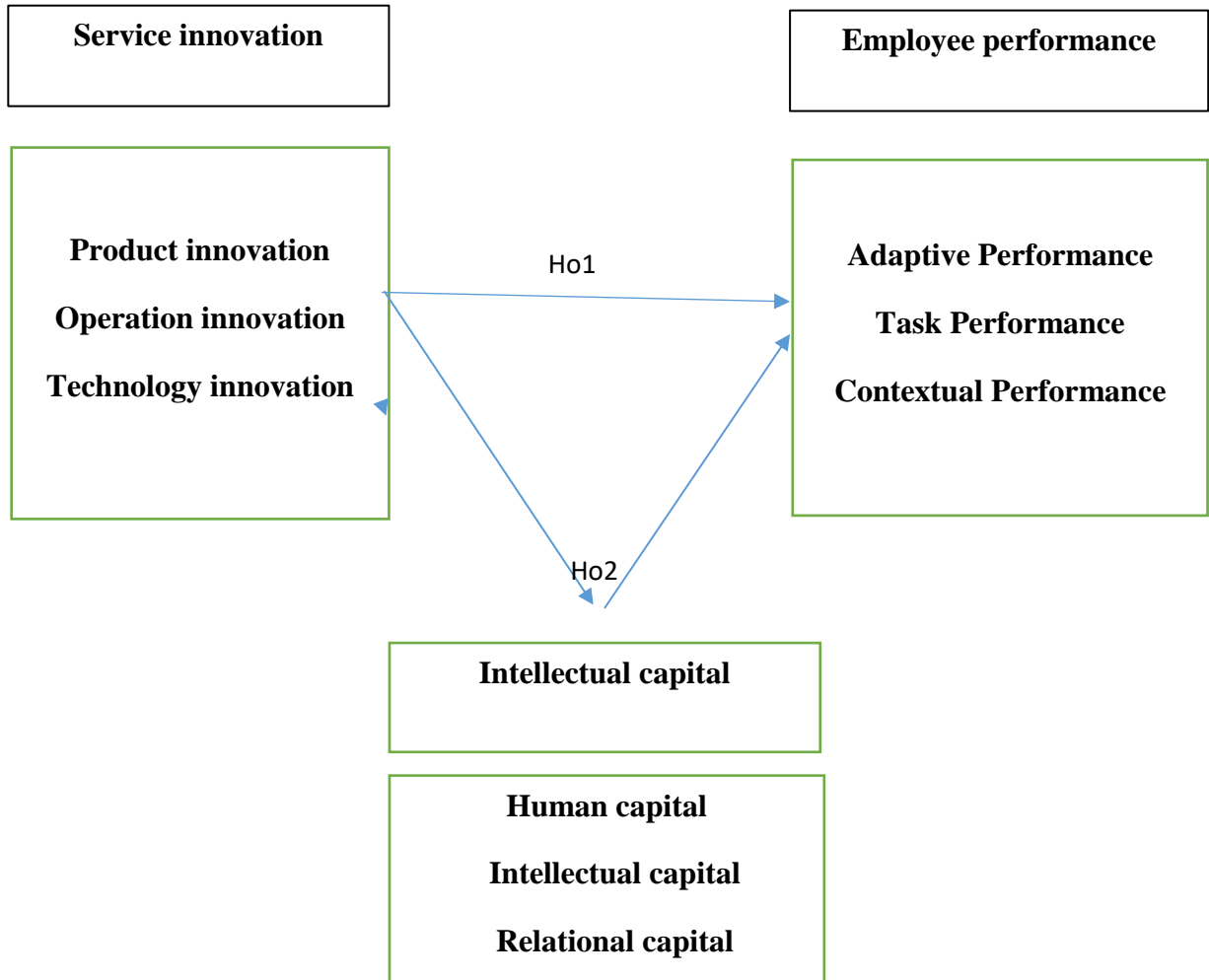


Figure 1.1: Research model

Chapter Four

Results of the Study

4.1 Introduction

The results of the inferential statistical analysis are discussed in chapter four, along with the results of the descriptive statistical analysis used to describe the study sample. The chapter also presents the most significant statistical findings related to the problem of this study, which is to determine the effect of service innovation on employee performance.

4.2 Descriptive Results

Table (6): Frequency of Sample Characteristics “Gender”

| Gender | Frequency | Percent |
|--------------|------------|--------------|
| Male | 74 | 49.3 |
| Female | 76 | 50.7 |
| Total | 150 | 100.0 |

From table (2), we found that the highest percent of the total sample was female by 50.7%, while male was 49.3% of the total sample.

Table (7): Frequency of Sample Characteristics “Qualification”

| Qualification | Frequency | Percent |
|---------------------------|------------|--------------|
| Diploma or less | 38 | 25.3 |
| Bachelor | 81 | 54.0 |
| Master’s degree and above | 31 | 20.7 |
| Total | 150 | 100.0 |

From table (3), we found that, the highest percent was for (Bachelor) by 54% of the total sample, then (Diploma or less) with 25.3% of the total sample, while 20.7% of the total sample were master’s degree and above.

Table (8): Frequency of Sample Characteristics “Years’ of Experience”

| Years of Experience | Frequency | Percent |
|--------------------------------|------------------|----------------|
| Less than 5 years | 53 | 35.3 |
| 5 years and less than 10 years | 56 | 37.3 |
| 10 and less than 15 years | 35 | 23.3 |
| More than 15 years | 6 | 4.0 |
| Total | 150 | 100.0 |

About Experience, the highest percentage was for (5 years and less than 10 years) by 37.3% of the total sample, followed by (Less than 5 years) at 35.3% of the total sample, while 23.3% of the total sample were 10 years and less than 15 years.

Table (9): Frequency of Sample Characteristics “Job Title”

| Job title | Frequency | Percent |
|------------------------|------------------|----------------|
| Employee | 94 | 62.7 |
| Manager | 17 | 11.3 |
| Head of the department | 39 | 26.0 |
| Total | 150 | 100.0 |

About the Job title, the highest percentage was for (Employee) by 62.7% of the total sample, followed by (Head of the department) with 26% of the total sample, while 11.3% of the total sample was Manager.

4.3 Results of the Study Questions

First Question: Do Palestinian banks implement service innovation practices?

Table (10) shows that the results of Product innovation dimension are low, in which the first item “The bank introduces a new product significantly before entering the competition” (M = 2.23, SD = 1.0), the last item has the lowest mean score is "The bank

takes a high risk to find innovative products/services" ($M = 1.9$, $SD = 0.97$). The total degree of the dimension "Product innovation" is low ($M = 2.1$, $SD = 0.65$).

Table (10): Means and Standard Deviations of respondents' answers among the dimension of "Product innovation"

| No. | Item | M | SD | RII | LA | R |
|------------------|--|-------------|-------------|--------------|------------|---|
| 1 | The bank takes a high risk to find innovative products/services | 1.90 | 0.97 | 38.0% | Low | 5 |
| 2 | The innovative product is an added value for the bank | 2.05 | 0.77 | 41.0% | Low | 4 |
| 3 | The bank seeks to introduce fundamental modifications to its products compared to the main competitors | 2.15 | 1.01 | 43.0% | Low | 3 |
| 4 | The bank is keen to replace old products with modern and distinctive products compared to the main competitors | 2.20 | 1.06 | 44.0% | Low | 2 |
| 5 | The bank introduces a new product significantly before entering the competition | 2.23 | 1.00 | 44.6% | Low | 1 |
| All items | | 2.10 | 0.65 | 42.0% | Low | |

Regarding the operation innovation dimension, table (11) shows that descriptive results of the "Operation innovation" dimension was low, in which the highest item mean score was "The bank opens communication channels for all persons, regardless of job level, in order to contribute to the innovation of operations" ($M = 2.48$, $SD = 1.11$), and the lowest item degree was "The bank improves its operations according to innovative working methods" with ($M = 2.23$, $SD = 1.03$). The total degree of the dimension "Operation innovation" is low with ($M = 2.34$, $SD = 0.69$).

Table (111): Means and Standard Deviations of Respondents' Answers Among the Dimension of "Operation Innovation"

| No. | Item | M | SD | RII | LA | R |
|------------------|---|-------------|-------------|--------------|------------|---|
| 1 | The bank introduces a new product significantly before entering the competition | 2.30 | 1.05 | 46.0% | Low | 3 |
| 2 | Bank operations are characterized by flexibility, which means the ability to move appropriately from one place to another quickly, not to be strict, and to adhere to one viewpoint | 2.33 | 1.05 | 46.6% | Low | 2 |
| 3 | The bank opens communication channels for all 1 person, regardless of job level, in order to contribute to the innovation of operations | 2.48 | 1.11 | 49.6% | Low | 1 |
| 4 | The bank improves its operations according to innovative working methods | 2.23 | 1.03 | 44.6% | Low | 4 |
| All items | | 2.34 | 0.69 | 46.8% | Low | |

Results in Table (12) indicate that the degree of "Technology innovation" dimension is low. In which the higher degree of items was "The Bank has an IT Steering Committee" (M = 2.3, SD = 0.98). While the lowest mean of items was "Technological innovation in banks focuses on the integration of finance and technology and the use of modern technologies to improve the efficiency of the bank" (M = 2.14, SD = 0.85). However, the total degree of the dimension is (M = 2.21, SD = 0.65).

Table (12): Means and Standard Deviations of Respondents' Answers Among the Dimension of "Technology Innovation"

| No. | Item | M | SD | RII | LA | R |
|------------------|---|-------------|-------------|--------------|------------|---|
| 1 | Technological innovation in banks focuses on the integration of finance and technology and the use of modern technologies to improve the efficiency of the bank | 2.14 | 0.85 | 42.8% | Low | 4 |
| 2 | The Bank keeps abreast of the latest technical developments related to the technological revolution and the opportunities and challenges associated with it | 2.21 | 0.94 | 44.2% | Low | 2 |
| 3 | The Bank has an IT Steering Committee | 2.30 | 0.98 | 46.0% | Low | 1 |
| 4 | The Bank is aware of the sources of technological innovation and takes advantage of investment and market opportunities | 2.19 | 0.93 | 43.8% | Low | 3 |
| All items | | 2.21 | 0.65 | 44.2% | Low | |

Second Question: What is the level of employee performance in banks?

Table (13) indicates that the degree of " Adaptive Performance" dimension is low, as the highest mean score was related to item " I can handle multiple assignments to achieve the bank's organizational goals" (M = 2.3, SD = 0.98), while the lowest degree related to the item " I handle the change in my job well whenever the situation requires it" & "I always believe that mutual understanding can lead to a workable solution in the bank" (M = 2.19, SD = 0.9). Relatively, the total degree of the dimension is low with (M = 2.25, SD = 0.61).

Table (13): Means and Standard Deviations of Respondents' Answers Among the Dimension of "Adaptive Performance"

| No. | Item | M | SD | RII | LA | R |
|------------------|--|-------------|-------------|--------------|------------|---|
| 1 | I can handle multiple assignments to achieve the bank's organizational goals | 2.30 | 0.98 | 46.0% | Low | 1 |
| 2 | I handle the change in my job well whenever the situation requires it | 2.19 | 0.89 | 43.8% | Low | 4 |
| 3 | I can deal effectively with my staff in the face of a career change | 2.28 | 0.89 | 45.6% | Low | 3 |
| 4 | I am used to completing tasks on time | 2.29 | 0.95 | 45.8% | Low | 2 |
| 5 | I always believe that mutual understanding can lead to a workable solution in the bank | 2.19 | 0.90 | 43.8% | Low | 4 |
| All items | | 2.25 | 0.61 | 45.0% | Low | |

However, the dimension of Task Performance indicates a low degree, in which table (14) shows that the highest degree of mean score was related to item "I draw new colleagues outside of my job" ($M = 2.63$, $SD = 1.16$), while the lowest mean score was related to item "I offer help to my co-workers when requested or when it is needed" ($M = 2.2$, $SD = 0.84$). The total degree of the dimension was low ($M = 2.63$, $SD = 1.16$).

Table (142): Means and Standard Deviations of Respondents Answers Among the Dimension of "Task Performance"

| No. | Item | M | SD | RII | LA | R |
|------------------|--|-------------|-------------|--------------|------------|---|
| 1 | I offer help to my co-workers when requested or when it is needed | 2.20 | 0.84 | 44.0% | Low | 5 |
| 2 | I actively participate in group discussions and business meetings. | 2.21 | 0.87 | 44.2% | Low | 4 |
| 3 | Express my sympathy to my co-workers when they are in trouble. | 2.27 | 0.89 | 45.4% | Low | 2 |
| 4 | I share knowledge and ideas between myself and my team members. | 2.27 | 1.03 | 45.4% | Low | 2 |
| 5 | I draw new colleagues outside of my job | 2.63 | 1.16 | 52.6% | Medium | 1 |
| All items | | 2.31 | 0.64 | 46.2% | Low | |

Regarding the dimension of Contextual performance, table (15) shows that the overall degree of the dimension was low, which the item "Very excited about my work" ($M = 2.37$, $SD = 0.96$) obtained the highest mean score, while the item "Able to handle special tasks without much supervision" ($M = 2.22$, $SD = 0.82$) within the lowest degree. Moreover, the total degree of the dimension was low ($M = 2.29$, $SD = 0.65$).

Table (153): Means and Standard Deviations of Respondents Answers Among the Dimension of "Contextual Performance"

| No. | Item | M | SD | RII | LA | R |
|------------------|---|-------------|-------------|--------------|------------|---|
| 1 | I maintain a high standard at work. | 2.23 | 1.02 | 44.6% | Low | 3 |
| 2 | My colleagues think that I am highly worthy in my work. | 2.34 | 0.94 | 46.8% | Low | 2 |
| 3 | Very excited about my work. | 2.37 | 0.96 | 47.4% | Low | 1 |
| 4 | Able to handle special tasks without much supervision. | 2.22 | 0.82 | 44.4% | Low | 4 |
| All items | | 2.29 | 0.65 | 45.8% | Low | |

Third Question: Do Palestinians' banks implement IC practices?

Results in table (16) shows that the Intellectual capital dimension was low, which the item "Bank management influences the 1 to implement their innovation orientations" ($M = 2.45$, $SD = 1.01$) obtained the highest mean score, while the item "Innovation and Change are Strategic Objectives of Bank Management" ($M = 2.15$, $SD = 0.88$) obtained the lowest mean score. However, the total degree of the dimension was low ($M = 2.28$, $SD = 0.57$).

Table (16): Means and Standard Deviations of Respondents Answers Among the Dimension of “Intellectual Capital”

| No. | Item | M | SD | RII | LA | R |
|------------------|--|-------------|-------------|--------------|------------|---|
| 1 | The Bank seeks to involve all employees in specialized courses that are compatible with the nature of the work entrusted to them | 2.28 | 0.93 | 45.6% | Low | 3 |
| 2 | are experts in their jobs | 2.27 | 0.81 | 45.4% | Low | 4 |
| 3 | Innovation and Change are Strategic Objectives of Bank Management | 2.15 | 0.88 | 43.0% | Low | 6 |
| 4 | Bank management influences the 1 to implement their innovation orientations | 2.45 | 1.01 | 49.0% | Low | 1 |
| 5 | The bank applies all innovation tools in dealing with customers | 2.32 | 0.94 | 46.4% | Low | 2 |
| 6 | The Bank cooperates with all institutions of knowledge (research centers, universities, etc.) for innovation | 2.23 | 0.77 | 44.6% | Low | 5 |
| All items | | 2.28 | 0.57 | 45.6% | Low | |

4.4 Hypothesis Testing

Ho1: There isn't significant statistical effect of service innovation on employee performance at the significance level ($\alpha \leq 0.05$).

In order to measure the hypothesis, each of the following sub-hypotheses has been examined by using the analysis of simple linear regression:

Table (17): The Effect of Service Innovation on Employee Performance

| Factor | Employee performance | |
|---------------------------|----------------------|-------|
| | Std. Beta | Sig. |
| Service innovation | 0.659 | 0.000 |
| R ² | 0.434 | |
| Adjusted R ² | 0.430 | |
| Std. Error | 0.275 | |
| F Statistics | 95.268 | |
| Sig. | 0.000 | |

Service innovation was found to be a significant indicator of employee performance ($p < 0.001$). The calculated F of 95.268 is significant at an alpha < 0.001 . The positive beta of 0.659 indicates that service innovation has a significant positive impact on employee performance.

This means that there is a statistical significance of the positive relationship between service innovation and employee performance.

➤ **Ho1.1: There isn't significant statistical effect of product innovation on employee performance at the significance level ($\alpha \leq 0.05$)**

Table (4): The Effect of Product Innovation on Employee Performance

| Factor | Employee performance | |
|---------------------------|----------------------|-------|
| | Std. Beta | Sig. |
| Product innovation | 0.535 | 0.000 |
| R ² | 0.286 | |
| Adjusted R ² | 0.281 | |
| Std. Error | 0.445 | |
| F Statistics | 59.363 | |
| Sig. | 0.000 | |

Product innovation was found to be a significant indicator of employee performance ($p < 0.001$). The calculated F of 59.363 is significant at alpha < 0.001 . The positive beta

of 0.535 indicates that product innovation has a significant positive impact on employee performance.

This means that there is a statistical significance of the positive effect of product innovation in employee performance.

- **Ho1.2: There isn't significant statistical effect of Operation innovation on employee performance at the significance level ($\alpha \leq 0.05$).**

Table (5): The Effect of Operation Innovation on Employee Performance

| Factor | Employee performance | |
|-----------------------------|----------------------|-------|
| | Std. Beta | Sig. |
| Operation innovation | 0.441 | 0.000 |
| R ² | 0.195 | |
| Adjusted R ² | 0.189 | |
| Std. Error | 0.473 | |
| F Statistics | 35.777 | |
| Sig. | 0.000 | |

Operation innovation was found to be a significant indicator of employee performance ($p < 0.001$). The calculated F of 35.777 is significant at an alpha < 0.001 . The positive beta of 0.441 indicates that operation innovation has a significant positive effect on employee performance.

This means that there is a statistical significance of the positive effect of operation innovation in employee performance.

- **Ho1.3: There isn't significant statistical effect of Technology innovation on employee performance at the significance level ($\alpha \leq 0.05$).**

Table (6): The Effect of Technology Innovation on Employee Performance

| Factor | Employee performance | |
|------------------------------|----------------------|-------|
| | Std. Beta | Sig. |
| Technology innovation | 0.556 | 0.000 |
| R ² | 0.309 | |
| Adjusted R ² | 0.305 | |
| Std. Error | 0.438 | |
| F Statistics | 66.325 | |
| Sig. | 0.000 | |

Technology innovation was found to be a significant factor of employee performance ($p < 0.001$). The calculated F of 66.325 is significant at an alpha < 0.001 . The positive beta of 0.556 indicates that technology innovation has a significant positive effect on employee performance.

This means that there is a statistical significance of the positive relationship between technology innovation and employee performance.

Ho2: IC mediates the impact of service innovation on employee performance.

In order to examine the above hypothesis, the method of path analysis has been followed, and results were as follows:

Table (7): The Results of Structural Model for Extracting Direct and Indirect Effects
(Intellectual Capital)

| Direction of effects | "Indirect" | Direct effect | | Indirect effect | |
|----------------------|-----------------------------|---------------|-------|-----------------|-------|
| | | B | Sig. | B | Sig. |
| SI-> EP | Intellectual capital | 0.472 | 0.000 | 0.107 | 0.003 |
| IC-> EP | | 0.234 | 0.000 | | |
| SI -> IC | | 0.472 | 0.000 | | |
| TI -> EP | | 0.371 | 0.000 | 0.040 | 0.135 |
| OI -> EP | | -0.025 | 0.720 | 0.082 | 0.015 |
| PI -> EP | | 0.344 | 0.000 | 0.037 | 0.137 |
| TI -> IC | Intellectual capital | 0.154 | 0.042 | | |
| OI -> IC | | 0.317 | 0.000 | | |
| PI -> IC | | 0.142 | 0.061 | | |

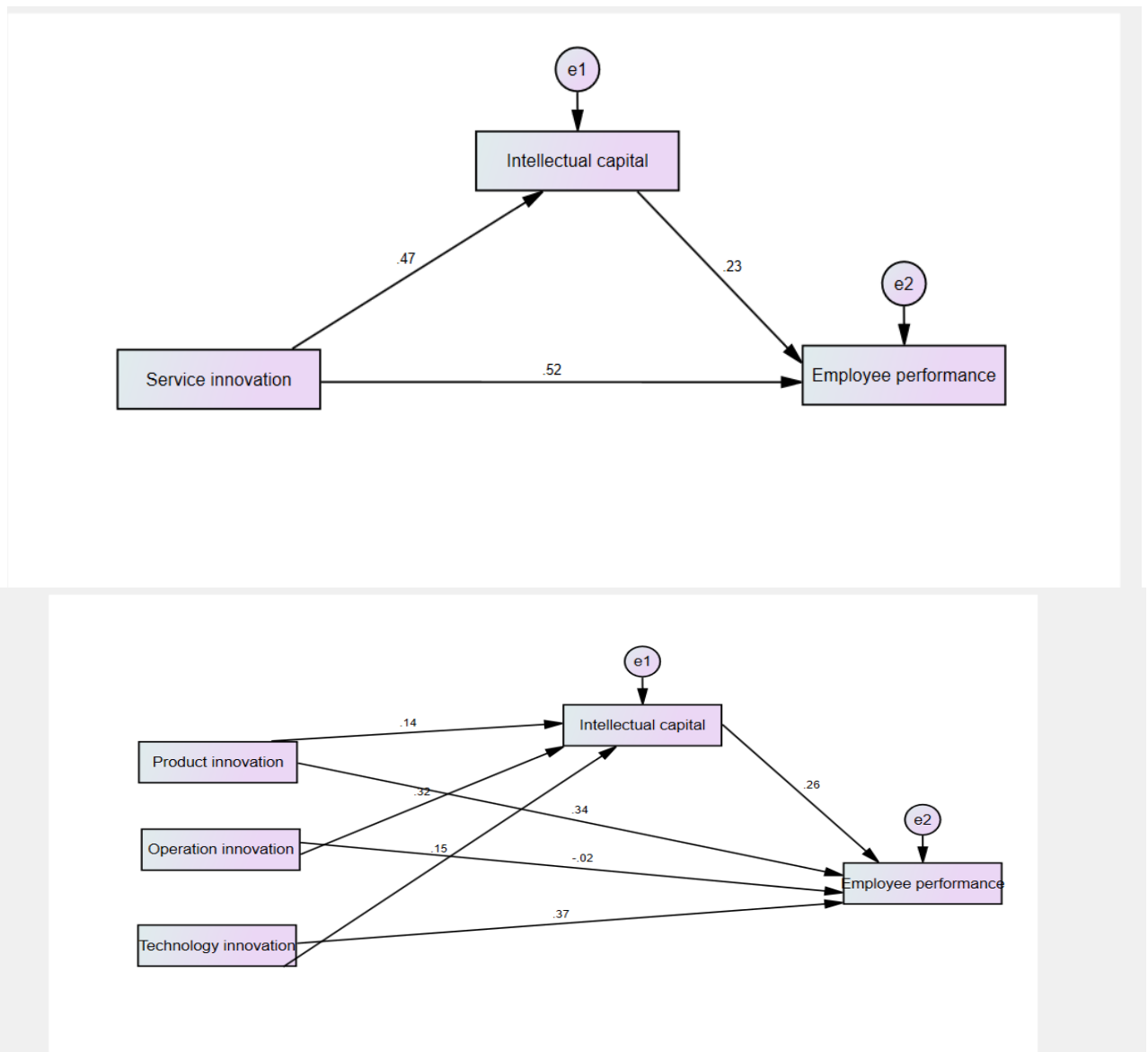


Figure 2.1: Shows the Results of the Structural Model

Figure # (4.1) shows that there are direct and indirect effects of service innovation on employee performance, taking into consideration the mediating role of intellectual capital. The figure shows that the mediating role of intellectual capital into the relationship between service innovation and employee performance is low as indicated in the percentage rates of service innovation dimensions (-3). Whereas, the service

innovation dimensions have direct effects on employee performance (69). Therefore, the total effect of service innovation on employee performance is (66).

Table (8): Summary of the Hypothesis Results

| Hypotheses | Comment |
|--|--|
| H1: There isn't significant statistical effect of service innovation on employee performance at the level ($\alpha \leq 0.05$) | H0 Rejected, H₁ Accepted |
| H1.1: There isn't significant statistical effect of Product innovation on employee performance at the level ($\alpha \leq 0.05$) | H0 Rejected, H₁ Accepted |
| H1.2: There isn't significant statistical effect of Operation innovation on employee performance at the level ($\alpha \leq 0.05$) | H0 Rejected, H₁ Accepted |
| H1.3: There isn't significant statistical effect of Technology innovation on employee performance at the level ($\alpha \leq 0.05$) | H0 Rejected, H₁ Accepted |
| H2: IC mediates the impact of service innovation on employee performance. | H0 Rejected, H₁ Accepted |
| H3: There aren't significant statistical differences in employee performance level ($\alpha \leq 0.05$) due to Demographic Variables | - |
| H3.1: There aren't significant statistical differences in employee performance level ($\alpha \leq 0.05$) due to Gender. | H0 Accepted |
| H3.2: There aren't significant statistical differences in employee performance level ($\alpha \leq 0.05$) due to Educational Qualification. | H0 Rejected, H₁ Accepted |
| H3.3: There aren't significant statistical differences in employee performance level ($\alpha \leq 0.05$) due to Years of Experience. | H0 Accepted |

H3.0: There aren't significant statistical differences in employee performance level ($\alpha \leq 0.05$) due to demographic variables (gender, educational qualification, and years of experience).

To test this hypothesis, each of the following sub-hypotheses was tested using the t-test

And ANOVA Test

- **H3.1: There aren't significant statistical differences in employee performance level ($\alpha \leq 0.05$) due to gender.**

To test the hypothesis we use an independent sample t-test to test the differences in employee performance level due to gender.

Table (9): Independent Sample T-Test to Test the Differences in Employee Performance Level Due to Gender

| Gender | N | Mean | Std. Deviation | T | P-value |
|--------|----|------|----------------|-------|---------|
| Male | 74 | 2.22 | .567 | 1.455 | 0.148 |
| Female | 76 | 2.35 | .477 | | |

The results in a table (23) shows that the mean scores of male = 2.22, and the mean scores of female=2.35. The absolute value of the calculated t-test (t-test = 1.455) is less than critical value (t-critical = 1.976), and the (p-value = 0.148 > 0.05), As a result, there is no significant difference in employee performance level due to gender.

- **H3.2: There aren't significant statistical differences in employee performance level ($\alpha \leq 0.05$) due to educational qualification.**

To test the hypothesis we use a one way ANOVA test to test the differences in employee performance level due to educational qualification.

Table (10): Independent Sample T-Test to test the Differences in Employee Performance Level Due to Educational Qualification

| educational qualification | N | Mean | Std. Deviation | F | P-value |
|---------------------------|----|------|----------------|-------|---------|
| Diploma or less | 38 | 2.48 | .573 | 4.271 | 0.016 |
| Bachelor | 81 | 2.25 | .490 | | |
| Master's degree and above | 31 | 2.14 | .498 | | |

The results in a table (24) shows that the value of the calculated f-test = 4.271 is more than critical value (f-critical = 3.058), and the (p-value = 0.016 < 0.05), As a result, there is a significant difference in employee performance level due to educational qualification.

➤ **H3.3: There aren't significant statistical differences in employee performance level ($\alpha \leq 0.05$) due to years of experience.**

To test the hypothesis, we use a one-way ANOVA test to test the differences in employee performance level due to years of experience.

Table (11): Independent Sample T-Test to Test the Differences in Employee Performance Level Due to Years of Experience

| years of experience | N | Mean | Std. Deviation | F | P-value |
|---------------------------------|----|------|----------------|-------|---------|
| Less than 5 years | 53 | 2.29 | .586 | 0.889 | 0.448 |
| 5 years and less than 10 years | 56 | 2.35 | .482 | | |
| 10 years and less than 15 years | 35 | 2.17 | .529 | | |
| More than 15 year | 6 | 2.36 | .192 | | |

The results in a table (25) shows that the value of the calculated f-test = 0.889 is less than critical value (f-critical = 2.667), and the (p-value = 0.448 > 0.05). As a result, there is no significant difference in employee performance level due to years of experience.

Chapter Five

Discussion and Recommendations

5.1 Introduction

This chapter provides the results discussion and the main conclusion of the overall study, according to the main results that have been achieved during the conducting of this study. In addition, based on those results, the recommendations will be provided in this chapter, as well the suggested future researches.

5.2 Discussion

The current study aims to assess the influence of service innovation on employee performance, taking into consideration the mediating role of intellectual capital in the Palestinian-banking sector. Based on this goal, the study assesses three dimensions of service innovation; therefore, the study revealed that the overall service innovation was low in the Palestinian banking sector. This means that the banks in Palestine are not intending to innovate among their services, due to the unstable political and security situations in Palestine, many political and economic negative events, occurred in Palestine; which lead the banks to keep on their performance as it is, avoiding any loss into investing in innovation of services. This result agreed with the result of Toivonen and Tuominen (2009) study who stated that enterprises might make some developments in their existing services, in order to deliberate innovativeness.

Accordingly, the study shows a significant statistical evidence for the positive relationship between service innovation and employee performance. This means that whenever the employee has space for service innovation, the employee will show higher

overall performance. In which, the study proves that service innovation elements: operation and technology innovation will be occurred in higher level since employees have the opportunity to innovate in their performance. This result disagreed with the study of (Nieto and Santamara, 2007) who stated that innovativeness does not necessarily improve the performance.

Moreover, the study shows a low significant positive mediating role of intellectual capital in the relationship between service innovation and employee performance; this can be related to the non-investment of the existed intellectual capital at the banking sector in Palestine. In other words, the policies and strategies toward service innovation might be flowed directly from the high management, without taking in consideration the capitals of the bank. And this is what the descriptive results of the study proved. This result is confirm with the study of Cheng et al., (2017), who argued that the higher management of the hotels in Taiwan forces the employees toward implementing the service innovation procedures in the hotel, without taking into consideration the human and rationale capital of the employees. Accordingly, the employees might not be able to implement those policies and procedures, which will lead directly to low employee performance, and the overall organization "Bank" performance.

In addition, the study shows that the second dimension of service innovation that is operation innovation was low. The researcher related this result to a common sense reason, which is unless there is no service innovation in the Palestinian Banking sector, the use of operation innovation that is conducted toward providing the services in innovation form, does not exist. In other words, service innovation has two main generators that are: operations, and technology. Where there is a low level of service innovation applied, all elements of service providing will be low. As the study showed,

the dimension of technology innovation was low, which proves the above reason. However, it is also noted that even though service innovation is low, operation innovation and technology innovation might be high or medium, due to the non-diversity of services. This means that whenever the bank provides common services, they might be innovative in providing the same services. This result is related to what Chesbrough (2011) claimed that in order to avoid falling into service deception and keep their competitiveness, manufacturing enterprises need to transition from a product-oriented business policy to a service-mindset service mindset.

In another context, the study shows that regarding employee performance, the dimension of adaptive performance level was low. The researcher can relate this result to that whenever the employees are limited to such services to be provided, they will face difficulties in performing new tasks or providing new services. This result adapted to the study of Fu et al., (2019) who argued that attitudes influence performance.

Moreover, the study reveals that the level of task Performance was low among employees in the Banking sector. This result might be related to the routine that employees feel in the banks. In which a number of the same frequent services and tasks should be done every day. This will automatically generate laziness and depression among employees, toward not trying to innovate "performing new tasks", when the bank itself is not innovating of its services. Considering service innovation is a self-esteem need for employees, which lead to job satisfaction influence positive performance. Adapting to Shin & Hur, (2020) study that discovered data demonstrating the relationship between job satisfaction, an attitude variable, and job performance, a behavioral variable. They also stated in their empirical investigation that the most

significant correlation between performance and satisfaction of higher order wants would be found.

Furthermore, the study explored that the contextual performance level among employees in the Palestinian banking sector is low. This is a logical result since the task adaptive and task performance are low. This means that since there is a low innovativeness in providing the existing services at least, the overall performance will be low. However, the task performance might be high in some banks, those who are considered big banks with a high number of customers, in which the employees might show high task performance. In addition, employees who have administrative tasks might be higher in performing tasks, as well as adaptive and contextual performance might be higher. This means that the overall performance depends on such circumstances and variables: position of the employee, the size of customers who benefit from the services of the bank, and the size of the workload. This is adapting with the study of Ajibola et al., (2019), who stated that there are other additional elements for performance that are the amount of work done, persistence and reliability, and the quality of work.

Regarding the intellectual capital in the banking sector, the study shows a low level of intellectual capital implementation in the banking sector in Palestine. This means according to the participants that the higher management control the intellectual capital at the Banking sector, throughout forcing them to implement specific tasks, and influence their innovativeness. As they stated "Bank management influences the employee to implement their innovation orientations" with low mean score, and it is the highest mean score in the dimension of intellectual capital. According to Marzo &

Scarpino (2016), businesses with higher levels of IC also tend to foster higher levels of innovation.

Regarding the differences among employees in the banking sector in Palestine, the study showed a significant difference in employee performance level due to educational qualification. This indicates for whenever the employee hold a higher educational qualification, the employee might show higher performance than lowest educational qualification holder. This might be because when the employee has higher education, more responsibilities and tasks will be assigned to the employee.

5.3 Conclusion

Based on the above mentioned discussion, it could be concluded that service innovation within its element has an importance toward employee performance, in addition to intellectual capital. But in this study the banking sector in Palestine does not invest its intellectual capital toward raising up service innovation and employee performance.

5.4 Recommendations

According to the results, discussion, and conclusions of the study, the researcher recommends the following:

- Banks in Palestine should take into consideration the importance of existing services innovation and should invest in the existing intellectual capital, toward improving their performance.
- Under the shadow of high competition, banks in Palestine must allow employees to apply their innovation-based services, toward maintaining their existence.

- Managers at banks should concern highly on raising their employees' performance, through service innovation, and implementing intellectual capital practices in the banks.
- Training courses for all employees must be conducted frequently, in order to ensure that employees have the sufficient tasks and skills toward implementing the service innovation.
- Manager must be aware about the important relationship between service innovation and adaptive performance in particular, in order to keep their employees up to date with new technologies and services in the global banking services.
- Higher management of the banks must be aware about the importance of making the innovation decisions beyond the short term, due to the extremely fast changes in the world regarding banking services.
- Banks management should take into consideration the inputs of whole staff in the bank, regardless the job position, in order to benefit from the overall inputs into the service innovation, which will lead employees to show high performance toward implementing the service innovation.
- Banks management need to raise up the level of employees commitment and loyalty, throughout involving them into workshops toward service innovation, this leads to that employees feel that they are part of the bank, and their opinions are valuable, which will lead to high performance of implementing their daily tasks, and high performance in new tasks. In addition, high level of organizational self-educated.

5.5 Future Studies

One major study to be conducted in the future represents in conducting the same topic of this study within different tool and design “qualitative design”. In order to obtain more in-depth information about the mediating role of intellectual capital, in the relationship between service innovation and employee performance, in the banking sector; as one of the most important services sectors in Palestine. Furthermore, the researcher recommends future studies seeking for reasons beyond low service innovation in banking sector in Palestine. In addition, researches might be conducted toward assessing the quality of intellectual capital existed in banking sector in Palestine. However, it is recommended to study different sectors such as: manufacturing industry, telecommunication companies, and healthcare centers.

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Appendices:

Appendix # 1: Questionnaire

استمارة جمع معلومات



"أثر الابتكار الخدمي على أداء الموظف: دور الوسيط في قطاع البنوك الفلسطينية

عزيزي المشارك / عزيزتي المشاركة :

تقوم الباحثة بدراسة عنوانها "أثر الابتكار الخدمي على أداء الموظفين في البنوك الفلسطينية: راس المال الفكري كمتغير وسيط"، وذلك استكمالاً لمتطلبات الحصول على درجة الماجستير في إدارة الموارد البشرية في الجامعة العربية الأمريكية.

لذا يرجى من حضرتكم قراءتها بدقة وتمعن والاجابة عن فقراتها بأمانه وموضوعية، راجياً منكم التكرم بالإجابة عن جميع فقراتها، ثم وضع إشارة (√) في خانة البديل الذي يُعبر عن وجهة نظركم.

علما بأن اجابتم ستعامل بسرية تامة ولن تستخدم إلا لأغراض البحث العلمي فقط، ويسعدني ان اجلب انتباه سيادتكم بان نجاح هذا البحث يتوقف على مدى مساهمتكم الفعالة بأرائكم.

مع جزيل شكري وامتناني لكم على حُسن تعاونكم.

الباحثة: اسلام ياسر احمد

القسم الأول: معلومات ديموغرافية

الجنس

ذكر

أنثى

المستوي العلمي

دبلوم فأقل

بكالوريوس

ماجستير فأعلى

سنوات الخبرة

أقل من 5 سنوات

5 سنوات وأقل من 10 سنوات

10 سنوات وأقل من 15 سنة

15 سنة فأكثر

المسمى الوظيفي

موظف

رئيس قسم

مدير

القسم الثاني: محاور الدراسة

| معارض بشدة | معارض | محايد | موافق | موافق بشدة | الفقرة |
|---|-------|-------|-------|---------------|---|
| المجال الأول : ابتكار الخدمة ابتكار المنتجات | | | | | |
| | | | | | 1- يتحمل البنك مخاطر عالية للعثور على منتجات / خدمات مبتكرة |
| | | | | | 2- المنتج المبتكر هو قيمة مضافة للبنك |
| | | | | | 3- يسعى البنك إلى إدخال تعديلات جوهرية على منتجاته مقارنة بالمنافسين الرئيسيين |
| | | | | | 4- يحرص البنك على استبدال المنتجات القديمة بمنتجات حديثة ومميزة مقارنة بالمنافسين الرئيسيين |
| | | | | | 5- يقدم البنك منتجًا جديدًا بشكل ملحوظ قبل الدخول في المنافسة |
| ابتكار العمليات (Operation innovation) | | | | | |
| | | | | | 6- يقدم البنك منتجًا جديدًا بشكل ملحوظ قبل الدخول في المنافسة |
| | | | | | 7- تتسم عمليات البنك بالمرونة، مما يعني القدرة على الانتقال بشكل مناسب من مكان إلى آخر بسرعة، وعدم التشدد، والالتزام بوجهة نظر واحدة. |
| | | | | | 8- يقوم البنك بفتح قنوات اتصال لجميع الموظفين بغض النظر عن مستوى الوظيفي من أجل المساهمة في ابتكار العمليات |
| | | | | | 9- يحسن البنك عملياته وفق طرق عمل مبتكرة |

| معارض بشدة | معارض | محايد | موافق | موافق بشدة | الفقرة |
|--|-------|-------|-------|---------------|--|
| الابتكار التكنولوجي (Technology innovation) | | | | | |
| | | | | | 10- يقوم البنك بمواكبة آخر التطورات التقنية المتعلقة بالثورة التكنولوجية والفرص والتحديات المصاحبة له. |
| | | | | | 11- لدى البنك لجنة توجيهية لتكنولوجيا المعلومات |
| | | | | | 12- يدرك البنك مصادر الابتكار التكنولوجي ويستفيد من الاستثمار وفرص السوق |
| المجال الثاني: قياس أداء الموظف | | | | | |
| قياس مدى تكيف الموظف اثناء أداء العمل والمهام الموكلة إليه (Adaptive Performance) | | | | | |
| | | | | | 13- يمكنني التعامل مع مهام متعددة لتحقيق الأهداف التنظيمية للبنك. |
| | | | | | 14- اتعامل مع التغيير في وظيفتي جيدًا كلما تطلب الوضع ذلك. |
| | | | | | 15- يمكنني التعامل بفعالية مع فريق العمل الخاص بي في مواجهة التغيير الوظيفي. |
| | | | | | 16- أنا معتاد على إكمال المهام في الوقت المحدد. |
| | | | | | 17- أعتقد دائمًا أن التفاهم المتبادل يمكن أن يؤدي إلى حل قابل للتطبيق في البنك. |
| قياس مدى ارتباطه بزملائه في العمل (Contextual Performance) | | | | | |

| معارض بشدة | معارض | محايد | موافق | موافق بشدة | الفقرة |
|---|-------|-------|-------|---------------|---|
| | | | | | 18- أعرض المساعدة على زملائي في العمل عند طلب ذلك أو عند الحاجة إليها. |
| | | | | | 19- أشارك بنشاط في مناقشات المجموعة واجتماعات العمل. |
| | | | | | 20- اعبر عن تعاطفي مع زملائي في العمل عندما يكونون في ورطة. |
| | | | | | 21- أتبادل المعرفة والأفكار بيني وبين أعضاء فريقتي. |
| | | | | | 22- أوجه الزملاء الجدد خارج نطاق وظيفتي |
| قياس مقدار أداء الموظف للمهام الموكلة إليه (Task Performance): | | | | | |
| | | | | | 23- أحافظ على مستوى عال في العمل. |
| | | | | | 24- زملائي يعتقدون أنني على جدارة عالية في عملي. |
| | | | | | 25- متحمس جدا لعملي. |
| | | | | | 26- قادر على التعامل مع المهام الخاصة دون الكثير من الإشراف. |
| المجال الثالث: رأس المال الفكر | | | | | |
| | | | | | 27- يسعى البنك إلى إشراك جميع العاملين في دورات تخصصية تتوافق مع طبيعة العمل المنوط بهم |
| | | | | | 28- موظفونا خبراء في وظائفهم |

| معارض بشدة | معارض | محايد | موافق | موافق بشدة | الفقرة |
|---------------|-------|-------|-------|---------------|---|
| | | | | | 29- الابتكار والتغيير هدفان استراتيجيان لإدارة البنك |
| | | | | | 30- تؤثر إدارة البنك على الموظفين لتنفيذ توجهاتهم نحو الابتكار |
| | | | | | 31- يطبق البنك جميع أدوات الابتكار في التعامل مع العملاء |
| | | | | | 32- يتعاون البنك مع جميع المؤسسات ذات المعرفة (مراكز البحوث ، الجامعات ، إلخ) من أجل الابتكار |

Appendix # 2: List of Arbitrators

| | |
|----------------|----------------------|
| Mahmoud Yassin | Akram hamdan |
| Raed Erekat | Rania shkairat |
| Zahi yaseen | Muhammad Abu Shrweed |

الملخص

هدفت هذه الدراسة بشكل أساسي إلى توضيح أثر الابتكار الخدمي على أداء الموظفين، مع الأخذ بعين الاعتبار الدور الوسيط لرأس المال الفكري في القطاع المصرفي الفلسطيني. لذلك اعتمدت الدراسة المنهج الوصفي والتحليلي من خلال استخدام الاستبيان كأداة رئيسية لجمع البيانات المطلوبة من العاملين في القطاع المصرفي الفلسطيني. أما مجتمع الدراسة فقد يتكون من العاملين في القطاع المصرفي الفلسطيني، وبلغت عينة الدراسة (150) موظفًا. تم اختيار العينة باستخدام تقنية أخذ العينات العشوائية، وتم تحليل البيانات باستخدام SPSS v.25 و AMOS .V.24

وبناءً عليه، كشفت الدراسة أن هنالك دور وسيط ضعيف لرأس المال الفكري في العلاقة بين ابتكار الخدمة وأداء الموظفين. حيث أن الابتكار العام في الخدمات كان منخفضاً في القطاع المصرفي الفلسطيني (الابتكار التشغيلي منخفض، والابتكار التكنولوجي). بالإضافة إلى ذلك، تُظهر الدراسة أنه فيما يتعلق بأداء الموظف، كان بُعد الأداء التكيفي وأداء المهام والأداء السياقي منخفضاً. ومع ذلك، تشير الدراسة إلى انخفاض مستوى تنفيذ رأس المال الفكري في القطاع المصرفي في فلسطين. حيث أظهرت الدراسة دليلاً إحصائياً ذا دلالة على العلاقة الإيجابية بين ابتكار الخدمة وأداء الموظف.

وبناءً على ذلك، أوصت الدراسة بضرورة أن تأخذ البنوك في فلسطين بعين الاعتبار أهمية الابتكار الخدمي الموجود، وأن تستثمر في رأس المال الفكري الموجود لتحسين أدائها. بالإضافة إلى ذلك، في ظل المنافسة الشديدة، يجب على البنوك في فلسطين السماح للموظفين بتطبيق خدماتهم القائمة على الابتكار، من أجل الحفاظ على وجودهم. علاوة على ذلك، يجب على المديرين في البنوك الاهتمام بشكل كبير برفع أداء موظفيهم، من خلال ابتكار الخدمة، وتوليد رأس المال الفكري للبنوك.