NEAR EAST UNIVERSITY
GRADUATE SCHOOL OF SOCIAL SCIENCES
DEPARTMENT OF BANKING AND FINANCE PROGRAM

THE IMPACT OF BANKING INNOVATION ON FINANCIAL PERFORMANCE :

A FIELD STUDY IN JORDANIAN COMMERCIAL BANK

AHMAD FAWAZ ALABEDALRAHMAN

MASTER'S THESIS

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ACCEPTANCE/APPROVAL

We as the jury members certify the ‘The impact of banking innovation on financial performance a field study in jordanian commercial bank’ prepared by the Ahmad fawaz alabedalrahman defended on ...../..../.... has been found satisfactory for the award of degree of Master / Phd

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ABSTRACT

THE IMPACTOF BANKING INNOVATION ON FINANCIAL PERFORMANCE :A FIELD STUDY IN JORDANIAN COMMERCIAL BANK

The current empirical study focused on the innovations in the Jordan commercial banks. The analysis stressed on the innovations and its effects on the commercial banks important financial indicators including profitability, assets returns, and gross income. The key objective of this research was to estimate the impact of innovations on the financial performance of the commercial banks of Jordan. The analysis focused on the survey method and the raw data has been accumulated by using a questionnaire on the selected commercial banks. The management students were considered as the sample size, where 90% responses were finally considered out of 254 totals. For the data analysis, the SPSS (Statistical Package of Social Sciences) version has been used. The findings of the analysis supported the significant association of bank innovations on the profitability, assets returns, and gross income on the chosen banks. The study does not weaken banks innovations; therefore, suggested that other innovation factors such as credit guarantee, securitization, plus agency banking also need to include in the analysis in order to fully capture the real effects.

Keywords: Financial, Performance , Inovation, Comercial bank , Jordan.

ÖZ

THE IMPACTOF BANKING INNOVATION ON FINANCIAL PERFORMANCE :A FIELD STUDY IN JORDANIAN COMMERCIAL BANK

Mevcut ampirik çalışma Ürdün ticari bankalarındaki yeniliklere odaklandı. Analiz, kârlılık, varlık getirileri ve brüt gelir gibi önemli finansal göstergelerin yenilikler ve ticari bankalar üzerindeki etkileri üzerinde duruldu. Bu araştırmanın temel amacı, yeniliklerin Ürdün'ün ticari bankalarının finansal performansı üzerindeki etkisini tahmin etmektir. Anket yöntemine odaklanan analiz ve ham veriler, seçilen ticari bankalar üzerinde bir anket kullanılarak toplanmıştır. Yönetim öğrencileri tahminen değerlendirildi ve burada %90 yanıt sonucunda 254 toplamdan değerlendirildi. Veri analizi için SPSS (Sosyal Bilimler İstatistiksel Paketi) sürümü kullanılmıştır. Analiz bulguları, banka yeniliklerinin kârlılık, varlık getirileri ve brüt gelir ile ilgili bankalar arasındaki anlamlı ilişkisini destekledi. Çalışma bankaların yeniliklerini zayıflatmıyor; bu nedenle, kredi garantileri, menkul değerlendirmesi ve ajans bankacılığı gibi diğer inovasyon faktörlerinin de gerçek etkileri tam olarak yakalamak için analize dahil edilmesi gerektiğini önerdi.

Anahtar Kelimeler: Finansal, Performans, Yenilik, Ticari banka, Ürdün.

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INTRODUCTION

One of the possible ways to encourage financial growth and competitive benefit is to implement strategies that improve innovations in the various segments of any well-established and renowned organization. The idea of innovation is one of the key steps for a production unit boom to infiltrate vibrant markets, enlarge the existing market share and to offer an advantageous boom to the organization. For such purposes, innovation is considered a key instrument for the strategic management of any organization in order to improve the share of the market plus to sponsor the brand loyalty in the competitive environment of a business (Hill et al., 2001; Kuratko et al., 2005).

In the words of Therrien et al. (2011), the concept of innovation includes a step-by-step procedure which carries the production of new commodities, sourcing newly established market structures, scheming novel production technological innovations plus the structural guideline of the firm. Besides, the concept of Innovation at the organizational level includes its motivation and coerces to execute newly born ideas and technological advancement in the development process of new products from the raw idea to the final stage Rubera and Kirca (2012).

According to the paradigm of knowledge economy, investing money in R&D is considered a superior and significant tactical constituent towards the sustainable industrial development, efficiency and effectiveness (Berry, 2000). With regard to firms listed under the banking and telecommunication sectors, they function in markets with full of monopolistic competition where innovation is considered as the key instrument for the purpose of survival.

The success of any well-established organizational structure in today's business world of underground economies and competitive market largely reliant on its aptitude to tactically out her competitor. Outwitting competitors in the market are conversant by capacity to convey submission better than those competitors in the market place.

INNOVATION

The concept of innovation

With regard to the term innovation, (Saren. 1984) described innovation as the development and application of new ideas in the institution, and here is the word comprehensive development, it covers everything from the new idea to the realization of the idea to bringing it to the institution and then applying it.

This corresponds to what we mentioned previously that innovation does not stop at the threshold of a new idea, but rather follows it to practical application in the market or within the organization, in addition to this; there is another definition of innovation that indicates a feature that can be acquired. Longman defines an organization by presenting innovation, which is the definition of a business dictionary for innovation as: Any new invention or an improved method of producing a commodity, as well as any change in production methods that give the product an advantage over competitors in achieving a temporary monopoly.

As for Peter Drucker, he defined innovation as the systematic abandonment of the old, confirming what Schumpeter said that innovation is creative demolition. "Here it is worth noting the distinction between the two approaches, (Schroeder & Scudder 1986).

We have realized that the Organization for Cooperation and Development defines innovation as the sum of the scientific, technical, commercial and financial steps necessary for the successful development and marketing of new or improved industrial products, the commercial use of new or improved methods, processes or equipment, or the introduction of a new method in social service, and research and development is only one of these steps.

As for (Tushman & Nadler, 2008), he defines innovation as the institution’s ability to reach what is new adds more value and faster than competitors in the market. This definition means that the innovative institution is the first in comparison with competitors in arriving at the new idea or the new concept, the first is to arrive at the new product and the first one to reach the market.

Types of Innovation

There are various kinds of innovation that have been used by many organizations with the purpose of ornamental competence and encouraging their level of performance. Such types of innovation comprise the process, organizational innovation as well as the market innovation.

The product innovation means to introduce a new product compared to its feature. This included considerable improvements in the provision of technology, product constituents, integrated software and consumer friendly in addition to introducing supplementary useful characteristics.

The process innovation type involves the acceptance of superior manufacturing technology that helps the production unit to accomplish the demand of customers while keeping competition in the field of business. This kind of innovation also help the organization to achieve the key indicators of performance viz. the operational cost, the improvement in quality of a product while fulfilling the demands of consumers (OECD Oslo Manual, 2005).

Similarly, the marketing innovations engage the inclusion of fresh marketing techniques that are geared towards keeping client connection through the clear pricing implications and the promotion of products (OECD Oslo Manual, 2005).

The organizational innovation involves that how an organization handle work procedures. For instance, the relationship of clients both internally plus externally in a way which endorse competitive advantage. The organizational innovation helps the production units to expand their employee commitment level which leads to improve the productivity of a product and to decrease the operational cost of the products (OECD Oslo Manual, 2005).

The importance of innovation

The perception of innovation has changed a lot in our time at the level of institutions and also at the level of countries, innovation has become a standard in the light of which the level of progress and the progress of nations and nations is improved, but more than that it is seen as a source of wealth and an important factor in driving the wheel of social development and economic. For example, to devise a new method that could increase the productivity of the factors of production in developing countries by less than one percent, which may contribute to increasing the GDP of these countries by more than the additional capital of $ 100 billion. At historical profit rates, a good innovative strategy with good execution is better than simply transferring resources.

On the other hand, innovation has become one of the important indicators that greatly help in inferring the progress of institutions. In general, what is observed today on the efforts made by contemporary institutions on research and development activities, which may cost them large sums and may last for long years despite what is involved of high risk due to the high rates of innovation failure, especially from a commercial point of view in the market, evidence of awareness of the importance of innovation by these institutions.

For instance, Japanese institutions allocate more than 30% of Its outputs are based on research and development activities, and in a recent survey it was found that 25% of all American institutions that employ more than 100 workers provide training in innovation for their workers. This represents an increase of (54%) in the four years between 1999-2003, as it has tempted many institutions that seek to achieve large profits and high growth rates. For example, on the returns of innovation, we find in the American 3M Foundation that about 32% of the Total Sales of $ 10 billion annually because of innovating new goods and services, and we find that the conditions are surrounding.

The contemporary and distinguished institutions of extreme change and complexity have imposed on the many great challenges that they have not witnessed before, which the institutions must face quickly but efficiently and effectively, and this requires the creative capabilities of the institutions that enable them to find new solutions and ideas for their problems and then continue and grow.

At the forefront of these conditions and factors comes the amazing change in technology, the rapid change in consumer tastes and the tremendous increase in the volume of knowledge, and in this context, there are a group of factors that have made the innovation of special importance more than ever and among these factors:

1. Increased competition between institutions.
2. The largest size of business organizations.
3. High expectations of consumers.
4. Lack of resources.
5. The increasing demand for new ideas.

As all these factors and others put a lot of pressure on the institution to be more distinguished and more in pursuit of competitive advantage, given that the latter is the winning card for the institution in light of these factors and conditions, and (Kotler, 2011) defines the competitive advantage as:

The institution's ability to perform in one or several ways is not competitors can follow now or in the future, as Doyle defines it as the institution's ability to follow the needs and desires of customers better than its competitors in the market." In this context, Ali Al-Salami sees the right approach to competition is for the institution to have an advantage that distinguishes it from others and a reason for its superiority over them. He adds that the establishment must create something new that others have not reached, and hence lead the market.

As for (Porter), he emphasized that institutions achieve a competitive advantage through innovation, and more than that, we find that (Schermerhorn, 2012) emphasizes in his most recent book that innovation is a competitive advantage.

A lot of writers link the enterprise’s continuity, success, and survival to its ability to create innovative ideas and turn them into products and services offered to the market, and although the competitive advantage results from various factors such as the size or possession of some distinctive assets, innovation has become increasingly and for a greater number of institutions The most important sources of competitive advantage.

Innovation Organizational Formats:

In general, innovations may take three forms, according to each (Azzawi et al. 2000)

Administrative innovation: Administrative innovation is one of the areas covered by innovation, and he indicated in the same context (West et al.2009) that: It is concerned with interactive relationships to accomplish tasks, work goals, and those rules and procedures that work in communication and exchange between workers and the environment surrounding the institution. Administrative innovation has been known: Managerial Innovation as reaching new concepts that can be transformed into policies, organizations, and methods that contribute to the development of performance in the organization. Transferring new ideas into products, and then creating new markets.

As for (Kent, 2001), he defined it as: Adopting the process of change in the institution and the surrounding environment. He added that managerial innovation is not limited to the changes that are taking place within the organization, but beyond that, where he referred to the process of its extension to the environment around the institution.

(Damanpour&Evan) explained that most of the areas covered by organizational innovation by defining administrative innovation as: It includes changes in the organizational structure, business design, enterprise operations, new policies and strategies, new control systems and others. This supports this. Taylor's definition in his engineering vision (Way Best One) that managerial innovation is: Bringing new things that exceed one way to multiple methods that mean that administrative effectiveness has more than one way to achieve administrative goals with high efficiency.

Innovation Technology:

Technical or technological innovation is defined according to the report of the Central Advisory Council for Science and Technology in the United States of America in several ways, but innovation took in this report a general meaning referring to the commercial, industrial and technical steps that lead to the marketing of new and manufactured goods, and the commercial use of new equipment and technical processes, and confirmed this (West et al,1999) that changes are taking place with the introduction of the new technology of the institution related to the main business activity, which includes the basic elements such as new products and services and new elements in the operations and innovation

(Dardess et al.2005) Presenting new ideas is often tools in the form of new technologies."Smeds pointed out that: "innovation creates wealth in the national economy, meaning by that technological innovation that he defined as an innovation that includes a new idea, an application that appears either in A new product, process, or service that leads to the dynamic growth of the economy.

While some people knew that innovation in terms of technology and technology represents the commodity, it can be seen as innovation, especially if the market notes it as innovative, and not the issue in the technological change that may appear, and if customers do not notice the commodity as being truly new, it is not innovative. Drucker says "the business has two legitimate jobs, which are innovation and marketing." He notes through the previous definitions that she looked at technical innovation from a marketing point of view and linked the process with customers. The important thing is not technical innovation, but rather the acceptance of consumers of this change. Hand in and pointed out that technological innovation is the ultimate production of a good and is judgedinnovative by the market.

(Alas,2007) noted that technical innovation is the technological innovation that occurs within the basic business activity of the institution, and in the same context (Damanpour, 1984) indicated in another definition that technical innovation is: “new products, services or processes that are directly related to the primary work activity, and emphasized (Beije) This is in: Technical innovation lies in being defined as new products, new processes, new technologies, or improvement, and organizations agree to create innovation, whether as a new process or product marketing, and he explained that most of the technological innovations have to do with innovation in institutions, and Rickne added (other jobs are creating human capital, creating and disseminating technical opportunities and products, improving the relationship between institutions, and creating a labor market.

Innovation Ancillary

An additional innovation is defined as: innovation that goes beyond traditional jobs such as marketing professionals developing a marketing program with the help of customers, and promoting a unique public service program, these are additional innovation, and (Damanpour, 2007) defines additional or auxiliary innovation as:

The innovations that constitute the boundaries of the regulatory environment, which go beyond the primary functions of the organization’s work. In the same context (Alas et al. 2007) pointed out that additional innovation is: auxiliary innovations and they extend across the boundaries of the regulatory environment and go beyond the core business functions of the institution. (Dangayach et al, 2001) added that the innovations: aim to provide improvements in products as additional services, to meet market needs and to use the capabilities of the institution in the field of research, development, and training. And the same thing (West et al.2009) emphasized that this innovation is related to programs and services that exceed the organization's primary functional activities, such as Programs for developing educational jobs and public offices, and thus we find that these innovations bring about changes in the objectives of the tasks.

Factors affecting innovation:

The many studies that deal with innovation and innovative activity have contributed to the identification of many of these factors affecting it and there are three groups of interrelated factors that have a mutual impact on innovation: the set of personal characteristics at the level of the individual, the group of organizational characteristics in the organization and the group of general environmental factors in the society.

First: a set of personal characteristics

The innovative individual is considered the core of the innovation process within the organization and the starting point, as it was believed at the outset that the innovators are only individuals with high intelligence, and therefore the innovation is limited to a certain category of society such as scientists, but recent studies have proven that innovation is a general human phenomenon and not a special phenomenon To anyone.

However, this does not negate the existence of a minimum number of personal characteristics that must be available in the innovative individual, and many researchers have studied the behavior of innovative people in an attempt to determine the characteristics of the innovative individuals and among them Charles, where he found that the innovative people have a number of important features, including the ability to focus on what could be, rather than what might be.

They are also distinguished by:

1. Curiosity and high questions about work.
2. They challenge the traditional ways of doing things.
3. prefer to look beyond the reference frames and think outside the box.

4. Bringing new perceptions in ways of facing problems and opportunities.

Second: The set of organizational factors

The institutions represent a highly organized organizational framework that affects the creative activity of individuals. Individuals do not work in a vacuum and cannot work outside their surroundings and their organizational context. Studies have demonstrated that organizational conditions within institutions affect the creative effort through their impact on individuals with innovative characteristics. The following are the most important Organizational factors affecting innovation

Corporate strategy:

Here, we can distinguish between two types of institutions, institutions that follow an innovative strategy, which are institutions that make innovation a source of their competitive advantage in the market and one of the dimensions of their strategic performance in it, and the second pattern follows a strategy directed towards the current state, i.e. technology, products, and current services, and of course the first pattern Looking for innovators and finding them areas There are many opportunities for them to do their part in creating and developing the foundation of innovations, while the second typefaces innovative activity to maintain the existing state.

Leadership and management style:

There is no doubt that leadership plays an effective role in stimulating or hindering innovation within the organization, where leadership is defined as: "Exercising influence on employees (workers) so that they cooperate with each other in order to achieve a common goal"

It is the innovative leadership in an organization that creates and creates innovation Incentives, while bureaucratic leadership maintaining the status quo finds risky change that creates chaos, and if the first leadership style is characterized by democratic style, flexibility, freedom from hierarchy, rigidity of structures and rules, and a tendency to independent work teams and units, the second (bureaucratic) pattern is characterized by Decentralization, inflexibility, hierarchy, strong routines, and downstream connections -the above.

Team:

A team is defined as: A gathering of two or more individuals in a regular, stable interaction over a certain period of time to embody a common interest and achieve a common goal"And studies have proven superior team performance as a unit of performance on the individual or departments, and the experiences of successful institutions have shown that the shift from the traditional organizational structure to the use of teams can constitute the most climateConvenient to foster and support innovation.

Enterprise Culture:

The culture of the institution is defined as: The set of values, customs, concepts, and rituals that have formed over the past period that give the institution a certain distinction in doing things. We find that institutions with a bureaucratic style tend to preserve their current culture, which makes them inappropriate for innovation and the concepts it brings New traditions and customs, other than the innovation-based institutions that are assumed to have a high capacity for cultural innovation, are introducing important changes to existing structures, policies and concepts in favor of cultural change and commensurate with the orientation towards Innovation

Influencing Factor:

Innovation in the organization is affected by the influencing factor that can stimulate or hinder innovation, and therefore the organization must consider the influencing factor in each innovation to ensure appropriate regulatory conditions, For innovation.

Communications:

Communication plays an important role in the leadership and management structure. It maintains the flow and flow of work within it. Whenever there are good systems of communication, the more efficient the performance. Communication is the means of leaders in managing their activities and in managing and achieving business goals. Consequently, communications differ according to the type of leadership and the type of organization. In institutions based on innovation, communication works to facilitate the formation of teams and the sharing of information between its members, and this is what network communication can do as it speeds up the movement of information and knowledge and then accelerates the allocation of resources and decision-making, and so on. A bureaucratic-oriented institution in which communications are part of the structure defined by lines of powers and responsibilities, which creates isolation of jobs and individuals, and thus this limits the institution's ability to innovate which is an undesirable origin.

Third: The set of factors of the general environment in society

An innovative individual, like sound, does not exist in a vacuum but is born in a society that attaches great importance to innovation and promotes it. The human being is the son of his environment, in other words, the environment surrounding the person either helps to the emergence of innovation and works to keep it and its continuation, or it may prevent its appearance and continuity and only encourage dependency Tradition, transportation and simulation are not only individuals but also institutions, both are influenced by factors The general environmental in society, and we can refer to the following to the factors of the general environment in society.

1-Social and cultural factors:

The interaction of the individual and society is one of the factors and variables that determine the personality of the creator and his behavior, and this interaction begins at the family level which constitutes the first social environment for the innovative individual, and then comes the role of educational and cultural institutions in motivating the individual to care for creativity and innovation through the means of education, cultural guidance and incentives.

2-Political factors:

It is considered a critical element in the innovation process, and that the continuous support from the political leaders of innovation in society leads to the explosion of innovative energies from the level of the individual to the level of the institution and society, and this through encouraging institutions and research programs and allocating material and moral incentives and setting educational and educational curricula that help to grow Innovative and creative capabilities.

What is an innovation strategy?

The strategy represents the general direction and primary guide that the organization takes in the long term to achieve all the benefits resulting from the overlap and integration of the organization's resources with the changing environment to achieve the expectations of owners, investors, suppliers, customers and everyone related to the organization. Many innovation strategies can be adopted by the organization, in order to help achieve innovation and make it a renewed and inherent phenomenon. Innovation strategies mean organizational policies that are designed to promote the innovative process and create an innovative climate within the organization.

If we consider that the strategy is how to create distinction and preference from others, then the concept of an innovative strategy is based on creating precedence to the new and the precedent to the best and the precedent to the different. The essence of innovation from a strategic point of view is mainly the fact that the innovative institution is the first in the movement in finding a new product and a new market.

Innovation strategy as a proactive strategy to the new idea and to the market. And if the important thing is that the institution be proactive to the market, then the most important thing according to this strategy is to be proactive to the three elements together, although this is not possible in all cases because it depends on the speed and productivity of new ideas and the speed of marketability of new products.

If the innovation strategy is a strategy that leads to the new idea, to the new product, or to the market, then the organization can be a precedent in all these elements or only one of them, or it may also be late in some or all of the elements. From this, it is possible to distinguish several cases of economic enterprise pre-eminence and judge its characteristics, strategy, and degree of innovation.

Features of the innovation strategy:

The strategy of proactive innovation is the strategy of the leading institution and this strategy involves influencing the markets by developing and introducing new products and creating new markets through these products. Indeed, institutions follow this strategy to benefit from two main advantages: the first is of strategic and technological source, and the second is linked to the process of purchasing by consumers.

1. The strategic advantage is the technological progress and precedence of the institution where the first innovator is more able to control the technology developed or acquired and more able to add improvement and development. The imitation of new products by competitors, in this case, takes a significant time, which allows taking advantage of their benefits before they are able So In all previous cases, subsequent competitors prefer to withdraw and not enter the market or change their destination to other markets.

2. The second advantage related to the effect is the process of consumer purchase, because new products will, in turn, represent a rare and important resource for distributors who compete with them in order to increase their profits and maintain their relationships with customers, and in the event of commercial success of a new product, distributors work to distribute a subsequent product / from In order to reduce their dependency on

> the productive enterprise and to expand their profit margins. On the other hand, we find that the leading product has the advantage of choosing the location and the target market that it creates through this choice of new physical and cognitive sites.

On the other hand, there are a limited number of attractive market groups and customers who have strong purchasing motivations for new products, thus the pioneering innovator can freely choose and locate a good site, and the subsequent competitor is required to distinguish his products in a different way with respect to the same market category, and from it targeting a less distinguished site And subject to the restrictions of the pioneer innovator.

Financial Performance

Financial performance evaluates the total financial health of any organizational setup and its capacity to generate worth to its stakeholders. Few of the financial performance indicators comprise the operational revenue, after tax profits, operating income, assets return and the cash which flows outside.

The financial services performance spins around a collaboration of margin growth rates vs. set budgets, the financial ratio analysis, and comparison with comparable production units in the stated industry (Ahmad et al., 2011). On the whole, the empirical literature on the performance of commercial banks stresses the objective of lending to the institutions where a firm gets satisfactory returns with minimum financial risk (Alam et al., 2011).

The universal predictable connection between financial risk and its return outlines that the higher risk investment should attract higher returns. In this situation, it has been a practice to explore the performance of a bank while using the risk-return relationship.

The Banking Sector of Jordan

Banking Sector

The financial system of Jordan is well-regularized with an effective banking system and a stock exchange market. On August 31, 2018, the financial services industry comprised of the Head Bank of Jordan, 43 commercial banks and a mortgage lender (CBK, 2018).

The banking sector of Jordan moved towards larger completeness, competence and stability in the year 2018 as envisaged in the Vision 2030 of Jordan. The key improvements in the financial sector during this time includes the increased in convergence of banking and mobile phone platforms, the proportion of Jordan financial services increased from 67 percent to 41 percent during 2013-2018, and this is caused through agents set in the microfinance and commercial bank whose hike the interest in the banking sector of Jordan by the international banking brands as established by the endorsement of various foreign lending organizations to function representative offices in Jordan, and carry expression of interest by other international agents. The usage of technology continues to augment the efficiency of commercial banks in offering the financial services. This is supported by the enlargement in the number of agents being attended by staff members of a bank (CBK, 2016).

The number of banks operating in Jordan is 43, in addition to its enjoyment of durability and financial strength, especially with regard to the levels of liquidity, profitability and financial solvency, and the ratio of lending to deposits totals 70%, and this indicates the role of banks in supporting various economic sectors, Beneficiaries of financing that are distributed throughout the Kingdom, the main driver of the economic development wheel and the need of the corporate, institutional and individual sector for banks to provide sources of financing constantly, and there is still a wide margin for banks in lending according to this ratio, and the banks in Jordan will not face any problems Or difficulties in applying the capital adequacy requirements in Basel III as a result of the high capital adequacy ratios and their enjoyment of sufficient capital, as the capital of Jordanian banks is 2.6 billion dinars (Jordan Economic Development, 2018).

Banks have proven their ability to withstand shocks and high risks in light of the stress test results used to measure banks' ability to withstand shocks.
Banks also have a role in the stage of prosperity and economic growth, their role is increasing in importance and need in these conditions that the national economy is going through in terms of simplifying financing procedures for different economic sectors, and lack of tightening in terms of credit, especially the medium and small companies sector, which is the largest employer And it is in urgent need of financing and the appropriate conditions, and this is what the government constantly emphasizes regarding the role of banks in bringing development and moving the economic wheel and its reflection on job creation.

The Central Bank of Jordan has realized the importance of providing finance to the sector of small, medium and micro enterprises and that the proportion of funding granted to this sector is still modest, which confirms the need to enhance its ability to access the required financing within appropriate loan conditions, and in light of this reality, the Central Bank decided to enhance its role In support of economic sectors with high added value in order to stimulate economic growth, it is of special economic importance for small and medium enterprises that make up 98% of the national economy, providing financing programs directed to the local industry, tourism, renewable energy, and agriculture, And information technology, and to meet the financing needs of customers, The Central Bank also worked to provide special lines of credit for small and medium enterprises through banks operating in the Kingdom.

One of the most prominent features of the government budget for the fiscal year 2018 is the growth of GDP at constant prices of 3.3%, and here lies the role of banks in achieving economic growth and reaching the desired ratio by supporting the various economic sectors by providing the necessary funding for them to bring about sustainable development, as well as the implementation of the sector strategy Energy for the years 2015-2030 and the development of the transport sector in Jordan, which has not received attention and funding for it in previous years and needs government measures and programs to advance it and address the problems it faces, and weak investment financing is another issue that must be addressed in it. This sector, and the most important characteristic of its direct link with other economic sectors and the life and work of the citizen, and any development or development in this sector will be reflected on other sectors directly, as well as the development of water projects that are the backbone of life; It has a vital and strategic role in developing these sectors by investing in these projects, providing the necessary financing for them, and achieving sustainable development (jordan Economic Development, 2018).

The steps that Jordan has taken during the last period within its reform plan, along with an agreement to simplify the rules of origin with the European Union and grant incentives to investors in the qualified industrial areas will enable the promotion of Jordan's trade to the countries of this union as it will help to push inter-Arab trade, and here also lies the role of banks in Supporting and encouraging investments in this direction.

Banks also have a role in providing financing. They also have a role in investing in companies and supporting them by participating in their capital. The total value of Jordanian banks ’contributions to companies’ capital amounted to 428 million dinars, and constitutes approximately 1% of the banks ’total assets of 45 billion Dinar.

Also, the banks ’approval to contribute to the capital of the company that was established to manage the projects of the Saudi-Jordanian joint investment fund plays a major role in financing investment and development projects that generate returns and provide job opportunities and help to stimulate economic growth, create an investment climate, and support the attractive investment environment (CBK, 2018).

The establishment of a joint investment fund with an independent financial and administrative personality that contributes to its capital through its existing investment portfolios and management according to professional, professional and professional foundations that achieve its goals and objectives will contribute to restoring activity to the financial market and root the culture of institutional investment in the financial market to counter individual tendency in dealings Shares, which was the most prominent feature in previous years.

In order to stimulate investment in the financial market, there is a role for banks in this by simplifying financing procedures, and easing the credit conditions for share financing requests, who have financial solvency, creditworthiness, and appropriate guarantees, including equity guarantees according to acceptable estimates, whether the requests submitted Of the companies, institutions, individuals or financial intermediation companies operating in the financial market.

In the field of investment in real estate and the revitalization of its market, there was a previous trend with the banks through the Association of Banks to establish a real estate company that contributes in its capital to banks through its existing real estate portfolios to be transferred to the company, and thus the banks reduce the costs of managing these investments and avoid their risks and empty them towards the fundamental aspects of its business, goals and objectives, and we remind again the Association of Banks to bring this company into existence due to its importance and strategic role in stimulating, supplying and strengthening the real estate market (jordan Economic Development, 2018).

Type of bank in jordan

The bank is known in its common concept as the organization that provides community members with the ability to invest in it, in addition to being a financial institution that can provide financial loans, receive deposits and provide currency services. There are many types of banks that were reviewed as follows:

1- Central Banks: They are banks that are interested in providing banking services to governments, and they occupy a significant place in the money market. The central bank is the basis of the banking system and differs from other banks, specifically commercial banks, whose main goal is not to achieve maximum profits but to provide services to the general economic environment. One of its most important functions is to issue money, whether paper or metal and to determine the monetary policy followed.

2- Commercial banks: Also known as deposit banks, they are institutions of a credit nature concerned with obtaining individual deposits, in exchange for providing the ability to withdraw them when requested. Therefore, these banks deal with short-term credits.The banking institution cannot be considered a commercial bank if it does not provide the ability to accept and withdraw financial deposits, as these banks deal with all financial assets only, such as securities and loans.

3- Investment banks: Sometimes called wholesale banks, they provide financial services to companies and financial institutions, and sometimes to countries or governments. Other tasks include providing investment advice, mediating on behalf of institutional investors, and acting as an intermediary when a client engages in mergers and acquisitions.

Many investment banks have their own trading rooms, where their team of traders can buy and sell securities on behalf of clients. It also manages pension funds and other large investments.

Problem Statement

Across the globe, the competition which emerged after the 1980s pushed the businesses to attract attention to their strategy of innovations (Kuratko and Hodgetts, 1998). In recent era, as we guided by the hard-hitting international business environment, corporate entity gets to evaluate and to utilize their innovative tactics with the main purpose of getting a competitive frame (Hult et al., 2003).

In the word of (Mabrouk et.al, 2010), irrespective of the empirical support affects of the various types of innovation on the business concert of financial organizations, and these effects are not yet quantitatively explored. In addition, there is a lack of knowledge about the motivation for innovation in the organizational structure. The results from other studies relate innovation and business performance and found an inconclusive result (Bonn, 2000). Other empirics explored innovation and bank performance and obtained mixed outcomes (Pooja and Singh, 2009: Franscesa and Claeys, 2010; Batiz-Lazo and Woldesenbet, 2006; Mwania and Muganda, 2011). Even though, attempts have been made on the involvement of financial innovation to the effectiveness of the monetary policy; however, few articles have sought to recount financial innovation to financial performance in the banking sector.

Several available studies presume a fundamental methodology to the innovation and performance connection failing to put into consideration the antecedents to innovation both internally and externally to the banking sector, the summation of which might affect this connection between the two. Innovation researches have been based on the financial markets with little highlighting on the banking sector of Jordan.

This empirical study has tried to fulfill the available research gap by answering the question: What are the effects of innovations on the financial performance of the commercial banks in the economy of Jordan?

The main question includes the following sub-questions(study hypothesis).

1. Is there a relationship between product innovation and the financial performance of the commercial banks in Jordan?.
2. Is there relationship between process innovations on financial performance of Jordanian commercial banks?.
3. Is there relationship between organizational/marketing innovations and financial performance of Jordanian commercial banks?.
4. Is theere challenges faced by commercial banks in implementing innovation decisions?.

Objectives

General Objective

The general objective of this empirical attempt is to determine the effects of innovation on the financial performance of the commercial banks in Jordan.

Specific Objectives

The specific objectives of this empirical attempt are given as under:-

i. To investigate the association between product innovation and the financial performance of the commercial banks in Jordan.
ii. To find out the relationship between process innovations on financial performance of Jordanian commercial banks.
iii. To find out the association between organizational/marketing innovations and financial performance of Jordanian commercial banks.
iv. To establish the challenges faced by commercial banks in implementing innovation decisions.

Significance of the Study

The results of this analysis will be important to the stakeholders as follows:-

i. The managers of financial institutions- the analysis will assist the relationship between innovation types and firms' performance; therefore, they guide key decision making by leaders in the financial services industry.

ii. Academicians-the results of this study are very significant to the research scholars, as it provides the future research gap for the young researchers.

iii. Researchers-The analysis report the useful information with recommendations of related research areas.

CHAPTER 1

LITERATURE REVIEW

1.1 Introduction

This section of the study comprises the available empirical literature related to the research area. It reports the review studies from those scholars who have conducted their studies on the same concern. The existing theoretical and empirical works presents the interconnection between innovation and the organizational performance.

1.2 Theoretical Review

Innovation defines all those business activities geared towards the adoption of goods and services that are technically new or value-added (OECD/Eurostat, 1997 p. 39). Consequently, innovations encompass novel ideas that impact the pattern of economic agents in a diversified manner. Implementation of the novel equipments, human resources and enhancement in the manufacturing techniques increase the organizational effectiveness while, facilitating the manufacturing process at the minimized cost. Similarly, the introduction of new goods offers the customers with new commodities which lead to the development of the organization together with other market sectors (Eurostat, 1997 p. 31). Finally, inventions permit businesses to differentiate themselves with the competition (i.e. by differentiation of the products, methods of production, overheads and the institutional advancements).

The traditional idea of the organizational behavior presumes that innovations do offer a provisional persuade on the performance of company because the new technology will speedily be subtle and will copied by the competitors. As a result, finally all business activities will move towards the steady-state level. Yet, it has been established that some organizations in various sectors as well as different institutions ensuring the attractive performance as compared with rivals for a desirable period, irrespective of the measure of firm performance taken into account (Klomp et al., 2001; Loof et al., 2002; Kemp et al., 2003). These remarks are comparable to the conceptualizations prevailing in different schools of thought, mostly evolutionist, the Schumpeterian plus the endogenous growth theory. With regard to the Schumpeter's thesis of the creative destruction, the development of different products, innovation of production processes, penetration to new markets, innovative ways to get different supply sources coupled with organizational adjustments are fundamentals within the organizational structure which commonly reason demolition to the existing monetary structures with the succeeding substitution with different preparations. It is believed that a firm adoption of the innovation necessitate the buildup of idea and the enough fiscal power; hence, the single trader cannot maintain being a key source of invention. This is targeted to enlarge corporations and their R&D laboratories which are having adequate amount of both the human and financial capital.

(Klette, et al., 2000) concluded that the multiple stages concept of the organizational behavior which claims that the advancement of a venture is to measure by the value and pricing of the company items and its competitive products summing that the value of the products can be improved by discovery. On the other side, the innovation strength is recommended to be irrelavent to the organizational size. If not, this is linked with firm's profit margin which conversely narrates to firm aptitude to differentiate its items with those of the rivals. The study model auxiliary pinpoints some industry characteristics as the determinants of R&D intensity since the companies in the particular sectors with larger stipulate for high quality commodities and supplementary innovative prospects predispose towards experiencing higher and intensified R& D. In recent times, these Insights on innovations have been incorporated in numerous articles through the multi-stage concept of invention process (Crepon et al., 1998; Loof et al., 2002; 2006). At this time, innovation process is enclosed from the decision to innovate by the production unit throughout its performance.

1.3 Innovation Theories

According to the world well- renowned authors, the innovation is investigated by several theories such as the constraint-induced innovation theory, the circumvention innovation theory, the regulation innovation theory, the transaction cost innovation theory, and the location theory.

Silber (1983) focused on the constraint-induced invention model in his analysis. The proposed model delineates drive to take advantage of profit gains by the financial institutions as the key inspiration of the financial innovation. Few limitations (such as, majorly external handicaps, for instance, policy plus internal handicaps like organizational management, etc.) do subsist in the venture to attain the maximize profit target. The given limits offer immovability in the management of financial institutions, but also impede with the effectiveness of these business organizations. For that reason, the financial institutions attempt to eradicate them at the first instance.

Kane (1981) was the inventor of the circumvention innovation theory. He postulates that the number of aspects of the government strategies, bearing related element of the embedded duty, humiliate outcomes of the productivity pursued by the production units. In this respect, markets plus regulation inventions ought to be seen as the fraction of the steady conflicting procedure in terms of the self-regulating, the political vs. economic forces. Because of the distinctiveness of the financial services industry, stricter regulations are obligatory. The institutions providing the financial services dealing with the challenges, for instance, the decrease in profit in addition to letdown by management organized by the government limitations, therefore, to achieve the least possible sufferings. Accordingly, invention is frequently brought about by wish to make profits plus circumvent government rules. This model presented by Kane is thought to be unrealistic. The theory main focus is on the evaluation on the cause of innovation.

After that, the regulation invention theory was invented by Scylla et al. (1982).This theory focuses on the inventions based on the economic growth record. The model postulates invention vs. social regulation to be almost connected adding that economic regulation is inclined by the regulatory changes. According to the authors, it is the difficult task to have space for the innovation in the socialist economy as compare to the capitalistic economy and the tight regulation. Therefore, any adjustment process caused by reforms in regulation in the financial arrangement can be defined as the financial innovation. The dealings b/w government and the market structure ultimately generate the spiral growth process, narrated as, “control-innovate, controls again-innovates again”. The model is considered to have seen the extension of the range of innovation with government activity being viewed to acquire key stimulus to the innovation. The financial control constrains innovation, and as a result, rules and regulations that are measured the symbol of financial control ought to be the way of financial innovation and reforms.

Hicks & Niehans (1983) discovered the transaction cost innovation theory. They argument that the chief cause of innovation is to reduce the transaction cost. In fact, the innovation is a response to the development in the technological knowledge that started reduction in the transaction cost. A lessen in the transaction cost is expected to stimulate the financial invention plus improve the financial services. The transaction cost model is an approach for the clarification of institutions, considering the relative pros of conducting transactions within the organizational structure contrary to market transactions (Black, 2002). In the transaction cost theory, the unit of the analysis is the unit of activity – the transaction, with its participants. Therefore, it is harmonizing with this study’s unit of analysis. According to Shelanski and Klein (1995), the transaction cost theory relational branch is predominantly related as its objective is to illustrate the method trading partners make decision from an assortment of feasible institutional options. Within the framework of the open innovations, the production units progressively transfer technologies across their own firm boundaries. As a result, these firms need to decide regarding the transaction partners.

Desai and Low (1987) advocated the Location Theory as advancement to the financial innovation microscopic economic model. The authors used the stated theory to prove the loophole within the range of achievable product in the fiscal market, which is a sign of promising chance to invent and to sponsor a new product.

1.4 Financial Performance Determinants

The firm performance is a multi-dimensional notion with parameters linked to departments such as marketing, production or finance (Sohn et al., 2007), or even substantial, for instance, those relating to profit and growth (Wolff and Pett, 2006). The performance of a firm can be calculated either by using the subjective or the objective pointers (Harris, 2001). Several firms' performance indicators found which include the gross income, profitability, efficiency in the production, and assets return among others. In the same way, the firm size can also participate a fundamental role in its ever-lasting performance.

The creation of competition in both the international and national lending markets, the switch to monetary unions and the innovations in technology herald main adjustments within the lending space exigent every bank to target appropriate measures in an attempt to get into fresh competitive business environment. Another attempt from Aburime (2009) explored the efficiency of the Nigerian banks concerning their political affiliation. The analysis found that the political elements were the major determinants of performance in the Nigerian commercial banks.

Profit after tax has been vibrantly used as a gauge of performance in the commercial banks. Several indicators of the bank expansion have been employed by academicians which includes the age of the bank, the bank capitalization amount, the market penetration, concentration in the market, loan to deposit ratio, portfolio composition of the bank, etc. (Athanasoglou et al., 2008). The financial performance of the commercial banks is approached in terms of both internal and external determinants. Firstly, the internal determinants also known as the bank-specific determinants of performance which are taken from the bank accounts (P&L accounts or the income statement).

Secondly, the external measures do not recount to management of the bank rather than to imitate the legitimate and fiscal environment impacting operation plus the performance of commercial banks. Several important variables have been targeted to explain both the categories, in terms of the nature and the objective of every study (Alam et al., 2011). The internal determinants of the bank performance incorporate the variables viz. the size of the bank, the risk and expenditure management, capital, HR and the bank innovations. On the contrary, the external determinants of the bank development comprise determinants such as interest rate, inflation rate, cyclical variation in GDP and those variables which represent the species of the existing market (Alam et al., 2011). The second aspect denotes the ownership of the bank status, market concentration and the size of industry. This study related innovation types plus financial performance and sought to carry out whether the two included variables are interconnected or not.

1.5 Empirical Review

Many of the empirical works have documented that all the innovation strategies change considerably across the businesses organizations. According to Weiss (2003), a vast number of quantitative researches on the innovation have been conducted towards one of the innovation categories, the product or the process. On the other hand, the given studies focused this area of interest in an unreserved way, with no condition on the innovation type under the process of scrutiny. Moreover, there has been more attention on the similarity of the implementation patterns of product and process innovations across industrial units rather than analysis at the firm level analysis of the analogous patterns (Damanpour and Gopalakrishnan, 2001).

Various studies endorsement the theoretical literature by presenting that the innovation promotes the growth and the productivity of a organization. In the words of Cainelli et al. (2006), investing in the ICT improves the growth alongside the output. The attempt by Koellinger (2008) focused the inter-correlation between innovation in the internet based technologies and the performance of an organization. The findings illustrate these categories of invention, whether Internet supported or not product/process inventions, report positive persuade on the employment opportunities and its turnover. Furthermore, firms using the non internet-based innovations have lower chances of growth in contrast with those factors which are applying the internet-based innovations.

Another quantitative study by Kamau (2009) on the efficiency aspect in the banking sector illustrated that the commercial banks liable to be more inventive in their production which offer to enhance their share concerning the number of customers. The financial services demand in Africa is projected to rise in the near future and albeit banks with a strong pan-African survival have an added an advantage, the banks will fulfill intensified rivalry both from the traditional rivals and from the advanced methods of providing the financial packages (Kamau, 2009).

By the innovation of new commodities, the commercial banks have expanded their attendance and afterward their financial status. The achievements in numerous commercial banks have been associated to the differentiation of items and to the unrelenting center on delivery of the service which is inclusive of access to the financial services. Lists of commercial banks have known that customers with low level of income need to be handled with a distinction; therefore, the products/processes are premeditated properly, with no negotiation on the operating descipline (Kihumba, 2008). Hauner & Peiris (2005) concluded that the major innovations affecting the banking distribution system that influence the piece of private banks notably like ATM, internet banking, mobile banking plus electronic money. According to Boot and Thakor (2007), the technology of bank management, the customer relationship management systems over and above many other technologies form part of the means adjustments in the internal banking systems which have significantly influenced on the fiscal performance of the lenders.

Griffith et al. (2006) examined the effect of innovations on the production activity using an evaluation across different selected countries such as U.S., Germany and France led to diversified results pertaining to special innovation types. In few countries, the product innovation resulted in the output improvement. Cassiman et al. (2010) reported the positive influence of exports on the productivity identified in empirics which is related to the innovation decisions of the production unit. The study on the manufacturing industry of Spain explains the firm indication that the product innovation lead to increase the productivity of the firm, not like the process innovation. In a result, out of the product innovation, the small entities with no export activities become tend to expand entry into the export market. This is in accordance with the theoretical explanation provided by the model presented by Melitz (2003).

Gopalakrishnan (2001) found the positive association between the implementation of product innovation and the implementation of process innovation, and the coupled great performance levels to businesses executing strategies of innovation that mix new product and process ideas as opposed to enterprises with the simplistic innovation strategies. Reichstein and Salter (2006) concluded a considerable positive relationship between the process innovation and the sale portion which is generated from the fresh products, showing the presence of complementary relationship between the major product invention and the process invention. Furthermore, the authors also exposed a positive correlation between the incremental process invention vs. the product invention. The organizational innovation gives a helpful factor to other kinds of innovation by expanding the value and effectiveness of the work, improve the information capacities and also expand the aptitude of a business to attract and to follow fresh skills and the advanced technological ideas (Lam, 2004).

In the light of the initially conducted studies, Svandven and Smith (2000) incorporated the existence of a lag between innovations and the profitability of a firm. Consequently, in so far as the innovative industrial units may have enhanced growth rate on the subject of market share, hiring capabilities, assets, production output; however, this is not flourished in terms of the profitability of the firm.

1.6 Conceptual Framework

The theoretical construction has been used in this study to outline key ways of action to display a final approach to an idea (Mugenda and Mugenda, 2003). This framework presented depicts the innovation types on the performance of a firm in the banking sector. A general diagram as given follows shows that the performance of a firm is a variable of interest and the innovation types are the explanatory variables, wherein the government policy is taken as the controlled variable in the analysis.

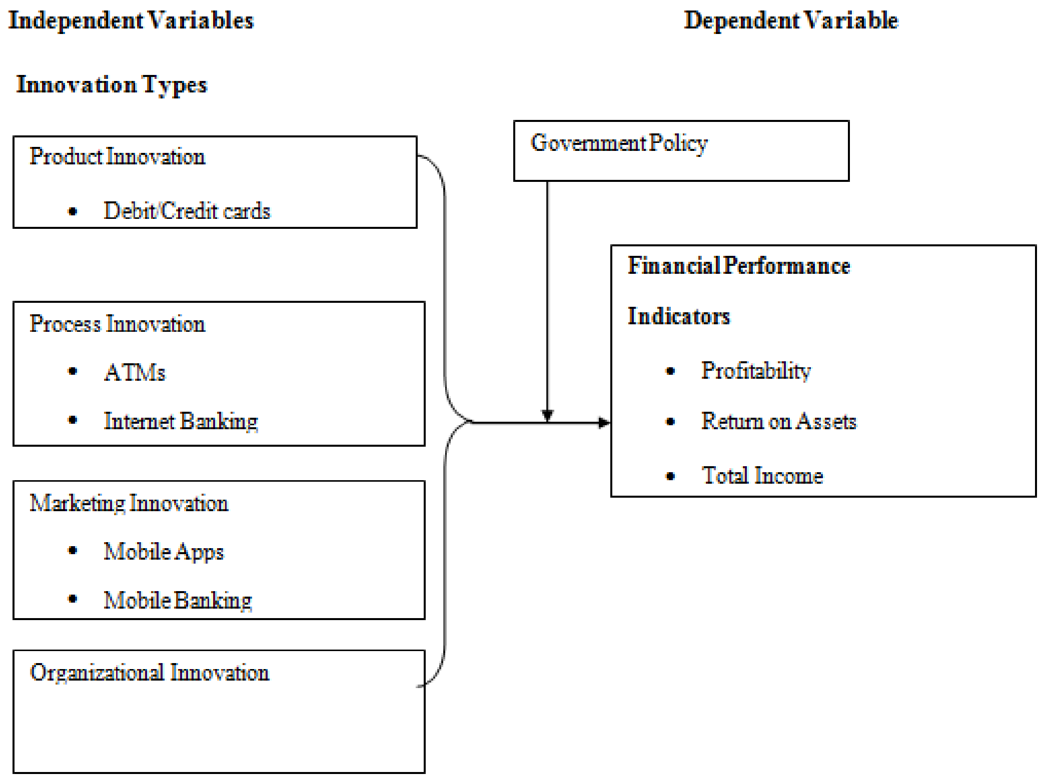

Figure 2.4: Conceptual Model depicting association between Innovations and Firm Financial Performance

1.7 Summary

This literature review outlined the conceptualization of the important concept which is covering the explanation on the types of innovation and performance of the firm. The overall evaluation of studies show that the innovation types at the firm level, different models and the innovation theories, face the challenge of implementation of innovation in the business alongside with their views. The identification of the research gap was carried out carefully. Therefore, this chapter is an indispensable part of this article as it attracts various scholars from other attempts as were conducted by other researchers in different contexts with different goal in the area of innovation and the performance of a firm; therefore, gives a signal of direction to carry out this study on time.

CHAPTER 2
RESEARCH METHODOLOGY

2.1 Introduction

This section of the chapter stress light on the methodology as supposed in arranging and analyzing the raw data of the analysis. This section also includes the research design, target population, sample size, the process of data collection and the ways how to analyze the accumulated dataset.

2.2 Research Design

The underlying study employed the descriptive statistics in order to achieve the designed objective of the analysis. The descriptive design is suitable to focus on special practical issues viz. to administer the questionnaire first and then to interpret the data (Kombo & Tromp, 2006).

In the words of (Kothari, 2008), the research design is an arrangement of the terms and conditions for the collection of data and the analysis of data in a matter that goals to unite significance to the purpose of research with economy in particular. The descriptive research design covers the measurement, category division, the analysis of data, the evaluation of data and then finally to interpret the data.

2.3 Population

The current study comprises the sample of 254 managers of the commercial banks of Jordan which covers the levels of management setup like top, middle and lower level of management in the organization. The population was selected because the managers are appointed on the good position for the purpose to provide the key information with respect to the types of innovation as adopted by the bank. In the words of Hyndman (2008), the chose population is the accumulation of things or people in which we are especially interested with some purpose.

2.4 Data Collection

This study includes the primary and the secondary source of data. The primary data was accumulated with the use of questionnaire and filled by the chosen sample of the whole population stressing on the innovation as adopted by the commercial banks of Jordan.

On the contrary, the secondary data was taken from the existing empirical carried out on the innovation types and their influence on the performance of the firm within the selected banking industry and besides, the remaining series of data has been coped with different publications. The selected time analysis starts from August -2019. The interviewees were the bank managers and employees working in the commercial banks who bitterly know the impact of innovation of the performance on the banking industry.

2.5 Data Analysis

After collecting the data, the next important step is to analyze the data. For the analysis of data, a series of statistical measures have been suggested in the statistical theory which includes mean, variance, standard deviation, etc. However, a more advanced step in the data analysis stage is the regression analysis which quantitatively estimated the impact of explanatory variables on the explained variables of the model, and such analysis has been carried out with the help of SPSS software. The proposed econometric model of the current analysis can be summed as follows:

$$Y=ao+ a1X1+a2X2+a3X3 +a4X4 + €$$

Where:

Y= Financial Performance

ao = Constant

X1 = Product Innovation

X2 = Process Innovation

X3= Marketing Innovation

X4 = Organizational Innovation

€ = Error term

2.6 Ethical Concerns

In a survey analysis, the researcher must keep the secrecy of the respondents with himself. He is bound to keep all the records and information provided by the interviewees and must not be disclosed to anyone as it is considered as the violation of the research bounds. The accumulated information must be confidential and should not be provided to anybody.

CHAPTER 3
DATA ANALYSIS AND DISCUSSION

3.1 Introduction

This section provides the empirical findings of the data as was collected using a questionnaire by the researcher. The estimated data can be then analyzed and interpreted accordingly. The basic aim of this study is to empirically explore the impact of innovation types on the performance of the commercial banks in Jordan. The remaining chapter includes the response rate of the questionnaire, the background information of the respondents, the types of innovations, and those factors which are mainly affecting the innovation decision and its proper implementations.

3.2 Response Rate

The survey's questionnaire was selected for the purpose to collect the raw data during the period -August, 2019, wherein, the secondary type of data was selected using the self-constructed data sheet. For the analysis, 20 commercial banks from the Jordan region were randomly selected and 254 sampled questionnaires were filled out. Out of the total, 98% of the questionnaires were returned back which were considered for the final data analysis. Some of the related studies obtained 50%, 30%, and 50% filled questionnaires and these studies are conducted by Mugenda and Mugenda (2003), Sekaran (2003), and Hager, Wilson, Pollack and Rooney (2003), respectively. On the basis of this available information, the response rate of questionnaires for the underlying study was considered quite satisfactory.

3.3 Reliability test

the reliability testing was conducted in order to ensure consistent measurement across various items in the questionnaire. Indeed, the reliability of a measure indicates stability and consistency of the instrument, In our study, a Cronbach's Alpha value of 0.804 for the 36 items , indicating good consistency and stability of the instrument. The results of the reliability tests are highlighted in the table below.

Reliability Statistics	
Cronbach's Alpha	**N of Items**
.804	36

3.4 Background of the respondents

This part of the study reports the age of the respondent, name of the department and the working experience in the banking sector. These are the key indicators as they affect the intellectual background and contribute in providing valid, reasonable and effective information.

3.5 Age

Table 4.1 reports that the study subject's age was above 35 years with a good percentage (75%) in the age group of 36-55 years. Other respondents age were below 35 years (25%). This reported information confirms the fact that most of the respondents fall outside the youth age group (18-25 years). This is quite dissimilar from the established belief that the commercial banks of Jordan are subjugated by the young-age professionals. In addition, those employees whose age was less than 25 years were found in limited portion because the employee should has experience according to several banks' labor also it is notice that the highest frequency is recorded for the employees whose age between 36-45. This is narrated by the occasional staff realignments which inclined the target dismissal of long serving staffs via company induced early retirement or voluntary the departure of employees.

3.1 age distribution(years)

Age Bracket	LESS THAN 25	26-35	36-45	46-55	ABOVE 55	TOTAL
Frequency	18	44	81	66	45	254
Percentage	7.1	17.3	31.9	26.0	17.7	100

3.6 Departments

Table 4.2 reports the information which express that more respondents (83%) were working in the audit department, the finance and the ICT departments; however, 17% of the remaining employees were working in the executive, and credit HR departments. The given pattern of information could have been pre-disposed by the questionnaire distribution approach, where the majority of them were the bank heads of the finance departments who are the main responsible people of contact and in the remaining banks, it was the audit and the ICT functions as shown in the table 4.2. Such kind of analysis stressed more attention on the ICT, finance, and the audit division which are the organizing leaders of the innovations in ensuring the system of financial service. These are the key departments which mainly focus to the innovation types because such departments are the leading sections with high utilization of the ICT novelties in the system of financial service.

Table 3.2: Distribution by Departments

Department	executive	finance	Ict	auditing	credit	TOTAL
Frequency	20	135	48	27	24	254
Percentage	7.9	53.1	18.9	9.8	10.2	100

3.7 Experience in Banking Sector

Table 4.3 reports that 85% (n=254) employees were those who were having more than 5 year working experience in the financial markets, whereas, the remaining 15% employees were having experience less than 5 years. The result shows that the subject focus of the current study is the tenure of industrial establishment which started in 2004 and we realized more banking growth in the last 10 years. The numbers of employees in the bank of Jordan were 28,846 in 2010 and the available employees have grown to 36,212 in 2017, showing an increase of employee of about 20.34% (CBK, 2017). The data shows that the number of working employees has been hired during these years in order to strengthen the financial activities within the banking sector.

Table 3.3: Respondents Experience In Banking Sector

YEAR	1-5Y	5-10Y	ABOVE 10	TOTAL
Frequency	37	42	175	254
Percentage	14.6	16.5	68.9	100

3.8 Data Categorization

This section of the analysis provides the categorization of the key objectives of the research. The categorization can be represented with the help of frequency tables, descriptive statistics, and the inferential statistics. In order to categorize the data in a proper manner, we have used the Likert scale for this purpose and have assigned special coding to each category, such as: 1=strongly disagree, 2=disagree, 3=neutral, 4=agree and 5=strongly agree.

3.9 Bank Innovations and Bank Profitability

3.9.1 ATMs and Bank Profitability

Table 4.4 illustrates the outcome of the questionnaire which relates the influence of ATMs on the profitability in the financial institution of Jordan. Most of the respondents (80%) were of the view that the use of ATMs can lead to increase the profit margins to the commercial banks; however, 9% of them were remained neutral. From the prospect of low-maintenance expenses, 77% employs were agreed and 10% remained neutral. Furthermore, 77% employees argued that if we invest in ATMs, the bank profitability can be enhanced; however, 10% were remained neutral and the remaining 13% were disagreed with this statement. Therefore, we can conclude that the ATMs are the most convenient way to provide services to the clients in the commercial banks of Jordan.

Table3.4 : ATMs and Bank Profitability

Statement	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean	Standard Deviation
Q5-income generated from the ATM machines positively affect the per annum profit of the banks.	14	15	23	90	112	3.87	1.179
Q6-The maintenance charges of the ATM machines are comparatively low, leading to ensure higher profitability to the banks for a long-period of time.	15	15	26	85	113	3.90	1.097
Q7-Net changes in investment in ATMs lead to motivate the profit of the bank.	15	16	26	85	112	3.96	1.124
Average						3.91	1.133333

3.9.2 Debit/Credit Cards and Bank Profitability

Table 4.5 reports the results of the influence of debit and credit cards on the profit of the commercial banks. Among the total responses, 67% respondents were agreed on the concern that the debit/credit contributes a reasonable margin which leads to more profit in the respected banks; however, 16% were opposed to this opinion. On the contrary, 72% of the respondents were agreed that the debit/credit cards bear the low financial cost in its installment; however, 16% opposed this view and 12% did not show any unique interest. In terms of investment in the debit/credit machines, 79% respondents were agreed that if we invest in these kinds of cards, the bank profitability will be increased; however, 12% respond differently and the remaining 10% remained neutral. The average score of 3.87 showed a below-average of respondents who were agreed on the debate the debit/credit cards can lead to improve the level of profit in the commercial banks of Jordan.

Table 3.5: Debit/Credit Cards and Bank Profitability

Statement	**Strongly disagree**	**Disagree**	**Neutral**	**Agree**	**Strongly agree**	**Mean**	**Standard Deviation**
Q8-The income generated from debit and credit cards would be positive signal to the per annum profitability of the bank.	19	20	44	94	77	3.75	1.186
Q9-Do you think that maintenance charges of debit/credit cards are low which positive signal for the profitability of the bank is?	22	18	31	97	86	3.81	1.223
Q10-The more the investment in debit/credit cards, the more will be the profit gains to the bank.	15	15	26	87	111	4.04	1.145
Average						3.87	1.184667

3.9.3 E-banking and Bank Profitability

Table 4.6 reports the responses of employers in relation to find out the influence of internet-banking on the profit of lending institutions in Jordan. Out of the total, 77% employees were kept the basic statement, 11% were remained neutral, and 12% were completely disagreed. In prospects of the internet banking maintenance expenses, 76% were agreed, 13% were neutral, and 11% were against of it. Finally, on the concern that banks are motivated by profitability in investing in the internet banking, 77% were not agreed, 11% were neutral 12% were agreed. The mean value of 3.93 depicted that the internet banking is positively affecting the profits of the commercial banks.

Table 3.6: Internet Banking and Bank Profitability

Statement	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean	Standard Deviation
Q11-The more income from the internet banking, the more will be the annual profit to the bank.	17	14	27	104	92	3.94	1.137
Q12-The lower the maintenance charges of the internet banking, the higher the level of profit of the bank over a long-period of time.	16	15	29	115	79	3.89	1.105
Q13-The relationship between investment in the internet banking and bank profitability is positive, what do you think?	16	14	28	105	91	3.95	1.122
Average						3.93	1.121333

3.10 Bank Innovations and Assets return

3.10.1 ATMs and Return on Assets

Table 4.7 reports that79% employees were agreed with the idea that ATM machines affect the operational cost of commercial banks, however, 9% were neutral and 12% were disagreed. In case of recovering the invested amount, 79% employees were argued that in a less than 3 year the bank can easily recover, however, 9% of them were neutral. Finally, the mean value of 4.003 shows that the investment in ATM positively leads to improve the returns on assets.

Table 3.7: ATMs and Return on Assets

Statement	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean	Standard Deviation
Q14-The better return on assets is only possible due to the lower operational cost of the ATM machine.	14	15	26	88	111	4.05	1.129
Q15-The investment in ATM machines can be recovered within 3 years of the initial period.	14	15	25	88	112	4.06	1.128
Q16-The relationship between ATM generated income and per annum bank income is positive, what do agree?	16	14	29	115	80	3.90	1.101
Average						4.003	1.119333

3.10.2 Debit/Credit Cards and Return on Assets

Table 4.8 illustrates the influence of debit/credit cards on the return on assets. Results show that 78% employees were greed by saying that reducing the operational cost of cards can lead to increase the profitability of commercial banks, 10% were remained fifty-fifty, and 12% were agreed. Similarly, 76% employees showed that cards payback period is recorded to be less than 3 years, 11% were neutral and 13% were disagreed. The mean value of 3.97 reveals that there is a positive effect of cards on returns.

Table 3.8: Debit/Credit Cards and Return on Assets

Statement	Strongly disagreed	Disagree	Neutral	Agree	Strongly agree	Mean	Standard Deviation
The better return on assets of the bank is the reflection of the lower operational cost of the ATM.	14	15	26	88	111	4.05	1.129
The recovery period of investment in debit/credit card is probably less than 3 years.	17	14	29	103	91	3.93	1.138
The debit/credit card has a positive influence on the income margin of a commercial bank.	17	14	28	104	91	3.94	1.137
Average						3.973	1.134667

3.10.3 Internet Banking and Return on Assets

Table 4.9 reports that 80% employees were agreed that the internet banking can reduce the operational cost of the commercial banks which can lead to increase the return on assets, 9% were neutral and 11% were disagreed. Likewise, 78% employees were agreed that the internet banking can significantly improve the bank margin, 10% were neutral, and 12% were disagreed. The mean value of 4.00 reveals that the respondents were agreed that the internet banking positively affect the return on assets.

Table 3.9: Internet Banking and Return on Assets

Statement	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean	Standard Deviation
Q20-The key advantage of the internet banking is to reduce the operational expenses of a commercial bank.	16	16	25	85	112	4.03	1.167
Q21-The internet banking platform has the ability to recover the initial investment within the course of 3 years.	15	15	27	85	112	4.04	1.148
Q22-The accumulated income from the internet banking has a favorable influence of the bank profitability.	18	14	28	103	91	3.93	1.152
Average						4.00	1.155667

3.11 Bank Innovations and Total Bank Income

3.11.1 ATMs and Total Bank Income

Table 4.10 reports that 80% employees were viewed that ATM machines positively impact the commission income, 9% were neutral, and 12% was disagreed with the stated notion. Similarly, 79% employees were agreed that ATM positively affect the interest amount, 10% were neutral and 12% of them were disagreed. Furthermore, 8% employees were remained neutral on the point that ATM has the capability to generate income for the financial institution, 79% were agreed, and 13% were disagreed. The average of 4.04 denotes that most of the employees were fully support this underline idea.

Table 3.10: ATMs and Total Bank Income

Statement	**Strongly disagreed**	**Disagree**	**Neutral**	**Agree**	**Strongly agree**	**Mean**	**Standard Deviation**
Q23-The ATM machines have the capability to hike the commission-based earnings.	15	16	25	86	112	4.04	1.152
Q24-The ATM machines have the capability to hike the interest-based earnings.	15	15	26	85	113	4.04	1.148
Q25-The ATM can lead to generate the earning of the bank.	15	16	26	85	112	4.04	1.154
Average						4.04	1.151333

3.11.2 Debit/Credit Cards and Total Bank Income

Table 4.11 shows that 75% employees were agreed that cards can positively lead to change the total income of the commercial banks in Jordan; however, 13% were disagreed with this reality. On the contrary, 77% employees were agreed that cards can contribute to generate finance for the respected banks, 11% were neutral, and 12% were in opposition. The mean value of 3.89 depicts that most of the employees were strongly agreed that different cards can lead to increase the total wealth of banks.

Table 3.11: Debit/Credit Cards and Total Bank Income

Statement	**Strongly disagreed**	**Disagree**	**Neutral**	**Agree**	**Strongly agree**	**Mean**	**Standard Deviation**
Q26-The debit/credit card is having a positive influence on the commission-based earnings.	18	14	29	104	89	3.91	1.149
Q27-The debit/credit card is having a positive influence on the interest-based earning	16	14	28	100	96	3.97	1.149
Q28-The debit/Debit is having the ability to generate more income for the bank.	14	15	25	89	111	4.06	1.127
Average						3.98	1.141667

3.11.3 Internet Banking and Total Bank Income

Table 4.12 report that 52% employees were of the view that the internet banking can enhance the bank commission fee, 36 % were disagreed and 12% employees were neutral. Likewise, 52% employees were agreed that the internet banking has the potential to increase income for the commercial banks in Jordan; however, only 30% were agreed.The mean score of 3.06 showed that majority employees do not concur that the internet banking can lead to enhance the income of banks.

Table 3.12: Internet Banking and Total Bank Income

Statement	**Strongly disagreed**	**Disagree**	**Neutral**	**Agree**	**Strongly agree**	**Mean**	**Standard Deviation**
Q29-The internet banking can lead the banking sector to increase the commission-based earning.	17	75	29	104	29	3.93	1.136
Q30-The internet banking can lead the banking sector to increase the interest-based earning.	17	14	29	104	90	3.93	1.136
Q31-The internet banking has the capability to hike the potential earning of the banking sector	17	60	39	104	29	3.01	1.162
Average						3.0 6	1.144667

3.12 Challenges of Implementing Innovation Decisions

Table 4.13 reports that 72% employees were agreed that the insufficient technological skills was one the of the main challenges that the commercial banks countenance in implementing the innovation decisions, however; 77% employees were agreed and strongly agreed that the complexity of the innovation decisions was new challenge faced by the private banks in innovation implementation. The average value of 3.84 confirms that the stated challenges were not upsetting the realization of innovation decisions by the selected banks according to the employees thinking level.

Table 3.13: Challenges of Implementing Innovation Decisions

Statement	**Strongly disagreed**	**Disagree**	**Neutral**	**Agree**	**Strongly agree**	**Mean**	**Standard Deviation**
Q32-Less knowledge of technological know-how	19	20	31	98	85	3.83	1.195
Q33-Introduction of innovation is a complex activity	17	14	28	115	80	3.89	1.114
Q34-Threat to job availing by the employee	16	15	28	105	92	3.94	1.126
Q35-Feeling of insecurity	19	19	43	94	79	3.77	1.185
Q36-Tight working environment within the bank constituency	23	18	31	97	85	3.80	1.233
Average						3.846	1.1706

CONCLUSIONS AND RECOMMENDATIONS

Introduction

This research article has the key focus on knowing the influence of innovation types on the financial performance of some of the selected commercial banks in Jordan, specifically taking the cases of ATM, debit, credit card, and the internet banking. The financial performance measurement comes under the head of profitability, income level, and assets return of the banks. This chapter is throwing light on the summary alongside the solid recommendations. Besides, a research gap is also give for future studies.

Summary of Findings

The prior studies focus on the examination the impact of the bank invention on the performance level and they revealed a mixed conclusion at the end as guided by both the adoption level plus the operational environment. The economy of Jordan has a competitive environment of execution of innovation kinds in the financial sector. Before the eventual collection of data, a pilot study was carried out to check for the questionnaire validity and reliability and the analysis was done with the use of SPSS software. Out of 254 questionnaires, 254 were correctly filled and returned back for the quantitative survey of analysis, showing the 98% response rate. The finding of this study shows that the bank inventions affect the lending institutions in a positive manner. The responses rate was denoted in both the %age form and mean valuation.

Majority of the employees argued that the internet technology has a great significance in the banking sector in order to carry out the effective work. The panic of loosing of a job is rocking the boat in the innovation, resulting into the creation of serious problems.

Conclusion

The empirical analysis of this current study supports the conclusion by saying that the bank inventions are certainly impacting the financial situation of the lending institutions of Jordan. The latest improvements in technology and innovations must be implemented in order to enhance the productive capability and its earnings of the commercial banks in the research area. The advantages of the technological advancement might increase the acceptance degree in the financial systems. However, the one-sided acceptance is highly complicated from the perspective of both banks and clients. It is quite worthy that the volatility of the financial system in Jordan is not fully changes due to the innovation nowadays. There are other supplementary indicators of the financial system disequilibrium like the government control, HR and effectiveness in the management aspects.

Recommendations

Following are the main recommendations of this study:-

1) The study recommends that the ICT experts need to allocate their time, resources, and energy to inventions of technology. However, the development of such a new technology needs more expenses for the ICT experts in the shape of salaries. The ICT experts are trying to know about the procedure and methods to offer the innovation solutions to get access to the unbanked information. This is comparable with the facilities of further financial intensity and to enhance financial growth for the economy.

2) The government of Jordan should stress on the R & D expenses, the research scientists, technical experts, and other allied field experts. Besides, the analysis recommends that the government of Jordan should design a proper policy in order to offer the incentives to the technological experts from the advanced countries of the world for the services provision.

3) The financial institutions need to heavily invest in the innovative delivery channels for the purpose to regulate the proper working of the banking sector expenses. The telephonic and electronic banking ways are most adequate in this case as compared with the manual operations, leading towards the enhancement in revenue collection.

4) The financial sector should put more emphasis on the economic factors to fulfill the national demand. Besides, the banking sector should also stress on the technological factors in order to ensure the availability of the newly produced products. Finally, the banking sector needs to provide more knowledge to their employees regarding the products.

Further Research

This empirical attempt has covered the limited banking inventions. On the basis of this analysis, we recommend that further exploration needs on the invention like credit guarantees, securitization and agency banking and their financial performance implication to the lending institutions of Jordan. Further research can be done towards exploring whether implementing financial inventions supported Jordanians effort to attain financial deepening.

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APPENDICSS I

Dear (Sir/Madam)

COLLECTION OF RESEARCH DATA:

My name is Ahmad Alabdalrahman and a Masters student in Banking and Finance at near yeast University . Currently, I am carrying out a research on the “The impact of banking innovation on financial performance: A field study in Jordanian commercial bank ”. I am in the process of gathering relevant data for this study. You have been identified as one of the respondents in this study and kindly request for your assistance towards making this study a success.

I therefore kindly request you to take some time to respond to the attached questionnaire. I wish to assure you that your responses will be treated with confidentiality and will be used solely for the purpose of this study.

SECTION A: DEMOGRAPHIC INFORMATION

1- Tick your gender:
Male ( ) Female ( )

2- State your age (in years)

less than 25 ( ) 26-35 ( )

36-45 ( ) 46-55( ) above 55( )

3- To which department do you belong at your organization?

Executive	Human Resources
Finance	Liabilities
ICT	Risk & Compliance
Audit	Others
Credit	

4- How long you have been in the banking sector?

1-5 years ( ) 5-10yeras ( ) above ( )

SECTION B: EFFECTS OF BANK INNOVATIONS ON BANK PROFITABILITY

No	Statement	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
		1	2	3	4	5
Automated Teller Machines (ATMs)						
5.	The income generated from the ATM machines positively affect the per annum profit of the banks.					
6.	The maintenance charges of the ATM machines are comparatively low, leading to ensure higher profitability to the banks for a long-period of time.					
7	Net changes in investment in ATMs lead to motivate the profit of the bank.					
Debit & Credit Cards						
8.	The income generated from debit and credit cards would be positive signal to the per annum profitability of the bank.					
9.	Do you think that maintenance charges of debit/credit cards are low which positive signal for the profitability of the bank is?					
10.	The more the investment in debit/credit cards, the more will be the profit gains to the bank.					
Internet Banking						

11.	The more income from the internet banking, the more will be the annual profit to the bank.					
12.	The lower the maintenance charges of the internet banking, the higher the level of profit of the bank over a long-period of time.					
13.	The relationship between investment in the internet banking and bank profitability is positive, what do you think?					

SECTION C: EFFECT OF BANK INNOVATIONS ON RETURN ON ASSETS

No	**Statements**	**Strongly disagree**	**Disagree**	**not disagree**	**Agree**	**Strongly agree**
		1	**2**	**3**	**4**	**5**
Automated Teller Machines (ATM)						
14.	The better return on assets is only possible due to the lower operational cost of the ATM machine.					
15.	The investment in ATM machines can be recovered within 3 years of the initial period.					
16.	The relationship between ATM generated income and per annum bank income is positive, what do agree?					
Debit & Credit Cards						
17.	The better return on assets of the bank is the reflection of the lower operational cost of the ATM.					
18.	The recovery period of investment in debit/credit card is probably less than 3 years.					

19.	The debit/credit card has a positive influence on the income margin of a commercial bank.					
Internet Banking						

SECTION D: EFFECT OF BANK INNOVATIONS ON TOTAL INCOME

No	**Statement**	**Strongly disagreed**	**Disagree**	**Neutral**	**Agree**	**Strongly agree**
		1	**2**	**3**	**4**	**5**
ATMs						
23.	The ATM machines have the capability to hike the commission-based earnings.					
24.	The ATM machines have the capability to hike the interest-based earnings.					
25.	The ATM can lead to generate the earning of the bank.					
Debit & Credit Cards						
26.	The debit/credit card is having a positive influence on the commission-based earnings.					
27.	The debit/credit card is having a positive influence on the interest-based earning.					
28.	The debit/Debit is having the ability to generate more income for the bank.					

Internet Banking						
29.	The internet banking can lead the banking sector to increase the commission-based earning.					
30.	The internet banking can lead the banking sector to increase the interest-based earning.					
31.	The internet banking has the capability to hike the potential earning of the banking sector.					

SECTION E: CHALLENGES OF IMPLEMENTING INNOVATION DECISIONS

No	Statement	Strongly disagree	Disagree	Neither agree not disagree	Agree	Strongly agree
		1	2	3	4	5
32.	Less knowledge of technological know-how					
33.	Introduction of innovation is a complex activity					
34.	Threat to job availing by the employee					
35.	Feeling of insecurity					
36.	Tight working environment within the bank constituency					

APPENDICES II

Reliability Statistics

Cronbach's Alpha	N of Items
.804	36

Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	less than 25	18	7.1	7.1	7.1
	26-35	44	17.3	17.3	24.4
	36-45	81	31.9	31.9	56.3
	46-55	66	26.0	26.0	82.3
	above 55	45	17.7	17.7	100.0
	Total	254	100.0	100.0	

Department

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Executive	20	7.9	7.9	7.9
	finance	135	53.1	53.1	61.0
	İct	48	18.9	18.9	79.9
	Auditing	25	9.8	9.8	89.8
	credit	26	10.2	10.2	100.0
	Total	254	100.0	100.0	

banking_sector

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1-5 years	37	14.6	14.6	14.6
	5-10 years	42	16.5	16.5	31.1
	above	175	68.9	68.9	100.0
	Total	254	100.0	100.0	

The investment in ATM machines can be recovered within 3 years of the initial period.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly disagree	14	5.5	5.5	5.5
	Disagree	15	5.9	5.9	11.4
	neutral	25	9.8	9.8	21.3
	Agree	88	34.6	34.6	55.9
	strongly agree	112	44.1	44.1	100.0
	Total	254	100.0	100.0	

The ATM machines have the capability to hike the interest-based earnings.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly disagree	15	5.9	5.9	5.9
	Disagree	15	5.9	5.9	11.8
	neutral	26	10.2	10.2	22.0
	Agree	85	33.5	33.5	55.5
	strongly agree	113	44.5	44.5	100.0
	Total	254	100.0	100.0	

The ATM can lead to generate the earning of the bank.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly disagree	15	5.9	5.9	5.9
	Disagree	16	6.3	6.3	12.2
	neutral	26	10.2	10.2	22.4
	Agree	85	33.5	33.5	55.9
	strongly agree	112	44.1	44.1	100.0
	Total	254	100.0	100.0	

Descriptive Statistics

	N	Mean	Std. Deviation
Q5-income generated from the ATM machines positively affect the per annum profit of the banks.	254	3.87	1.179
Q6-The maintenance charges of the ATM machines are comparatively low, leading to ensure higher profitability to the banks for a long-period of time.	254	3.90	1.097
Q7-Net changes in investment in ATMs lead to motivate the profit of the bank.	254	3.96	1.124
Valid N (listwise)	254		

Statistics

		Q8-The income generated from debit and credit cards would be positive signal to the per annum profitability of the bank.	Q9-Do you think that maintenance charges of debit/credit cards are low which positive signal for the profitability of the bank is?	Q10-The more the investment in debit/credit cards, the more will be the profit gains to the bank.
N	Valid	254	254	254
	Missing	0	0	0
Mean		3.75	3.81	4.04
Std. Deviation		1.186	1.223	1.145

Statistics

		Q11-The more income from the internet banking, the more will be the annual profit to the bank.	Q12-The lower the maintenance charges of the internet banking, the higher the level of profit of the bank over a long-period of time.	Q13-The relationship between investment in the internet banking and bank profitability is positive, what do you think?
N	Valid	254	254	254
	Missing	0	0	0
Mean		3.94	3.89	3.95
Std. Deviation		1.137	1.105	1.122

Q11-The more income from the internet banking, the more will be the annual profit to the bank.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly disagree	17	6.7	6.7	6.7
	Disagree	14	5.5	5.5	12.2
	neutral	27	10.6	10.6	22.8
	Agree	104	40.9	40.9	63.8
	strongly agree	92	36.2	36.2	100.0
	Total	254	100.0	100.0	

Q12-The lower the maintenance charges of the internet banking, the higher the level of profit of the bank over a long-period of time.

		Frequency	Percent	Valid Percent	Cumulative Percent

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly disagree	16	6.3	6.3	6.3
	Disagree	15	5.9	5.9	12.2
	neutral	29	11.4	11.4	23.6
	Agree	115	45.3	45.3	68.9
	strongly agree	79	31.1	31.1	100.0
	Total	254	100.0	100.0	

Q13-The relationship between investment in the internet banking and bank profitability is positive, what do you think?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly disagree	16	6.3	6.3	6.3
	Disagree	14	5.5	5.5	11.8
	neutral	28	11.0	11.0	22.8
	Agree	105	41.3	41.3	64.2
	strongly agree	91	35.8	35.8	100.0
	Total	254	100.0	100.0	

Statistics

		Q14-The better return on assets is only possible due to the lower operational cost of the ATM machine.	Q15-The investment in ATM machines can be recovered within 3 years of the initial period.	Q16-The relationship between ATM generated income and per annum bank income is positive, what do agree?
N	Valid	254	254	254

	Missing	0	0	0
Mean		4.05	4.06	3.90
Std. Deviation		1.129	1.128	1.101

Q14-The better return on assets is only possible due to the lower operational cost of the ATM machine.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly disagree	14	5.5	5.5	5.5
	Disagree	15	5.9	5.9	11.4
	neutral	26	10.2	10.2	21.7
	Agree	88	34.6	34.6	56.3
	strongly agree	111	43.7	43.7	100.0
	Total	254	100.0	100.0	

Q15-The investment in ATM machines can be recovered within 3 years of the initial period.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly disagree	14	5.5	5.5	5.5
	Disagree	15	5.9	5.9	11.4
	neutral	25	9.8	9.8	21.3
	Agree	88	34.6	34.6	55.9
	strongly agree	112	44.1	44.1	100.0
	Total	254	100.0	100.0	

Q16-The relationship between ATM generated income and per annum bank income is positive, what do agree?

		Frequency	Percent	Valid Percent	Cumulative Percent

Valid	strongly disagree	16	6.3	6.3	6.3
	Disagree	14	5.5	5.5	11.8
	neutral	29	11.4	11.4	23.2
	Agree	115	45.3	45.3	68.5
	strongly agree	80	31.5	31.5	100.0
	Total	254	100.0	100.0	

Statistics

		Q17-The recovery period of investment in debit/credit card is probably less than 3 years.	Q18-The debit/credit card has a positive influence on the income margin of a commercial bank.	Q19-The debit/credit card has a positive influence on the income margin of a commercial bank.
N	Valid	254	254	254
	Missing	0	0	0
Mean		4.05	3.93	3.94
Std. Deviation		1.129	1.138	1.137

Q17-The recovery period of investment in debit/credit card is probably less than 3 years.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly disagree	14	5.5	5.5	5.5
	Disagree	15	5.9	5.9	11.4
	neutral	26	10.2	10.2	21.7
	Agree	88	34.6	34.6	56.3
	strongly agree	111	43.7	43.7	100.0

	Total	254	100.0	100.0	

Q18-The debit/credit card has a positive influence on the income margin of a commercial bank.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly disagree	17	6.7	6.7	6.7
	Disagree	14	5.5	5.5	12.2
	neutral	29	11.4	11.4	23.6
	Agree	103	40.6	40.6	64.2
	strongly agree	91	35.8	35.8	100.0
	Total	254	100.0	100.0	

Q19-The debit/credit card has a positive influence on the income margin of a commercial bank.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly disagree	17	6.7	6.7	6.7
	Disagree	14	5.5	5.5	12.2
	neutral	28	11.0	11.0	23.2
	Agree	104	40.9	40.9	64.2
	strongly agree	91	35.8	35.8	100.0
	Total	254	100.0	100.0	

Statistics

		Q20-The key advantage of the internet banking is to reduce the operational expenses of a commercial bank.	Q21-The internet banking platform has the ability to recover the initial investment within the course of 3 years.	Q22-The accumulated income from the internet banking has a favorable influence of the bank profitability.
N	Valid	254	254	254
	Missing	0	0	0
Mean		4.03	4.04	3.93
Std. Deviation		1.167	1.148	1.152

Q20-The key advantage of the internet banking is to reduce the operational expenses of a commercial bank.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly disagree	16	6.3	6.3	6.3
	Disagree	16	6.3	6.3	12.6
	neutral	25	9.8	9.8	22.4
	Agree	85	33.5	33.5	55.9
	strongly agree	112	44.1	44.1	100.0
	Total	254	100.0	100.0	

Q21-The internet banking platform has the ability to recover the initial investment within the course of 3 years.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly disagree	15	5.9	5.9	5.9

	Disagree	15	5.9	5.9	11.8
	neutral	27	10.6	10.6	22.4
	Agree	85	33.5	33.5	55.9
	strongly agree	112	44.1	44.1	100.0
	Total	254	100.0	100.0	

Q22-The accumulated income from the internet banking has a favorable influence of the bank profitability.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly disagree	18	7.1	7.1	7.1
	Disagree	14	5.5	5.5	12.6
	neutral	28	11.0	11.0	23.6
	Agree	103	40.6	40.6	64.2
	strongly agree	91	35.8	35.8	100.0
	Total	254	100.0	100.0	

Statistics

		Q23-The ATM machines have the capability to hike the commission-based earnings.	Q24-The ATM machines have the capability to hike the interest-based earnings.	Q25-The ATM can lead to generate the earning of the bank.
N	Valid	254	254	254
	Missing	0	0	0
Mean		4.04	4.05	4.04
Std. Deviation		1.152	1.148	1.154

Q23-The ATM machines have the capability to hike the commission-based earnings.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly disagree	15	5.9	5.9	5.9
	Disagree	16	6.3	6.3	12.2
	neutral	25	9.8	9.8	22.0
	Agree	86	33.9	33.9	55.9
	strongly agree	112	44.1	44.1	100.0
	Total	254	100.0	100.0	

Q24-The ATM machines have the capability to hike the interest-based earnings.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly disagree	15	5.9	5.9	5.9
	Disagree	15	5.9	5.9	11.8
	neutral	26	10.2	10.2	22.0
	Agree	85	33.5	33.5	55.5
	strongly agree	113	44.5	44.5	100.0
	Total	254	100.0	100.0	

Q25-The ATM can lead to generate the earning of the bank.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly disagree	15	5.9	5.9	5.9
	Disagree	16	6.3	6.3	12.2
	neutral	26	10.2	10.2	22.4
	Agree	85	33.5	33.5	55.9
	strongly agree	112	44.1	44.1	100.0
	Total	254	100.0	100.0	

Statistics

		Q26-The debit/credit card is having a positive influence on the commission-based earnings.	Q27-The debit/credit card is having a positive influence on the interest-based earning	Q28-The debit/Debit is having the ability to generate more income for the bank.
N	Valid	254	254	254
	Missing	0	0	0
Mean		3.91	3.97	4.06
Std. Deviation		1.149	1.131	1.127

Q26-The debit/credit card is having a positive influence on the commission-based earnings.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly disagree	18	7.1	7.1	7.1
	Disagree	14	5.5	5.5	12.6
	neutral	29	11.4	11.4	24.0
	Agree	104	40.9	40.9	65.0
	strongly agree	89	35.0	35.0	100.0
	Total	254	100.0	100.0	

Q27-The debit/credit card is having a positive influence on the interest-based earning

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly disagree	16	6.3	6.3	6.3
	Disagree	14	5.5	5.5	11.8

	neutral	28	11.0	11.0	22.8
	Agree	100	39.4	39.4	62.2
	strongly agree	96	37.8	37.8	100.0
	Total	254	100.0	100.0	

Q28-The debit/Debit is having the ability to generate more income for the bank.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly disagree	14	5.5	5.5	5.5
	Disagree	15	5.9	5.9	11.4
	Neutral	25	9.8	9.8	21.3
	Agree	89	35.0	35.0	56.3
	strongly agree	111	43.7	43.7	100.0
	Total	254	100.0	100.0	

Statistics

		Q29-The internet banking can lead the banking sector to increase the commission-based earning.	Q30-The internet banking can lead the banking sector to increase the interest-based earning.	Q31-The internet banking has the capability to hike the potential earning of the banking sector
N	Valid	254	254	254
	Missing	0	0	0
Mean		3.93	3.93	4.04

Std. Deviation	1.136	1.136	1.162

Q29-The internet banking can lead the banking sector to increase the commission-based earning.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly disagree	17	6.7	6.7	6.7
	Disagree	14	5.5	5.5	12.2
	neutral	29	11.4	11.4	23.6
	Agree	104	40.9	40.9	64.6
	strongly agree	90	35.4	35.4	100.0
	Total	254	100.0	100.0	

Q30-The internet banking can lead the banking sector to increase the interest-based earning.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly disagree	17	6.7	6.7	6.7
	Disagree	14	5.5	5.5	12.2
	neutral	29	11.4	11.4	23.6
	Agree	104	40.9	40.9	64.6
	strongly agree	90	35.4	35.4	100.0
	Total	254	100.0	100.0	

Q31-The internet banking has the capability to hike the potential earning of the banking sector

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly disagree	16	6.3	6.3	6.3
	Disagree	15	5.9	5.9	12.2
	neutral	25	9.8	9.8	22.0
	Agree	85	33.5	33.5	55.5

	strongly agree	113	44.5	44.5	100.0
	Total	254	100.0	100.0	

Statistics

		Q32-Less knowledge of technological know-how	Q33-Introduction of innovation is a complex activity	Q34-Threat to job availing by the employee	Q35-Feeling of insecurity	Q36-Tight working environment within the bank constituency
N	Valid	253	254	254	254	254
	Missing	1	0	0	0	0
Mean		3.83	3.89	3.94	3.77	3.80
Std. Deviation		1.195	1.114	1.126	1.185	1.233

Q32-Less knowledge of technological know-how

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly disagree	19	7.5	7.5	7.5
	Disagree	20	7.9	7.9	15.4
	neutral	31	12.2	12.3	27.7
	Agree	98	38.6	38.7	66.4
	strongly agree	85	33.5	33.6	100.0
	Total	253	99.6	100.0	
Missing	System	1	.4		
Total		254	100.0		

Q33-Introduction of innovation is a complex activity

		Frequency	Percent	Valid Percent	Cumulative Percent

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly disagree	17	6.7	6.7	6.7
	Disagree	14	5.5	5.5	12.2
	neutral	28	11.0	11.0	23.2
	Agree	115	45.3	45.3	68.5
	strongly agree	80	31.5	31.5	100.0
	Total	254	100.0	100.0	

Q34-Threat to job availing by the employee

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly disagree	16	6.3	6.3	6.3
	Disagree	15	5.9	5.9	12.2
	neutral	28	11.0	11.0	23.2
	Agree	105	41.3	41.3	64.6
	strongly agree	90	35.4	35.4	100.0
	Total	254	100.0	100.0	

Q35-Feeling of insecurity

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly disagree	19	7.5	7.5	7.5
	Disagree	19	7.5	7.5	15.0
	neutral	43	16.9	16.9	31.9
	Agree	94	37.0	37.0	68.9
	strongly agree	79	31.1	31.1	100.0
	Total	254	100.0	100.0	

Q36-Tight working environment within the bank constituency

		Frequency	Percent	Valid Percent	Cumulative Percent

Valid	strongly disagree	23	9.1	9.1	9.1
	Disagree	18	7.1	7.1	16.1
	neutral	31	12.2	12.2	28.3
	Agree	97	38.2	38.2	66.5
	strongly agree	85	33.5	33.5	100.0
	Total	254	100.0	100.0	

THE IMPACT OF BANKING INNOVATION ON FINANICAL PERFORMANCE: A FIELD STUDY IN JORDINAIN COMMERCIAL BANK

Ahmad Fawaz Alabedalrahman

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