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The American University in Cairo School of Global Affairs and Public Policy Public Policy and Administration Department

Innovation in the Local Administration System in Egypt

A Thesis Submitted to the Public Policy and Administration Department in Partial Fulfillment of the Requirements of the Degree of Master of Arts

By Mustafa Adel Abdulrahman

Fall 2016

Acknowledgments

First and foremost, words fail to express my deep thanks and deep gratitude to the Almighty Allah for being with me all the time, as well as for His blessings and for giving me the strength and capabilities necessary to complete my studies.

My gratitude and respect goes to my supervisor Dr. Hamid Ali Eltgani for his supervision and guidance, which he offered me in accomplishing this work. I am also indebted to the reader Dr. Khalid Abdelhalim who gave me his precious time and effort whenever needed; there is nothing I can say but simply - thank you indeed. In addition, I would like to thank the reader Dr. Ghada Barsoum for her kindness and dedication. She taught me several important lessons in life. Words of thanks should also go to the faculty member Dr. Laila El-Baradaee for her continuous support and assistance. I would also like to extend my thanks to the previous reader and faculty member Dr. Khaled Amen for his guidance.

Thanks and appreciation are also due to some special friends and colleagues, especially Dr. Mohammed Mustafa and his family, Dr. Hazim Hamed, Andreea Marusceac, Valerie Carpenter, Nahla Mahmoud, Sawsan Mardini, Yasmine Ibrahim, Hend Al Helaly, Enas Abdel Azim, Sally Barsoum and Mariez Wasfi. I would also like to thank here the Tatweer and Nadmi Auchi Fellowship Programs.

On this occasion I could never forget to express my gratefulness and appreciation to the special members of my big family. I am deeply grateful to my dear late father and my beloved mother, the first woman teacher in the county at that time, for all their continuous sacrifices and prayers for me. I am indebted to them for life. I would like also to thank my brother, sister, mother-in-law, father-in-law, brothers-in-law and sisters-in-law for their continual encouragement, support, and the magnanimous stance they have taken.

Last but not least, my study would never have seen the light and been accomplished without the love, patience, and support of my soul mate and beloved wife Huda Alaa, who had to endure hardships for my sake.

Abstract

The Egyptian public sector always described as a highly centralized system, with an inflexible hierarchical structure and high levels of formal relationships channeling its communications through public enterprises and institutions. Even establishing the local administration system as an approach of decentralization, it still highly connected and governed by the central government. On the other hand, innovation in public sector studies and application in last two decades gained much interest from scholars, practitioners and even leaders and policy makers as an approach to enhance public sector efficiency and effectiveness. Accordingly, this study aims to explore innovation in the public sector in Egypt, evaluating the extent to which it permits innovation. In addition, it aims to analyze experiences of innovation, if any, within the public sector in Egypt, discussing them in relation to the latest advances in academic understandings of innovation. The local administration system has been selected as a model to be examined in this study as it can represents the public sector in Egypt on a larger scale, as it is a core part of this sector. The study evaluates the laws, structures and dynamics that constitute the framework of the local administration system. Furthermore, it explores the main constraints on innovation within the system. To develop and support the argument, which emerges from the literature review, this study employs qualitative research methods, namely interviews, as a method to collect data from various informants working in and/or with the public sector. The study draws the broad conclusion that the current laws, structures and dynamics of the public sector in Egypt discourage innovation. However, the study also uncovers evidence of innovation in the public sector, of a type in harmony with recent advances in contemporary academic understandings of innovation. In addition, the study found the existence of different types of innovative applications like, product, service and process occurred more frequently than other categories of innovation, such as organizational and strategic innovation. It also found that leadership plays an effective role within the public administration system in Egypt. These examples of innovation flourished only when they were applied in parallel with, not within, the current laws, structures and dynamics of the local administration system in the public sector. Nevertheless, poorly skilled staff with low wages, the absence of a competitive spirit, a lack of positive culture and bad working conditions, along with rigid centrality and apathy all constitute real barriers to the flourishing and dissemination of innovation within Egypt's public sector.

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1. Chapter one: Introduction and Conceptual

Framework

1.1 Introduction

In its journey through modern history, public administration system in developed countries has witnessed many reforms; some of which were minor, others of which were major, whilst a few were radical. From the nineteenth century onwards, Max Weber has been considered one of the main figures who contributed greatly in founding and establishing the traditional public administration system, which was built with many characteristics, mainly bureaucracy and hierarchy (Denhardt & Denhardt, 2009).

During the twentieth century, the public administration system, influenced by many theories, underwent important changes. These included Taylor's invention-scientific management principles, and theories of organizational behavior from the Human Relations Schools as founded by Elton Mayo. In addition, during the early 1980s and with the emergence of neoliberalism as an ideology in social and political life, the public administration system experienced a radical change. Most governments in developed countries transformed its usual administration system into the new public management system (NPM). The NPM led to many big changes in the public sector, such as the downsizing of government, minimizing its scope from being an administrator of everything into rather being a manager and contractor, thus reducing its

budget. The marketing of government and privatization became the norm (Denhardt & Denhardt, 2009).

Although shifting into the NPM system was marked as a radical and noticeable advancement in the public sector in developed countries, the changes were subject to growing criticism regarding the devaluing of citizens, wherein they became increasingly treated as customers. Such criticism paved the way to reinvent the new public governance (NPG) system, which is distinguished by a citizen-centered orientation, considering citizens to be co-producers, thus sharing the responsibility of the decision-making process through collaborative networks (Wiesel and Modell, 2014).

All of these minor, major and radical reforms mentioned above were innovations, or creative ideas, yet they occurred randomly and in a discrete manner. Therefore, scholars and practitioners were urged to think how they could convert these inventions into innovations, how they could be defined as new ideas to be implemented successfully in a continuous process, and how to make the innovation process a core concept in any public sector organization (Bessant, 2003).

Innovation is therefore a new paradigm in the public sector. Although lacking resources (Bloch & Bugge, 2013; Bommert, 2010), innovation has received increasing interest over the last few decades among scholars, researchers and practitioners (Borins 2001b). More recently, it has become part of the top agenda of many states' public agencies (Klas et al, 2015). Although the public sector has undergone a great deal of innovation throughout its history, as mentioned earlier, it is still far behind the private

sector (Albury, 2005). The main reason why the private sector is described as innovative relates to its intrinsic value, which is profit. The highly competitive environment of the private sector forces it to be as innovative as possible in order to survive and gain profits (Arfeen & Khan, 2009). On the other hand, the monopoly conditions (Kattel, 2015), lack of incentives (Arundel & Huber, 2013) and avoidance of failure by elected officials (Bloch & Bugge, 2013), all of which characterize the public sector, lead to a dampening of the internal drivers of innovation.

On Egypt's level, there is a need to have a look on the main characteristics and structures as well as the efforts exerted to reform its public sector. Egypt became a presidential state after the 1952 revolution, in which the president became the dominant power and assumed the highest executive position in the state. Since then, and as a consequence of the socialist ideology that shaped the President Nasser era from 1952 – 1970, the main components, factors and drivers of the system in Egypt - including practices, institutions and laws - have tended to work in favor of the president. The president has the authority to propose legislation if parliament is not in session and also has the right to issue decrees, which have the backing of the force of the law, and can be ratified later by parliament. Many public agencies are affiliated to the President's office, including the Central Agency for Public Mobilization and Statistics (CAPMAS), the Central Auditing Agency (CAA), and the National Specialized Councils. In addition, the President has to draw up the state's general policies. Such a position and stature is a common pattern found in many developing countries (Ayubi, 1991).

The prime minister - who is appointed by the president - along with his cabinet, collectively assume the responsibilities of proposing, supervising and implementing the general policies of the government in accordance with the general guidance and policies of the Presidency. This includes drafting the state budget and laws, which are then approved by parliament. They also oversee, organize and monitor so as to ensure the functioning of state activities and public institutions. They regulate the administrative system, issuing decisions and following up their implementation. They preserve the state's interest, maintain its security, and protect the civil rights of individuals and society at large. The Egyptian public sector can be described as a highly centralized system, with an inflexible hierarchical structure and high levels of formal relationships channeling its communications through public enterprises and institutions (Sayed, 2004).

Egypt's administration system is composed of two levels, the central and local levels. The central level consists of ministries, central agencies and public enterprises. The local level consists of governorates, which in turn are classified into two types of hierarchies, those with a complex structure and those with a simple structure. The simple structure governorates are composed of three levels: governorates, city and district levels. The complex structure governorates consist of four levels: governorate, markaz, city/village and district levels. The local administration system is currently governed and ruled by law 43 issued in 1979, which was based on the previous 1971 constitution (Ayubi 1991).

Since the Republic of Egypt was established after the 1952 revolution, many initiatives have been launched to reform the Egyptian public administration system. The first attempt was made during the 1950s when the government depended on foreign consultants to improve the civil service. However, as a result of the absence of a comprehensive framework, these efforts could not achieve their desired outcomes (Aaref, 2015). Another attempt was made during the 1960s when the government launched the five year plan for the period (1959/1960 – 1964/1965) in which the reforms focused on enhancing prominent positions as well as improving tools used for assessment and supervision. Furthermore, the government received Gulik and Paulic's report to guide the administrative system. The overall circumstances were shaped by the war with Israel and the intervention in Yemen, which led to these reforms being discontinued (ibid).

During the 1970s, a comprehensive plan was made to reform the administration system covered the following pillars: leadership development, personnel, organization, and developing laws and regulation. The endeavor failed because of the non-compliance of the proposed plan with the social and economic national plan (ibid). Despite the 1980s bearing witness to two five-year plans; the main attribute that characterized the administrative reform efforts in this period was the absence of a comprehensive vision. However, there were some efforts made to enhance services, to simplify procedures, to introduce a new system for promotion to higher positions, to modify job descriptions and reward systems.

In addition, the Egyptian government set up an advanced information system in 1985 called the Information and Decision Support Center (IDSC). The center was affiliated to the cabinet in order to offer technical expertise and share its information with the government (ibid). The efforts of administrative reform continued and were included within the two five-year plans launched during the 1990s (Ahmed, 2016). The administrative reforms covered many areas within the system, and were aimed at enhancing the transparency of recruiting policy within the public sector, at simplifying the procedures and routines of the public sector, at facilitating rules and processes so as to attract foreign investment and at offering a special kind of new service called "citizen kiosks" distributed in different places to serve citizens (ibid). In addition, a new system with specific criteria presented for appointing leaders in top posts and proposing a scheme of early retirement was implemented so as to reduce government expenditure (ibid).

During the first decade of the twenty-first century, there was a remarkable transition towards the adoption of the e-government system. The Egyptian government signed an agreement with the UNDP and launched the "Administrative Reform in the Mediterranean Region" initiative in order to enhance their technological capacity. These efforts enabled the government to provide fifty different types of on-line services on its portal as well as five hundreds kiosks (ibid).

Following the January 25th revolution, the pressures on government to reform its public sector and improve its services have increased noticeably. As a result, many plans were developed to overcome the challenges, meet citizen needs and compete

globally. The top-level strategy was the *Sustainable Development Strategy: Egypt Vision 2030* launched in 2015. The strategy prioritized the state's main objectives in which it wished to be among the top thirty countries in several aspects, including the economy, fighting corruption, human development, and global competitiveness (sdsegypt2030, 2015). Since 2014, the Ministry of Planning, Follow-up and Administrative Development has also proposed multiple initiatives targeting the administration system such as ("The Administrative Reform Strategy", "The Government Civil Service Development Program", "The Institutional Development Program", "The National Linking Database Program", and "The State Resources Management System Development Program"). Each of these programs works towards the objectives of enhancing public sector capacity, simplifying processes and procedures and improving service delivery (Ahmed, 2016).

All of these initiatives have been launched recently, placing an additional burden on the government to address innovation in its strategies and programs so as to achieve its objectives. Hence, this research will take a leading step towards studying the environment of the public administration

Accordingly, the purpose of this research is to make an additional contribution to previous efforts made which aimed to enhance and promote innovation in the Egyptian public sector. This study aims to explore the public sector in Egypt in order to find out the extent to which it permits innovation. In addition, it aims to search for experiences of innovation, if any, within the public sector in Egypt, before discussing them in relation to recent advances in contemporary understandings of innovation.

The local administration system has been selected as a model for the study for two main reasons. First, it is an exemplar of the public sector in Egypt more widely given that it is considered a core part of it. Second, this system comes into regular, direct contact with citizens for whom innovation has become a necessity and highly desirable. This study examines the laws, structures and dynamics that constitute the framework of the local administration system. In addition, it explores the main constraints on innovation within the system. Informants working inside and/or alongside the public sector have been interviewed, in order to examine innovation in the public sector on the local level. On the other hand, as this is the first time that innovation has been studied in the public sector in Egypt, it was preferable to start with informants and/or experts so as to be familiar with the factors that affect innovation positively or negatively.

The recent of this chapter will illustrates the conceptual framework of the study that determines the hypotheses and research questions, as well as the study's methodology. The second chapter introduces the academic literature on innovation, which has concentrated on previous studies on innovation. It gives further illustrations of the concept of innovation, of types of innovations and of what may be considered to be an innovation. The third chapter gives an overview of and background information on the public sector in Egypt on both the central and local levels, with more detail on the latter. The fourth chapter analyzes the data obtained from the empirical research, the experiences of innovation, their categorization and barriers to innovation in the public sector in Egypt. The final chapter offers conclusions and recommendations resulting from the study in addition to suggestions for future work on this topic.

1.2 Conceptual Framework

This study aims to enhance innovation in Egypt's public sector, aligning it with international efforts, which seek to transform the public sector from the current situation in which it is innovative randomly and in a discrete manner to a situation in which innovation occurs as a continuous process. It therefore consists of an effort to institutionalize innovation in public sector organizations. Hence, to conduct such a study, innovation must be defined; the criteria and conditions will be determined to offer the tools, which can measure innovation. In addition, there is a need to clarify the importance of studying innovation in the public sector in Egypt.

1.3 The Meaning of Innovation for the Study

As noted in the literature review, many scholars have given definitions of innovation (e.g. Moore, 2005; Moore & Hartley, 2008; Mulgan & Albury, 2003; Walker 2007). Whilst they differ among each other as to their understandings of innovation, they agree on some common elements present if any given change, reform, or inventive idea is to be considered innovative. Accordingly, this study will combine those elements so as to define innovation as "any new idea that could be implemented and which has an impact on the organization who adopts it". The 'new idea' concept does not necessarily entail novelty; rather it should be new to the organization that adopts it. Moreover, the innovative idea should comply with two conditions, which are 'works sustainably', and has a 'valuable impact' on the organization. One subsection of the organization should not decide whether the 'impact' is valuable or not; instead key stakeholders of the organization should agree on this. Despite the existence of

differences among scholars between those who consider incremental and/or radical change to be innovation, in this study any kind of change can be accepted as an innovation if it fulfills the condition of having a valuable impact.

This study's model draws on the categorization of innovation adopted by Hartley (2005) as shown in (fig 1.1) because it is the most suitable categorizations for this study.



(FIG 1.1) THE STUDY'S MODEL Based on Hartley (2005)

The categories are as follows:

- Product innovation—new products.
- Service innovation—new ways in which services are provided to users.
- Process innovation—new ways in which organizational processes are designed.
- Position innovation—new contexts or users.
- Strategic innovation—new goals or purposes of the organization.
- Governance innovation—new forms of citizen engagement, and democratic institutions.
- Rhetorical innovation—new language and new concepts.

More detailed clarifications of these subcategories of innovation will now be given below:

1.3.1 Product Innovation

This refers to any product that is new to the organization (Hartley, 2005). In other words, providing an organization with a new instrument or device can be considered a form of innovation. Innovations with a technological aspect are vital so as to improve the effectiveness and efficiency of the public sector (Micheli et al, 2012).

1.3.2 Service Innovation

Hartley (2005) defined service innovation as referring to new ways of delivering services to citizens. Walker (2007) combined product innovation with service innovation and classified them as part of one category: service innovation. He focused his definition on 'what' has to be produced. Whilst Bessant (2003) made a

terminological distinction between product and service innovation, at the same time he classified them under the same category. He defined service/product innovation as a change in what was to be produced.

1.3.3 Process Innovation

This can be defined as designing the processes, which take place in an organization in new ways (Hartley, 2005). Walker (2007) defined process innovation as a change in relationships within an organization. These relationships, in his point of view, may affect various wide aspects within an organization such as structures, procedures, rules, and communications. Furthermore, the change may also affect the relationship an organization has with its outside environment. Walker's definition of process innovation was concentrated on 'how' services are delivered. In contrast, Bassant (2003) considered process innovation to refer to changes in how the services are created and the changes in how they are delivered.

1.3.4 Position Innovation

Hartley (2005) defined position innovation as "new contexts or users". Position innovation does not affect the attributes of the product or service by itself; rather it affects its identity, namely the service/product's meaning in the eyes of the targeted audience who receive the service/product. For example, the UK Labour Party innovatively repositioned itself as "New Labour" prior to the general election held in the UK in 1997 (Francis & Bessant, 2005).

1.3.5 Governance Innovation

Governance innovation is derived from understandings of the New Public Governance system (NPG), which demands a greater citizen orientation, with an increased citizen role and level of participation in the public sector, with the sharing of responsibilities. Hartley (2005) therefore defined governance innovation as "new forms of citizen engagement, and democratic institutions".

1.3.6 Strategic Innovation

Hartley (2005) embodied the idea of strategic innovation on strategic planning principles present in public administration. Hence, she defined it as the "new goals or purposes of the organization".

1.3.7 Rhetorical Innovation

This category is the most radical kind of innovation that may occur throughout the whole of the administrative system, not just within an organization. The definition of rhetorical innovation as described by Hartley (2005) is "new language and new concepts". The example of the tax policy used by London authorities to reduce traffic congestion is a good example illustrating rhetorical innovation.

1.4 Contributions made towards an Innovative Public Sector

in Egypt

Governments are always under pressure and direct criticism mainly by citizens. There are constant demands to increase the effectiveness and efficiency of the government's performance. In addition, societies have became more sophisticated and diversified which has led to an increase in demands made on the public sector to cope with such changes in attitudes and trends. Furthermore, deep-seated problems from which the public sector suffers have increased the burden on government to find solutions and make reforms so as to satisfy citizens. Innovation is one of the indispensable advances made in recent decades relevant for the public sector all over the world.

Developed countries and many developing countries are investing tangible efforts in enhancing their public sectors and making them as innovative as possible. As a developing country, Egypt is in vital need of enhancing its public sector innovatively, particularly following the 25th of January revolution. Despite the existence of a spirit and plans for rehabilitating the public sector significantly - even by launching a special championship in August 2015 dedicated to forming innovative ideas in the public sector - scholarly research on exploring and examining innovation within the Egyptian public sector is absent. Furthermore, enhancing innovation within the public sector and taking all suitable measures to make it innovative has become a necessity. Hence, conducting such a study at present is inevitable.

1.5 Hypothesis & Research Questions

This study aims to explore innovation in the local administration system in Egypt. It will examine and evaluate all the conditions, norms and practices of the Egyptian public sector on the local level, and whether they support innovation or not. The empirical research will test the following hypothesis:

> "The current local administration system in Egypt, within central system, does not encourage innovation."

The main research question will be:

> "Do the laws, structure and dynamics of the current local administration system permit innovation?"

The main research question will be explored alongside three specific research questions, which are:

- **1.** Do understandings and practices of innovation exist within the local administration system in Egypt?
- **2.** Does the internal environment of the local administration system encourage or discourage innovation?
- **3.** What are the barriers to innovation within the local administration system in Egypt?

1.6 Methodology

This research aims to explore the existing situation regarding innovation in the Egyptian public sector. A qualitative study is therefore the best approach that can be taken in order to uncover in detail the real situation within the public sector.

Furthermore, it is an appropriate choice if one wishes to understand the internal notions, norms and traditions affecting the conditions and an environment suited to innovation.

1.6.1 Research Strategy and Data Collection Method

For the purposes of conducting small-scale research with real data, Interviews with face-to-face interaction have been used for collecting the primary data. It is relatively inexpensive and an efficient means of data collection. This is the most relevant method for obtaining in-depth information. Besides, it is considered to be a good tool for validating data, which enables the researcher to make additional checks and probes for greater clarification and correction during the interview (Denscombe, 2014).

1.6.2 Sampling Technique

As the study takes a qualitative approach combined with face-to-face interviews, the initial plan was to use a non-probability purposive sampling technique at the design stage. The plan was to interview informants and/or experts working in or alongside the local administration system. Despite of most of the interviewees agreed initially to participate, lately they were unable to find time in their tight and busy agendas. After conducting the first few interviews, the researcher switched to a snowball sampling technique in order to overcome this unexpected difficulty. Further interviews were conducted, which were fortunately very fruitful and beneficial as concerns the research aims. Both the purposive and snowball sampling techniques are appropriate for qualitative exploratory studies (Berg, 2009).

1.6.3 Research Interviews

The interview period in which the research was conducted took place from March 3rd to March 22nd in 2016. The interviews were semi-structured so as to leave some space for the researcher to make further probes, if needed, for clarification. The interviewees had positive attitudes and were very cooperative.

1.6.4 Ethical Considerations

All required procedures were followed in order to obtain Institutional Review Board (IRB) approval prior to the collection of any data. All considerations have been taken so as not to expose the interviewees to any kind of harm. A consent form in Arabic was presented to all interviewees and their signatures were obtained. The interviewees informed by the researcher in both writing and verbally about the purpose of the research, the voluntary base of participation and right to withdrawal at any time. The interviewees informed that the responses would only benefit the study itself, in line with the study's purpose. Permissions to record the interviews were obtained and their name to be kept anonymous.

1.6.5 Study Limitations

Life always consists of a tradeoff and perfection is beyond our grasp. The first limitation experienced was the shortcoming between the planned and actual of interviewees, which affected the ability to conduct a more targeted in-depth investigations. Nevertheless, the interviews conducted evidenced the most relevant and genuine experiences of innovation in the Egyptian public sector, which therefore compensated to some degree for this limitation. The second limitation was the lack of

an academic literature on innovation concepts, understandings and applications in the public sector in Egypt, which led to an absence of referenced criteria for comparison. However, such a limitation was partially compensated for by investing significant efforts in reading the international literature on this topic.

2. Chapter Two: Literature Review

This chapter reviews the literature on innovation, concentrating on understanding innovation in detail, its definitions, importance, classifications, scale, as well as barriers to innovation.

2.1 Innovation

One of the early scholars who mentioned innovation in the context of the public sector was (Schumpeter, 1939) with his famous theory of "Business Cycles" and evolutionary change, in mentioning how "the theory of evolutionary change adapted to the economic sphere, of a much larger theory which applies to change in all spheres of social life, science and art included." During the period from 1960 – 1990, whilst much effort was made to describe and theorize innovation in the private sector, some scholars endeavored to conceptualize innovation in both the public and private sector in general, influenced both by the norms of scientific management principles as invented by Taylor and the ideal model of bureaucracy as invented by Weber that was considered appropriate for the private and public sectors alongside one another (Kattel, 2015).

Arundel & Huber (2013) found that Roessner conducted the first documented explicit study on public sector innovation in 1977. Despite the scarcity of research on public sector innovation, they noticed that case studies overshadowed almost all-academic research until the early 2000s. In addition, they identified just eighteen research studies, which made use of fifteen wide-ranging sources of data and surveys.

Gow (2014) also demonstrated the dearth of public sector innovation publications. He found that it constituted just 1.4% of all publications among 316 million references in a Google search conducted in 2013. However, when examining the literature so as to review what academics and practitioners have published on innovation, one can find that there is a wide spectrum of views and perceptions even regarding major concepts of innovation.

The literature therefore contains a diverse spectrum of views among scholars concerning many issues, including the definition of innovation, its boundaries, types of innovation, the scale of innovation, and the classification of innovation. These topics will now be introduced in the following sections.

2.1.1 Defining Innovation

Some researchers have studied innovation without defining how they use the term innovation in their studies. They rather dealt with innovation as a concept with which many people were familiar. This was especially the case when they discussed certain subjects relating to innovation such as the diffusion of innovation or open innovation. They focused on defining, explaining and analyzing the innovative ideas without describing the concept of innovation itself. Examples include Bowden (2005), Korteland & Bekkers (2008) and Ferlie et al., (2005).

In contrast, other researchers gave their own definitions of innovation (see Amdam, 2014; Jacobsen & Andersen, 2014; Moore & Hartley, 2008; Mulgan and Albury, 2003; Walker, 2007; Wegener & Tanggaard, 2013). These authors gave a clear

description of what constitutes innovation in their work as the following examples demonstrate:

Mulgan and Albury (2003) defined innovation as "new ideas that work". They accompanied their definition with an additional, more accurate illustration in stating: "successful innovation is the creation and implementation of new processes, products, services and methods of delivery which result in significant improvements in outcomes, efficiency, effectiveness or quality".

However, Walker (2007) defined innovation as "a process through which new ideas, objects, and practices are created, developed or reinvented, and which are new for the unit of adoption." He argued that "innovation has to be more than just an idea, and implementation has to occur". Furthermore, Moore and Hartley (2008) defined innovation as "new ideas and practices brought into implementation". Therefore, innovation is considered to be different from invention. In addition, they mentioned that innovation differs from continuous improvements or other minor changes, which entails determining the scale of innovation so that it refers to something noticeable.

Obviously, scholars diverge among themselves as concerns the definition of innovation, whilst at the same time they all agree on certain criteria that should be present in any innovative idea: namely, it should be "new" and it should be "implemented".

2.1.2 The Importance of Innovation for Public Sector

Many scholars and researchers have asserted the importance of innovation to both the private and public sector. In so doing, they have differentiated between the motivations influencing innovation in the private sector and how they differ from those in the public sector. On the one hand, scholars have referred to the competitive environment and the necessity to survive present in private sector organizations as an essential reason driving innovation in the private sector. On the other hand, as innovation in the public sector is different in context and nature, there is a need to identify a different set of values to clarify and magnify its importance. Here are some remarkable points of view that support the relevance of innovation to the public sector.

The idea of 'one size fits all', which spread throughout twentieth century, has now become obsolete and unsuitable for a wide range of demands and expectations present across many citizens and populations. Adopting innovation, as a core process in the public sector, will therefore make the sector more in harmony with such renewed and diversified community needs (Albury, 2005; Daniela, 2015; Klas et al, 2015; Moor & Hartley, 2008).

In order to make efficient use of resources and technologies, to find new solutions for old problems and discover different ways of meeting citizens' needs, successful innovation is the essential means that should be adopted by public services and effective governments. Unfortunately, most public sector organizations deal with innovation as something voluntary or as an added luxury and even an additional burden

rather than seeing it as a core activity (Arfeen & Khan, 2009; Kamarck, 2004; Klas et al, 2015).

Innovation in the public sector will contribute effectively in absorbing the amount of costs in the sector as compared with the rest of the economy. Furthermore, it will contribute to alleviating the pressures placed on hardworking staff when faced with a situation in which costs are being cut. Without innovation, the staff will have to deal with an additional burden when merging the increased levels of cost (Kamarck, 2004; Mulgan & Albury, 2003).

As mentioned earlier, generating a profit is the intrinsic value that motivates innovation in the private sector. On the other hand, the values that motivate the public sector to be innovative are different in nature. However, some values are to some extent difficult to measure because of the difficulty in quantifying the outcomes of services such as the level of service quality and the trust levels present between users and providers of services. As a result, innovation has become a necessity so as to tackle and overcome such problems (Daniela, 2015; Klas et al, 2015; Mulgan & Albury, 2003).

Despite the existence of certain challenges, which make it more difficult for the public sector to be innovative in comparison with the private sector, the history of the public sector has borne witness to good examples of innovation. These examples have had a positive impact on the public sector, thus emphasizing the importance of innovation (Borins, 2001a; Kamarck, 2004).

In spite of the fact that many public services have shown noticeable improvements in certain areas, such as increasing the percentage attainment levels in education, decreasing the crime level and enhancing employment rates, other public services continue to suffer from degradation and are far behind acceptable levels. These fields include, but are not limited to, increases in poverty, wide disparities in living standards, high levels of violence accompanied by drug addiction and/or usage, etc. In these fields, innovation is important in playing an outstanding role in improving policies and practices so as to overcome deep-seated challenges (Kamarck, 2004; Mulgan & Albury, 2003).

Thanks to the importance of innovation to the private sector, the study of this concept has been developed substantially over the last four decades in both theoretical and empirical directions. The question is rather how to transfer these insights to the public sector so they may be understood and applied, alongside a consideration of which approach is appropriate to take when transferring these understandings (Arfeen & Khan, 2009; Mulgan & Albury, 2003).

In sum, there are many significant factors, which support the importance of innovation to the public sector, regardless of depictions, which stereotype the public sector as a rigid sector reluctant to change.

2.1.3 Criteria and the Scale of Innovation

Can any change to an organization that occurs be considered an innovation? Scholars, researchers and practitioners in the public sector are constantly raising such a question. However, their answers demonstrate the existence of a wide diversity of perceptions among each other about regarding what may be considered an innovation.

Some researchers have argued that changes cannot be described as innovations unless they have a radical impact on the organizations' structures, tasks or goals. Lynn (1997) illustrated such an issue clearly through an example when he said: "innovation must not simply be another name for change, or for improvement, or even for doing something new lest almost anything qualifies as innovation. Innovation is properly defined as an original, disruptive, and fundamental transformation of an organization's core tasks. Innovation changes deep structures and changes them permanently".

Other scholars have put forward different arguments about what may be considered to be an innovation. They have referred to the accumulative gradual and incremental changes in any organization which can be considered to be innovations as well as radical changes, as discussed by Bessant (2003). Hence, they have included a wide spectrum of changes in their definition of innovation, from small-scale to large-scale changes.

Whilst the first group applied restrictive conditions in recognizing innovation, eliminating any other kinds of changes and rather including just radical ones, the second group included a wide range of changes in their definition of innovation, without obvious limits or boundaries. In order to distinguish between changes and innovation, a third group of scholars suggested a middle ground, which eliminates small-scale and continuous improvements that may occur normally within any organization from being

considered to be innovations. Moreover, they relaxed the high-level conditions that constituted the concept of innovation for some: "Not all organizational changes qualify as innovations. Some are simply too small, obvious or idiosyncratic to warrant much analytical attention. Those changes worth recognizing as innovation should be globally (or at least locally) new to the organization, large enough, general enough and durable enough to appreciably affect the operations or character of the organization" (Moore et al, 1997; Brown, 2015).

Furthermore, Greenhalgh et al (2004) indicated that any new, discontinuous improvements should not be recognized as innovations through a simple dependence on a singular opinion. Instead, 'new' innovations have to be recognized by key stakeholders in order to be accepted.

In a different vein, Mulgan and Albury (2003) classified innovations into three varieties, which they called incremental, radical and systematic innovations. Incremental innovations are those innovations that consist of minor changes to existing processes or services. Radical innovations are those innovations, which affect the structure of an organization itself, or produce a completely new service or product. Systematic innovations are those that require fundamental changes in organizational, social and cultural arrangements.

As noticed, there were differences in opinion among scholars over what may be considered an innovation. However, they converged in offering certain guidelines that may constitute criteria to recognize innovation and to determine its scale. In the main,

they take the view that an innovation is a change that should have an impact on an organization and that should be recognized by its stakeholders.

2.1.4 Categories of Innovation

Although scholars and researchers have categorized innovation in many different ways, ambiguity is one attribute present in attempts to categorize the concept. Wolf (1994) noticed an absence of consistency among scholars when they dealt with types of innovation. Walker et al (2002) also discussed such a problem about a decade later. This phenomenon continues to appear in the literature due to considerations such as the following: there is an absence of consensus among scholars to follow a standard categorization; the categories have not been well-defined and analyzed, and some researchers still use a categorization that analytically overlaps with others, etc. Three scholars have been chosen in Table 2.1 for an academic comparison with the aim of clarifying the non-uniformity of the categorization. These scholars are: Arfeen & Khan, (2009), Bessant (2003) and Hartley (2005).

It can be deduced from Table 2.1 that although the three scholars converge in opinion regarding service innovation's terminology and to some extent its definition, they deviate widely as regards certain categories (such as paradigm innovation, marketing innovation, organizational innovations, strategic innovation, governance innovation, rhetorical innovation). At the same time, there are fewer deviations in other categories, such as process innovation and position innovations. However, the researchers tended to categorize innovations in order to differentiate between the different kinds of innovations.

	(Arfeen & Khan, 2009)	(Bessant, 2003)	(Hartley, 2005)
Product innovation	-	(Product/Service)	New products
Service innovation	Introducing new kind of services or new after sales activities	Change in what is offered	New ways in which services are provided to users
Process innovation	-	Change in the ways in which product / service is created and delivered.	New ways in which organizational processes are designed
Position Innovation	-	Change in the context in which product / service is applied	New contexts or users
Paradigm innovation	-	Change in the underlying mental models surrounding product / service	-
Marketing innovation	Opening new markets	-	-
Organization innovations	Implementation new methods and practices, new structures and distribution of responsibilities and decision- making; changes in governance and new ways of interacting with external organizations	-	-
Strategic innovation	-	-	New goals or purposes of the organization
Governance innovation	-	-	New forms of citizen engagement, and democratic institutions
Rhetorical innovation	-	-	New language and new concepts

(TABLE 2.1) A COMPARISON AMONG THREE SCHOLARS REGARDING INNOVATION CATEGORIZATION

2.1.5 Constraints on Innovation in Public Sector

The private sector, as mentioned earlier, is unlike the public sector; its constantly competitive environment distinguishes it. In such an environment, it becomes easier to make innovation one of its main core concepts. One question, which frequently arises among scholars and researchers, is the question of why innovation in the public sector lags far behind innovation in the private sector. To fathom an answer to such a dilemma, it is necessary to look for barriers and obstacles that constrain innovation in the public sector.

In fact, there are many factors that play a significant role in dampening innovation and which prevent it from being a continuous process within the public sector. Scholars like Albury (2005); Anggadwita & Dhewanto (2013); Kohli & Mulgan (2010); Torugsa & Arundel (2016) have all referred to some of these barriers and obstacles.

The short-term budget & planning horizon in the public sector potentially impedes attempts to innovate within any public organization. For example, if the required efficiency has to be increased by 2% - 3% each year, who will be willing to think innovatively in order to reach such an unchallenged goal? Whereas, if an organization sets a target of increasing efficiency by 20% - 25% within 5 years, this will motivate all units and all staff members to start thinking innovatively in order to achieve this target.

The administrative pressures and delivery burdens that face most public organizations make the daily working environment harsh and time consuming. Managers and staff members at all levels are always busy fulfilling their day-to-day requirements. Such an environment does not leave any time each day in which one can think innovatively. In addition, it does not leave room for innovative thoughts and ideas to flourish and be recognized, the first step on the road to implementation.

Risk aversion has a huge impact on innovation. Accountability, media and criticism by opponents constitute the three elements that cause the most anxiety to governments' leaders and elected officials. Hence, in order to avoid such pressures, officials always tend to keep the functions and services of public sector organizations at an acceptable level. The consequences of a failure in this domain would be catastrophic for the elected officials. As a result, any innovation faces a great deal of resistance because of the high risk of failure combined within it.

The inappropriate reward and penalty system in the public sector represents an additional barrier to innovation. Government regulations continually impose large penalties on any failure. On the other hand, rewards for successful innovation are low and therefore cannot function as an incentive to workers. At the same time, governments around the world apply certain policies, which aim to enhance innovation in the private sector. These include a corporate tax regime, patents, trademark protection and employee share option schemes.

The poor skills of public sector staff in many domains and especially as regards change and risk management would certainly affect and dampen the innovation process, even if the motivation and opportunity exist.

2.1.6 The Stages of Innovation

Scholars have taken different approaches when identifying the cycle or the stages of innovation. Some scholars have described these stages as linear sequence processes with the possibility of jumping between stages. However, other scholars have described these stages as overlapping and interactive processes. In Table – 2 another comparison illustrates the differences between two scholars' (Kohli & Mulgan 2010; Hartley 2012) approaches, which may be considered an example of deviation.

As is clear from Table 2.2, Kohli & Mulgan (2010) divided the innovation process into six stages. Starting from the first stage, which searches for an innovative idea, it passes through various medium stages before reaching the final stage in which the innovative ideas become a norm within the organization.

Hartley (2012) concisely divides the parts of the innovation process into just three stages: invention, implementation and diffusion. In any case, other scholars have stated that for any given innovative idea, it should first be discovered at the first stage, before passing through many stages of processing before becoming ready to be implemented. After all, managers should pay attention to newly implemented innovative ideas because they may face internal resistance within the organization that may stagnate them and freeze their continuity.

Kohli & Mulgan 2010	Hartley 2012	
1 st stage: Prompts, inspirations, and diagnoses. Searching for solutions for existing problems, overcoming challenges and even surviving from crisis that facing an organization are the main triggers and drivers for generating innovative ideas. Also, new technologies may prompt to generate new ideas.	1 st stage: Invention. Which is the first stage where creative ideas to be searched and invented. It is also the stage where opportunities to be recognized.	
2 nd stage: Proposals and ideas. In this stage, a deep understanding of a problem is necessary in order to present innovative to solve existing problems or meet new demands or goals		
3 rd stage: Prototyping and pilots. This is the stage where the innovative ideas to be tested. Also here where some ideas need to be refined and/or upgraded in order to survive or may die.	2 nd stage: Implementation. Which is the second stage where the creative ideas transformed into solid frame in the real world. It is also the stage where creative ideas may witness modifications in order to make them work properly.	
4 th stage: Sustaining. If the innovative idea succeeded to survive, it need a supportive measures in order to find its way to implementation. These measures are, but not limited to, fundraising, legislation, technical resources, etc.		
5 th stage: Scaling and diffusion. Successful innovative ideas need to be expanded, replicated and even diffused.	3 rd stage: Diffusion. Which is the final stage, where the implemented innovative ideas to be disseminated to other units within the organization or to other organizations.	
6 th stage: Systemic change. Here is the stage where the innovation becomes a notion to an organization. It is the impact of innovation on the framework and mode of thinking to an organization.		

(TABLE 2.2) A COMPARISON BETWEEN TWO SCHOLARS CONCERNING STAGES OF INNOVATION

2.2 A Summary of the Literature on Innovation

To sum up, innovation, as a field of public sector study, is still in its early, pioneering days and requires more time to be grasped. As a result, there is little convergence of opinion among scholars, researchers and practitioners regarding any aspects or distinct characteristics of innovation. However, innovation in the public sector has become very important for many reasons. These mainly include overcoming challenges, meeting diversified citizens' needs, raising the efficiency and effectiveness of government, finding new solutions for old and enduring problems, enhancing staff skills and performance, etc.

Huge efforts have been made by scholars and practitioners to understand innovation in the public sector, in favor of making innovation a core concept within an organization, and encouraging its presence as a continuous process rather than being randomly present. It is therefore necessary that some criteria be made available so as to recognize the new idea and consider it as innovative, particularly given its value and impact to all stakeholders.

Finally, inadequate incentive systems and a phobia of failure by elected officials, combined with poor skills and short planning horizons constitute the main barriers to innovation. Moreover, many stages should precede the implementation of an innovative idea prior to it being adopted and diffused by an organization.

3. Chapter Three: Egypt's Public Administration

This chapter gives a broader view of the Public Administration System in modern Egypt, in order to understand its main advances, the periods it has gone through, its characteristics, and its main aspects.

3.1 The Central Administration System in Egypt

The first attempt in modern Egypt's history to establish a state owned bureaucracy with developed strategies and policies was during the Mohammed Ali Pasha era near the beginning of the 19th century. Despite criticism being raised against these strategies and policies, he succeeded to found an industrial economy and central bureaucratic administrative structure in Egypt. Although the administration system was simple, consisting of seven main directorates, it was modern at that time and characterized by specialty and professionalism. In addition, Mohammed Ali Pasha established seven regional geographic authorities in Egypt. In the late nineteenth century, The Khedive Ismail Pasha upgraded the administration system into a council of ministers with some extensions made to its directorates and more specialization and professionalism as regards its duties and services. Following this, the administration continued to retain its main structures and characteristics, namely centralism, until the end of the monarchic era during the mid-twentieth century (Bishri, 2015).

After the revolution of The Free Officers Movement who came to power in 1952, the United Arab Republic was established. The President Jamal Abdul-Nasser, who led the revolutionary command council during the period from 1952-1970,

launched the biggest marches with the aim of establishing a central state with a restricted administrative bureaucratic system and social economic ideology. He nationalized all socio-economic activities and established a huge central state that assumed the responsibility of handling all industrial, economic, service, social welfare and national security sectors. During the period from 1952 – 1972, the number of employees jumped from 250,000 to 1,200,000, which means that the size of the government doubled approximately five times in just two decades (Mayfield, 1996).

During the era of the president Al-Sadat, over the period from 1970 - 1980, a shift occurred in the direction of market economy based policies, nevertheless under the name of the 1952 revolution. Al-Sadat attempted to narrow and minimize the interventionist role of the government, but at the same time, he tended to strengthen the dominant role of his authority in both governmental and wider political arenas. Some reforms attempted by the government to develop the public administration system, such as the civil servant reforms referred to as "management by objective" in 1976, the call for "administrative revolution" in 1977 and the legislation issued in 1979 that created local government bodies constituted through a democratic electoral process. The majority of these efforts could not achieve their ambitions to develop the administration system or raise welfare standards (Ayubi, 1982).

After the 1980s and during the era of President Mubarak, Egypt struggled severely from major economic problems, characterized by a deceleration in economic growth, reductions in foreign exchange, increasing inflation and unemployment rates, and decreasing revenue from tourism. As a result, Egypt witnessed a trend of structural

adjustment programs and reforms, which addressed many issues, such as imbalances regarding macroeconomic problems and other commonly persisting problems. The Egyptian government adopted a variety of policies and procedures, including the liberalization of foreign exchange markets, prices, private investment and the foreign trade sector. Besides these, other policies included a debt burden reduction, privatization and reforming of the public sector (Sayed, 2004).

3.2 The Local Administration System in Egypt

Since the Pharaoh era, Egypt has been known for having a highly centralized state. The Nile River greatly contributed to and maintained this main characteristic of having a centralist political system. Despite many attempts in both ancient and modern Egypt to give the local administrative system a distinguished status, it continued to function as an ancillary of the central administration system. The current local administration system gained its status, authorities, hierarchy and functions from Law 43 and its amendments – issued in 1979, which was based on the previous constitution of 1971. The constitution of 1971 articulated just three large articles establishing the local units. These three articles simply stated that Egypt was to be divided into governorates. Furthermore, the local popular councils were to be constituted through elections taking into the consideration the stipulation that 50% of the councils' members should be workers and/or farmers. All other issues concerning the functions, specializations, resources, budget of the local administrative units, and their relations with central government were left to the laws to be issued by Parliament (Abd al-Wahhab, 2006).

3.2.1 The Main Components of the Local Administration System in Egypt¹

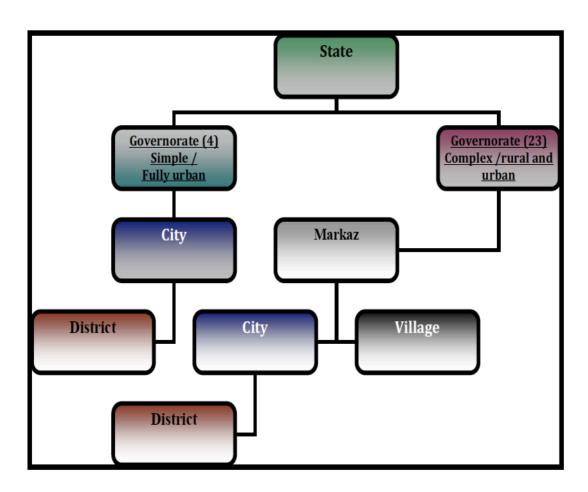
According to law 43/1979 and its amendments, Egypt is divided into (27) major units called governorates. These governorates are classified into either fully urban governorates of simple structure, or mixed urban and rural governorates of complex structure. The simple structure governorates consist of three levels: governorate, city and district.

According to law 43/1979, the complex structured governorates consist of four levels: governorate, markaz, city/village and district - as shown in figure (2-1). The governor is the highest executive representative of central government in his unit, the governorate, and he has to be appointed by the president through a presidential decree. In addition to the governor's position, and according to law 43/1979, there are three other high-ranking positions in each governorate. These positions include the governor's deputy who has to be appointed by the president, and the general secretary and assistant to the general secretary, both of whom have to be appointed by the prime minister. Furthermore, the heads of each lower level unit (Markaz, City, District) have to be appointed by the prime minister. The deputies of the head of Markaz and the heads of village units have to be appointed by the governor. Moreover, each local level (Governorate, Markaz, City/Village, District) consists of two councils: the local council and the executive council.

¹ **Note:** Everything mentioned in this section and the following sub-sections, unless otherwise referred to a reference, has been concluded directly from Law 43/1979.

3.2.1.1 The Local Councils

According to law 43/1979, the members of the local council have to be elected directly by the local community at each level. Each local council is responsible for supervising and monitoring all activities and institutions within the jurisdiction of its level. Furthermore, it has the authority to supervise and monitor the lower level councils in addition to approving their plans and decisions. Each local council has the authority to approve all the plans and budgets of its counterpart executive council.



(FIG. 3.1) THE STRUCTURE OF THE LOCAL ADMINISTRATION SYSTEM IN EGYPT by (Mahmoud, 2012). Reproduced with permission.

The local council has the authority to request through the chief executive at the unit level any information concerning all economic and productive activities and the operations of other public sector entities within the jurisdiction of its unit. It has the authority to approve the budget plans and then to supervise their implementation as well as approving the final accounts of the fiscal year. The local council can propose to impose local taxes in addition to centralized taxes. The local councils should represent their communities' needs and express these needs through submitting suggestions, developing plans and recommending programs to enhance their communities and to raise their living standards. For each unit level (governorate, markaz, city/village, district) there is a section named 'Bab' dedicated to detailing the authorities, jurisdictions and missions of its local council. Within each unit level section or 'Bab', there is a chapter dedicated to detailing the resources of the unit level.

3.2.1.2 The Executive Councils

According to law 43/1979, the executive council consists of appointed officials and elected locals. The appointed officials are the senior representatives of the central government who represent different services and production sectors. On the governorate level the appointed officials are the deputies of their ministers and they direct the administrative departments of the governorate. The directors of the administrative departments at each local level are interrelated technically to their central ministries, whereas they are interrelated administratively to the chief executive of their council. The chief of each local unit level directs the executive council of its unit.

According to law 43/1979, the executive council of each level is considered to be the highest executive body of that level. The main duties of the executive council include executing the general policies of the government, pursuing all activities performed by the executive departments, and ensuring an adequate level of performance for all services and projects. It is also responsible for formulating the budget plans and submitting proposals for allocating resources, namely funds and investments to be approved by the local councils. The executive council also has to adapt the rules and regulations for managing and exploiting the lands under the jurisdiction of its level. In addition, it has to determine the rules and regulations regarding building, housing and urban planning.

3.2.1.3 The Governor

The governor is the highest-level executive official who represents the central government in the governorate. According to law 43/1979, he has presidential authority as the president appoints him and he has to leave his position by law at the end of the presidential term or by presidential decree. Following this, he will serve as acting governor until a new governor is appointed. He is the head of the executive council of the governorate. He represents the governorate to the government, the courts and to regional and international forums. The governor has full authority over all employees working in the local administrative units belonging to the governorate.

Furthermore, albeit with minimal authority, he has authority over all other civil servants who work within his jurisdiction who belong to the central government sectors and entities. He has the authority to suggest the transfer of any employee to a position

outside the governorate, to suggest employees' promotion, to request an interrogation and to impose penalties within the ambit of the pre-determined powers of the appropriate minister.

According to law 43/1979, the main duties of the governor are to supervise and implement all the goals and policies of the central government within the governorate. Moreover, he is responsible for ensuring food security and for stimulating the effectiveness of industrial and agricultural production. He has the authority to take necessary actions to achieve these duties but not beyond the existing rules and laws. He has the authority to assume particular administrative and financial functions when aligned with the general guidance of the central government's budget. The governor has to report all of his achievements and activities periodically to the prime minister, as he is accountable to him.

3.2.1.4 The Council of Governors

In addition to the previous councils, and according to law 43/1979, there are two other bodies that directly relate to the local administration system. The council of governors is a body headed by the prime minister, and its members include the Minister for Local Development, who acts as the general secretary of the council. Besides this minister, the council of governors is composed of the governors and the heads of local councils on the governorate level. The prime minister has the right to call for a council meeting and to invite other ministers depending on the meeting's agenda (Article 5).

3.2.1.5 The Ministry of Local Development

The ministry of local development is the core actor working between the central government and the governorates. According to law 43/1979, its main responsibility is to coordinate relations between central government and the governorates, as well as relations across all the governorates. It is also responsible for the supervision of governorates in order to ensure that their activities coincide with the central government's goals and policies. It has to submit annual reports to the government and to parliament as regards all the governorates' activities and accomplishments.

3.2.1.6 The Budget of the Local Administration System

According to law 43/1979, the ministry of finance centrally governs the budget of the local administration system. The local administration system's budget consists of four sections named 'Abwab', which are identical to the state's budget sections as shown in table 3.1. The first section consists of salaries and wages located in the expenditure column in addition to sovereign revenues located in the revenues column. The second section consists of maintenance and operating expenditures positioned in the expenditure column in addition to transfers and current revenues, which can be found in the revenues column. The third section consists of investment expenditures located in the expenditure column in addition to capital revenues located in the revenues column. The fourth section consists of the debts reimbursement located in the expenditure column in addition to credits and loans revenues located in the revenues section. Accordingly, the first two sections represent the current accounts. The third account is therefore an investment account, and the forth section is a capital account (Abou El-Zahab, 2005).

Section	Types of Accounts	Expenditures	Revenues
1	Current Account	Salaries and Wages	Sovereign Revenues
			(Taxes on Agriculture Land, Taxes on
			Buildings, Entertainment/Amusement
			Taxes, Motor Vehicles Fees, Share in
			Common Revenues, Share in Joint Fund,
			Share in Surtax on the Suez Canal Profits)
2	Current Account	Maintenance and Operating Expenditures	Transfers and Current Revenues
			(Utility Revenues, Fees Paid to Service
			Directorates, Local Licenses and fees,
			Revenues from Productive Project,
			Quarries and Mining, Other Current Fees
			and Charges, Local Service and
			Development Fund)
3	Investment Account	Investment Expenditures ²	Self Finance Capital Transfer Revenues
			(Capital Grants and Aids Local and
			Foreign, Other Capital Transfer revenues)
4	Capital Account	Debts Reimbursement	Credits and Loans Revenues
			(Self Finance, Capital Sovereign Subsidy
			and Loans and Credit Facilities)

(TABLE 3.1) THE STRUCTURE OF LOCAL ADMINISTRATION BUDGET IN EGYPT by Abou El-Zahab, (2005) Adopted by permission.

3.2.2 Main responsibilities of local administration system

The local units are responsible for the implementation of government policies and the supervision of all utilities, services and operations within the boundaries of the governorate. The local units of the administration system have the authority to create and administer all public utilities within its jurisdiction and in accordance with the general government policies. The local units at each level undertake all jurisdictions assigned to the ministries within the boundaries of the unit according to the laws in

² **Note:** According to the budget scheme of the Ministry of Finance, the Investment Expenditure lays under chapter six not three. However, the researcher think that inserting the Investment Expenditure under section three in this table just for clarification of local administration expenditures and it does not represent chapter six of the official budget of the state.

operation and the rules of these ministries, except for the public agencies and the agencies which have a specific function as declared and created according to a presidential decree. The local units have the right to regulate the reclamation and the distribution of local land (Abd al-Wahhab, 2006).

3.2.3 Main Challenges of The Local Administration System

According to James Mayfield (1996), the personnel system of a local administration system constitutes the cornerstone of the local administration system. It is the core driver of all activities, operations and accomplishments for all sectors to a high degree - a direct reflection of the local personnel system's features. An overall review of the personnel system of a local administration system may therefore help in presenting the main attitudes and behaviors that drive and shape the system, as follows:

A reluctance to delegate authority and the decision-making process between central government and the governorates is one of the issues affecting the personnel system. There is a tendency among the high-level staff and directors in central government to handle most of the local affairs centrally, thus leaving a limited role for local staff and directors. This trend has reflected negatively on local level staff in different ways. It has lowered their aspirations to work actively, and weakened the trust between the central and local officials, therein leading to a dependency attitude present among local officials towards central government.

The strife over supervision between the administrative and professional staff constitutes an additional burden on the administration system. This conflict has become

more obvious in the multiple supervision system adopted by law to affiliate local staff administratively to governorate directors and technically to their directors in central ministries. In return, this has led to a complication of directions and of the decision-making process. Furthermore, it has added greater ambiguity and distractions to the whole decentralization process, the role of governorates within the system and the influential role of central government.

Promotion procedures, the act of increasing salaries, and the transferring and/or exchanging of officials are all subjected to seniority regulations and strict manners. Any given individual cannot be promoted to a higher grade unless all individuals of the higher rank are promoted first. In addition, any deviation from such procedures will be considered a violation of law and therefore subject to legal action. Whilst such a system originally strived for fair criteria among officials and attempted to isolate personal influences, it has led to negative symptoms including disappointment, nonchalance and a feeling of detachment from the system.

Other norms, which characterize attitudes and behaviors within the organizational system, include the tendency to gain influence by relying on relations with those who are in superior positions. This tendency of adhering to the rules and procedures instead of to goal-oriented achievements are considered key factors for leverage and promotion. Low wages with an insufficient incentive system will have a negative impact on individuals' productivity and responsibility. Rewarding subordinates who show loyalty and obedience towards their superiors becomes a tradition rather than achieving the organization's goals.

4. Chapter Four: The Analysis

The analysis focuses on the relationship between innovation and the local administration system in Egypt. It looks for answers to the research questions raised in the section outlining the conceptual framework. These questions were designed with the aim of looking for the existence of innovation in the local administration system in Egypt. The analysis will determine to what extent such innovation exists. In addition, it will highlight obstacles discouraging innovation in the local administration system in Egypt. The approach taken in this analysis is a comparison. A comparison is made between real innovative situations in the local administration system in Egypt, and the categories of innovation adopted in the conceptual framework in accordance with the model in Hartley's (2005) study.

4.1 Egyptian Experiences of Applying Innovation in the Public Administration System

First of all, it is worth introducing the experiences obtained through interviews. These experiences reveal some of the innovative practices within the local administration system in Egypt. Following this, it will be possible to examine these practices according to the definition of innovation, and categorize them as well in accordance with the study's model.



4.1.1 The Innovation Championship

The Ministry of Planning, Follow-up and Administrative Development launched a championship initiative named the "Innovation Championship" in August 2015. The objectives of this initiative were to encourage public sector employees to invent and find new ways of minimizing corruption, to introduce new services into the public sector, to enhance performance, and to find new solutions for the problems and challenges which the administrative system in Egypt faced. The initiative was the first of its kind ever to deal with innovation or invention as a tool to improve administrative performance in the public sector in Egypt. Previously, most initiatives dealt with specific fields of inventions, such as information systems, IT technology and specialized technical fields.

The championship covered the whole of Egypt's public sector, and it received approximately 650 ideas within just one month. Employees from different local level administrations covering all governorates participated in the championship, as well as many employees from different central administrations. The arbitration committees recognized fifty ideas as innovative and implementable. It is worth noting that the mechanism of direct communication between the organizing committee of the initiative and the participants led to the ministry receiving a large number of ideas. The organizing committee requested from the participating teams that they contact them directly without even getting permission from their superiors. If the organizing committee had followed the routines, rules and structures it would have been much more difficult for participants to submit their ideas (Interview with a key official, 10th March).

4.1.2 The Innovation Support Unit

The Ismailia governorate established a new administrative unit to support innovation, under the direct authority of the governor, and the supervision of the secretary general of the governorate. This unit was named "The Innovation Support Unit and Development of Government Performance". The Innovation Support Unit seeks to achieve many goals. Its main focus is on finding solutions to existing problems, enhancing performance and improving services. In order to fulfill its objectives, the unit chose the slogan, "innovative employee and satisfied citizen", making this the key message of the unit. Although most of the objectives on which the unit concentrates work to enhance and develop the performance of the local administrations within the governorate, the idea of establishing the unit was innovative in itself. This was the first time over the history of administration systems in Egypt, that a unit was established whose main purpose was to receive and generate ideas.

Nevertheless, the received or generated ideas were neither designed to be new nor innovative, nor were they designed with the aim of making radical changes to the services or the institutions. Rather, the aim was that the received ideas would achieve at least one of the unit's goals, regardless of its impact, whether minor or radical. Furthermore, the approach adopted to deal with all the suggested ideas was also innovative. The visible innovation approach is the creation of an organic connection between the academic community and the administration system. First, the received idea was to be preliminarily reviewed by the unit's staff. If the idea was concise and in keeping with the laws and regulations, then the unit would deliver it to the consultancy committee. The consultancy committee consists of academic scholars from the Suez

Canal University. The committee's main duty is to review in depth, evaluate and modify the received idea, if necessary, so as to make it applicable and implementable.

The unit welcomes ideas and initiatives from all stakeholders in the governorate, employees, citizens, NGO's and the private sector. Furthermore, the unit made a "needs assessment" so as to determine the areas of shortages in the governorate and the required resources for improving and developing the governorate's performance and the better delivery of services. Previously, donors used to donate randomly and in an uncoordinated manner. Nowadays, the donation is directed constructively towards fulfilling the governorate's prioritized needs as assessed by the unit and adopted by the governorate. However, the unit itself still faces the challenge of authentication by the central government, as it was established outside of the approved structures. This means that the innovation support unit has no legal status, because it began operating outside of the currently approved structures. (Interview with a key official, 22nd March).

4.1.3 Automated Systems and e-Services

One of the most obvious changes that can be considered the fruits of innovation is the adoption of an automated system instead of the traditional paper/handwork system. The administration system in Egypt, on both local and central levels, now provides some services through e-government. The Ministry of State for Administrative Development - in cooperation with local administrations - has contributed effectively to provide each governorate with the required capabilities enabling them to provide their citizens with electronic services. Many governorates succeeded in transforming some of their services from being paper/manually based into e-services. Each governorate now

has its own website that can handle some kinds of e-services through these websites. Each shift from the paper/manual system into an electronic system requires making multidimensional changes, including changing the methods and procedures of the service to be provided, and even the structure of how the service has to be provided (Interview with a key official, 10th March).

4.1.4 The One Stop Shop

The One Stop Shop is another trial to implement innovative idea within the agriculture sector of Ismailia governorate. Previously, citizens used to pass through a sequence of steps and procedures in order to obtain many of the services they needed. For example, to obtain or renew the farmer's license/ID, there are several steps and procedures that need to be followed. First, the farmer must apply for an application at the agricultural office of the corresponding local administration unit. Second, the farmer is required pay the fees in a post office, which is located somewhere else, far from the agricultural unit. Third, the farmer is required to submit the certified and stamped receipts for the fees personally to the agricultural unit. The One Stop Shop combines all of these steps and procedures in one place. However, the initiative failed to be implemented because the challenge it faced with laws and regulations. Many of these initiatives face obstacles, such as the non-compliance of these new services with laws and regulations. All of the services provided according to certain rules and regulations. The laws and regulations determined the required procedures and even their fees. To make changes to the steps and procedures, it is first necessary to make changes to the rules and regulations (Interview with a key official, 22nd March).

4.1.5 The Governorate of Alexandria

During the period from 1997 - 2006, several important projects successfully implemented that have improved and developed many services in the governorate. The projects were regular in nature, such as paving the network of roads, creating leisure centers, rehabilitating the long beach and enhancing the entrance to Alexandria, which is mired in a large marsh. Providing these services by normal means cannot be considered an innovation. However, what was innovative was how these projects were implemented. The leaders of the governorate succeeded in establishing significant relationships with many stakeholders such as international investors and local partners in the governorate. In addition, they built up valuable and reliable channels of communication with local citizens. They opened their offices to all citizens each day in the afternoon to hear their requests and complaints, and to receive their ideas and suggestions. The governorate's leadership was the main factor behind the successful achievements here (Interviews with key officials, 3rd March).

4.1.6 The Governorate of Qena

Significant achievements distinguished the period from 1999 - 2006 of the Qena governorate. The strategic view and distinguished leadership of the governorate's high-ranking leaders enabled them to accomplish a number of unusual projects. They applied new regulations and issued new decrees in order to generate local resources. The governorate's administration concentrated on two main areas: the environment and traffic/road network. The governorate enforced certain rules and regulations so as to regulate and enhance performance in these two areas. High fines imposed against whoever violated these rules and regulations. In addition, the generated resources have

been mobilized effectively in order to attain the planned targets, namely a clean environment and a reasonable amount of traffic. The governorate's administration succeeded in creating leisure centers, in organizing the road network, building shopping malls and generating new jobs. These achievements were described as innovative by the interviewees. The innovation wasn't down to the actual work that had been done, but rather related to the way in which it had been done. Within the normal dynamics and regulations it would have been difficult for the leader of the governorate to make any progress (Interviews with key officials, 3rd March).

4.2 Understandings of Innovation in Egyptian Public Administration

For the purpose of this section's analysis is to worth reminding the reader of how innovation may be defined and its criteria in this study as adopted in the conceptual framework.

Some of the interviewees, referred to innovation as invention combined with an improvement in public sector performance. Despite being aware that innovation and invention refer to something new, they didn't give a clear definition of innovation that coincides with the concluded definition given in the conceptual framework, nor did they determine its criteria accordingly (interviews with a key official, 3rd March).

Another interviewee stated that an idea considered innovative must be new. However, the organizing committee of the innovation championship had neither certain definition of innovation nor any criteria. The arbitrators' committee given the right to

accept any idea and consider it as innovative depending on their experience not on academic references, this was therefore somewhat broad and not clearly defined. Consequently, no clear definition of innovation or invention was formulated for participants (Interview with a key official, 10th March).

Other interviewee referred the innovation support unit to welcoming new ideas and to supporting such tendencies. However, the interviewee indicated that the main function of the unit is to receive or generate ideas regardless of their conditions or criteria. Therefore, the unit does not give a clear definition or a set of criteria for recognizing any idea as innovative. As a result, the unit deals with ideas in the context of developing, improving and enhancing the administration system, not strictly in the context of innovation (Interview with a key official, 22nd March).

On the other hand, most researchers working on the public sector in Egypt usually refer to any change in the administration system as a reform, improvement and/or development - not as an innovation. Few researchers referred to innovation explicitly in their research. However, they used the phrase "innovation" as a synonym for reform, improvement and/or development as have several academics (Azab 2009; Hassan & Sarker, 2012; Sayed, 2004). Those researchers neither defined innovation nor determined its criteria. They rather used terms relating to "innovation" in conjunction with reform, change and development phrases. As a result, one cannot distinguish innovation as an approach discussed as a freestanding concept in the literature on the public sector in Egypt, neither at the central or local levels.

To sum up, there is a common understanding among scholars and practitioners, which recognizes innovation as something new. However, there is a fundamental lack of theoretical framing regarding the concept of "innovation". Consequently, there is no commonly accepted definition of innovation or clear criteria in the Egyptian public administration system. Nevertheless, there have been significant efforts to reform the administration system in Egypt through enhancing and improving performance and services. Unfortunately, because of the absence of a clear definition and criteria for the concept of innovation, these reforms have not been classified as being innovations.

4.3 The Presence of Different Kinds of Innovation in the Local Administration System

It is worth going back over the categories of innovation, which were identified in the conceptual framework. The approach taken was to compare the experiences within the local administration system in Egypt with the model adopted in the conceptual framework. This comparison was based on the model developed by Hartley (2005). The aim of the analysis was to recognize certain existing experiences as innovations according to the adopted criteria. In addition, the recognized innovations were categorized according to the agreed definitions in the conceptual framework.

Whilst certain scholars classified various categories of innovation separately, innovations are often complex and multidimensional, and may include more than one category in a given innovative application. For example, the tax policy implemented by the London authorities to reduce congestion may be considered a multidimensional innovation, consisting of organizational arrangements, a service, and even rhetoric

(Hartley, 2005). Understanding the various categories of innovation is key to understanding innovation itself (Rowley, J. et al; 2011).

The local administration system in Egypt has witnessed many advances that can be classified either under a single innovation category or in terms of multidimensional innovation categories. The experiences described by the interviewees were analyzed so as to classify the innovations, which had taken place within Egypt's administration system according to the categories they used.

4.3.1 The Innovation Championship

The Innovation Championship was the first experience of its kind in Egypt, as earlier mentioned. However, it was not innovative in itself. It was rather an initiative designed to promote innovation within the public administration system, developed to spark innovative thinking among public sector employees. In fact, the Ministry of Planning intended to redirect the public sector along new lines so as to develop the public administration system and enhance its performance. The initiative can therefore be categorized as process innovation and position innovation. It can be classified as process innovation because there was a change in how new ideas were received.

The regular approach involved following established routines and hierarchical channels of communication. The innovative approach involved receiving innovative ideas directly, in so doing passing over the routines and hierarchy. Furthermore, this approach can be classified as position innovation because the Ministry of Planning intended to redirect the public sector along new lines.

4.3.2 The Innovation Support Unit

The Innovation Support Unit established in the Ismailia governorate is another example of multidimensional innovation. It is a good example of innovation in the sphere of governance, as it has opened the way to engaging different stakeholders outside of the local administration system. The innovation support unit encourages citizens, experts and the private sector to participate actively in public sector development. Furthermore, it can be classified as process innovation because it entails the invention of new ways to deal with received ideas by establishing a reliable connection with the academic community.

4.3.3 The Automated Systems and e-Services

E-government is one of the most obvious examples of significant advances made in the fields of both product and service innovation in Egypt. It may also be recognized as a form of process innovation. The use of new devices, such as computers and automated systems, constitutes a product innovation. In addition, e-services consist of novel means for delivering services, and may therefore be characterized as a form of service innovation.

They have also affected procedures relating to how services are delivered, therein being a form of process innovation as well. However, this combination of product, service and process innovation still comes across difficulties and obstacles as regards its implementation in the local administration system because of certain rules and procedures.

4.3.4 The Governorate of Alexandria

Innovation on the part of the governorate of Alexandria is multi-dimensional. The first dimension can be categorized as process innovation, and consists of the methods the governorate followed to implement and deliver services to the local community. The second dimension was the success in building significant relationships with different stakeholders – both international and local investors as well as citizens. This can be categorized as innovation in the sphere of governance. There is one further important element that needs to be considered: the governorate's leadership skills. This was the main factor behind the significant and successful achievements in Alexandria.

4.3.5 The Governorate of Qena

The governorate's leaders of Qena concentrated their efforts on making changes along three important lines. They issued new rules and regulations so as to generate local resources. Then they reallocated these resources in order to achieve the desired goals. In so doing, they made use of new methods to achieve these goals, which can be classified as process innovation. The leaders directed the local administration towards addressing a new area in their plans: the environment. This shift towards addressing a new area can be considered a form of position innovation. In addition, the overall reorganizing of priorities combined with the setting of new goals and purposes to be achieved can be considered a form of strategic innovation. The governor's leadership also played a vital role in supporting innovation within the local public administration.

To conclude, the public administration system in Egypt has undergone a wide variety of different kinds of innovations, some of which were one-dimensional and others multi-dimensional. Leadership was one of the main factors, which encouraged the presence of innovation and its later implementation. Careful maneuvering around the various laws, rules and dynamics was another important factor that led to success in achieving and implementing innovative ideas. It is therefore difficult to adopt innovative ideas within the public sector in Egypt given the current rules, structures and dynamics. Furthermore, some successful innovations succeeded in flourishing and being disseminated only because they were implemented alongside of the present-day rules and structures and/or outside of the regular dynamics and norms present in the local administration system.

4.4 Barriers to Innovation.

New ideas always face challenges and obstacles, including both multiple inherent and extrinsic forms of resistance to change. The literature on innovation in the public sector has also referred to such a dilemma. The administration system in Egypt has its own obstacles and barriers that impede innovation. Some of these obstacles are similar to those encountered in many other contexts as they are common symptoms present in all public administration systems. Yet the Egyptian administration system has its own barriers because of certain unique characteristics.

When asked about obstacles to innovation, most of the interviewees agreed that poor salaries and a lack of skilled staff are the main challenges restricting innovation in the Egyptian administration system. Furthermore, they also referred to some other

symptoms that characterize the administration system in Egypt, namely a rigid centrality and sense of apathy that creates a poor environment for innovation. However, the interviewees rejected the Egyptian public administration system punishment code as being a direct factor impeding innovation (as mentioned in the interviews with key officials, 3rd; 10th; 22nd March).

It is also worth mentioning another barrier to innovation: the lack of sufficient mechanisms and channels to suggest ideas and/or initiatives. This is further complicated by the absence of any related means to deal with any suggested ideas. As a result, the ideas cannot survive or flourish within the current regulations and structures (Interviews with key officials, 3rd; 10th March).

Sayed (2004) cited the large amount of bureaucracy, poor skills and incompetent staff, low wages, lack of a positive culture and lack of good working conditions as being the main factors that dampen the spirit of innovation. Aaref (2015) added another important factor that has had a major impact on problems with the implementation of innovations: an inability or incapability of dealing with internal resistance to change present within any organization.

5. Chapter Five: Conclusions and Recommendations

5.1 Conclusions

The concept of innovation in the public sector is a powerful advance made in recent decades. It has therefore received a large amount of attention from policy makers, practitioners and scholars. If public sector institutions succeeded in administering innovations well and incorporated them within their intrinsic policies, structures, regulations, norms and activities, they would be able to achieve remarkable levels of citizen satisfaction.

However, an in-depth literature review on the topic innovation, as undertaken by this study, revealed that the concept of innovation remains under-theorized. Scholars and practitioners still face fundamental challenges if they are to reach some kind of consensus regarding the definition, criteria, categorization, and stages of innovation. The literature review also highlighted how the practical dimensions of innovation - such as its implementation - still encounter problems, of no lesser complexity than the theoretical issues. The lack of an encouraging environment, resistance to change, insufficient skills, stressful, demanding agendas and risk aversion all constitute serious impediments to innovation. Nevertheless, public sector institutions demonstrate a distinguished ability to adopt innovations and innovative processes on different levels and in different ways, including the adoption of innovative products, services, processes, governance and strategies. Hence, alongside serious cooperation between scholars, practitioners, officials and leaders in incubating innovation, a satisfactory level of efficiency and effectiveness will be within reach in the public sector.

On the other hand, a broader literature review of Egypt's public sector - with a focus on the local administration system as considered in this study – illustrated that the administration system in Egypt is a strongly centralized system. From the time of the Mohammed Ali Pasha era through to the President Nasser era and his successors, all efforts to establish an administration system with governing local units that have real local autonomy and which are separated from the central system have failed.

Despite the local administration system having its own laws since the era of President Sadat, which is represented mainly by the law 43/1979; Egypt's public sector on both the central and local levels has had the same structure. The executive branch of the administration system on both central and local levels is governed and ruled by the same laws and regulations. Furthermore, they are characterized by the same attributes and a similar hierarchy structures them. In fact, they should be looked upon as one coherent and consistent body. They should be treated as one system with two hierarchical levels, and not as two different systems. Therefore, what it is applicable to the level of the local administration is also applicable to the level of the central administration.

This study's research has mainly sought to explore and investigate the real situation regarding innovation within Egypt's administration system at the local level. It has examined the earlier mentioned hypothesis, which stated that, "the current laws, structure and dynamics of the local administration system do not permit innovation". In order to test this hypothesis, the study focused on two research dimensions. First, it aimed to explore the various understandings and applications of innovation inside

Egypt's public administration system on the local level, questioning whether it exists or not, and if it does exist - in what sense. Second, it aimed to uncover whether or not the internal environment of the local administration system encourages or discourages innovation, seeking to reveal possible barriers to innovation.

The data gathered from the interviews has been discussed and analyzed and it has proven the hypothesis to a significant degree, but some points need to be taken into consideration. These points can be clarified by the existence of a motivation to innovate and also the existence of innovative applications in Egypt's public sector. Nevertheless, the main challenges for motivating and implementing innovations are the current structures, dynamics, rules and norms. The evidence shows that for any innovative idea to flourish and be disseminated within Egypt's administration system, it needed to be implemented outside of the existing laws and structures. Moreover, it needed to maneuver around the dynamics and norms of the internal environment of the administration system.

The evidence has shown the existence of successful innovations. These successful innovations were developed in and through the Innovation Championship launched by the Ministry of Planning, Follow-up and Administrative development; the Innovation Support Unit in the Ismailia governorate, some of the e-services provided by governorates and the achievements of the governorates of Alexandria and Qena. In addition, experiences of the public administration system in Egypt revealed the occurrence of different kinds of innovation. The evidence showed that innovations in

product, service and process occurred more frequently than other categories of innovation, such as organizational and strategic innovation.

One of the important findings is that leadership plays an effective role within the public administration system in Egypt. It can provide great support for innovation as found in the Alexandria, Qena and Ismailia governorates. The major role of leadership and its positive impact on innovation represents a distinguishing characteristic of Egypt's local administration system and the public sector as a whole. A lack of comprehensive strategic planning dedicated for enhancing innovation is another important finding, which has played an essential role in discouraging innovation within Egypt's public sector on both the central and local levels.

On the other hand, many initiatives that have tried to make distinctive reforms to Egypt's administration system have been dampened and have faced many obstacles because their attempted implementation has occurred under the current structures, laws and rules. The One Stop Shop innovative initiative launched Innovation Support Unit, was one good example of an unachievable innovation. There are also many other barriers, which have made significant contributions in damping innovation in the public sector.

The study also found that the existence of poorly skilled staff with low wages, the absence of a competitive spirit, a lack of positive culture and bad working conditions, along with rigid centrality and apathy all constitute real barriers to the flourishing and dissemination of innovation within Egypt's public sector.

5.2 Recommendations

It is necessary to advocate for strategies and policies that may enable policy makers, practitioners, scholars and even legislators to enhance innovation levels in Egypt's public sector. In turn, this may lead to the institutionalization of innovation within the Egyptian public administration system. In addition, it may offer insights, which state leaders, could use in drawing up a comprehensive strategic plan to promote an innovative nation.

5.2.1 The Public Sector

Enhancing innovation in the public sector will have a significant positive impact on all other sectors and on society in general. The public sector has to develop its own strategic plan for innovation so as to become an innovative sector. This strategy has to encompass many aspects and approaches in order to be able to achieve its goals. The public sector is the core part of this study and it has to be the cornerstone of any comprehensive innovation strategy developed on the national level.

There is one critical point that needs to be taken into consideration when dealing with innovation: namely, one must deal with innovation as a status, condition and aspect of a working environment more than viewing it through laws, structures and procedures. Innovation can be enhanced and stimulated within any kind of administration system. It can work within traditional administration systems, new public management systems, as well as in both centralized and decentralized administration systems.

There is also a vital need to establish a central body to be affiliated either to the ministry of planning because as reform the administration system is on of its responsibilities, or to be affiliated to the prime minister office to gain the power and authority acquired over all public institutions and activities. The body should be dedicated to implementing innovation strategies together with a research center, which specializes in innovation studies within the public sector. Its foremost functions would be to guarantee the flourishing and dissemination of innovation, and to ensure the execution of the innovation strategy. Its main responsibilities would include proposing initiatives, following up on programs, recommending policies, suggesting regulations, setting priorities, facilitating implementation, performing surveys, conducting research, publishing studies, building networks, importing innovations, and reporting to government and parliament.

One of the most important measures, which could be taken to encourage innovation and to help it flourish, is to support it by offering suitable conditions and a positive environment. The creation of dedicated channels to receive, analyze, and implement innovative ideas would be one effective means. Regulating certain rules and procedures so as to stimulate innovations would also help, for instance by offering financial stimulants for employees and their managers together. Allocating resources within the budget devoted to supporting innovation is one other important approach. Spreading the notion of implementing pilot projects for innovative ideas to be examined, alongside minimizing the effects of internal resistance would also help.

The strategy pursued also has to target leaders as one of the important pillars for stimulating innovation. As the evidence showed, leadership plays a pivotal role in helping innovation flourish in Egypt's public sector. Hence, there is a need to raise awareness regarding the importance of leadership in supporting innovation. There is also a need to increase knowledge of the influence of incentives, barriers and constraints. There is a need to enhance their abilities to cope with resistance so as to change behaviors within public institutions.

The main pillars that the public sector strategy has to primarily address are those, which this study has concluded constitute the main hindrances to innovation. Laws, structures and dynamics have to receive the most attention. Furthermore, leadership is an important pillar to address because it has played a pivotal role in supporting innovation in Egypt's public sector.

The strategy to be taken needs to guarantee a certain level of knowledge regarding innovation among all public sector employees. The initiative has to address the main understandings of innovation including its definition, criteria, categories, stages and what promotes and hinders it. Consequently, there is a need to implement several programs, with each one addressing a single aspect. The programs will work as tools with the aim of achieving desired targets.

The strategy will have to deal with the personal characteristics of employees, including their skills, capabilities, competencies and attitudes towards change and initiatives. Poor skills, apathy and a reluctance to change are also important aspects that

need to be taken into consideration in the public sector strategy. Products and services delivered to clients and citizens must receive a great deal of attention because they form the indispensable pillars of the innovation strategy. The strategy needs to develop a string of measures and policies, which will redefine and reshape the public sector in the direction of becoming a more innovative sector.

The most effective means to achieve these goals are through initiatives. Launching an initiative for each of the described aspects above so as to fulfill the prescribed targets has many advantages. The main advantage of such initiatives is that they can gather together different actors to collaborate and consolidate efforts and resources in achieving the desired goal. Each initiative can deal with a particular aspect of the public sector strategy, which may consist of many programs. Each program could deal with a specific aspect of a particular issue. These programs within each initiative can include, but are not limited to: championship competitions, awareness campaigns, training courses, workshops, partnerships with other sectors, twinning with counterpart institutions, and exposure to international expertise.

5.3 Becoming an Innovative Nation

All twenty-first century nations currently need to become innovative nations and Egypt is no exception. Moreover, there is a crucial need for Egypt to incubate innovation in its strategies and policies so as to foster social prosperity, enhance people's quality of life, overcome local demographic and environmental difficulties, and to compete with global challenges. Furthermore, Egypt has its own obstacles and deep-seated problems that characterize its unique situation, which in turn makes

innovation highly desirable and to be welcomed in all spheres. Above all, Egypt, as with any developing country, has an additional motivation in that by adopting innovative strategies nationally, it can achieve its ultimate goal of becoming a developed country.

Accordingly, nurturing innovation is a shared responsibility and must be undertaken in an integrated fashion across all of the nation's segments and sectors. Legislative institutions, the government, the academic community and the private sector all have collective and accumulative roles to play in promoting innovation throughout the whole of society in general and the public sector in particular. Therefore, it is a good idea to implement a comprehensive innovation strategy at the national level that encompasses all of the nation's citizens and sectors so as to achieve the goal of becoming an innovative nation.

Consequently, it would be insufficient to plot a road map that sought to incubate innovation within the local administration system alone. First, the dynamics and structures that resist change and innovation affect whole sectors and not just the local administration system. Second, society is the dominant source of public sector employees, and so without raising its innovation capabilities the problem will persist. Third, the unitary nature of Egypt's public sector with its dependent and interrelated relationships makes it redundant in dealing with one dimension separately. Fourth, it is inefficient to adopt a strategy seeking to develop and disseminate innovation without promoting collaboration between all actors and stakeholders.

5.3.1 The State

The foremost duty of the state as regards promoting innovation in Egypt is to develop a comprehensive strategy that strives to work towards the goal of an innovative nation. Such a comprehensive strategy should take into consideration the main dimensions of the state such as the public sector, the private sector, the education sector and the parliament. Although Egypt Vision 2030 addressed innovation as one of its pillars, it concentrated on entrepreneur and technological innovation. Hence, there is a need to address the public innovation within its vision.

The government is the most suitable actor for handling the responsibilities of the comprehensive strategic plan. It can act as an umbrella for other sectors, mediating and coordinating between them, thus promoting cooperation across all sectors. It needs to establish a specialized entity dedicated to achieving the ultimate goal of establishing the innovative nation. This entity has to be given paramount priority and affiliated to the uppermost executive authority.

In addition, this entity has to have the authority to oversee work in all necessary sectors and departments in order to enable it to carry out its duties. These duties include, but are not limited to, developing the comprehensive strategy, coordinating and cooperating with different departments and sectors inside and outside the government, monitoring and following-up on all processes and procedures, facilitating all necessary measures, suggesting recommendations, and reporting to the government and even to parliament.

5.3.2 The Parliament

The main role of the parliament is to ensure that all laws and regulations encourage innovation. In addition, the laws and regulations should guarantee conditions that secure a supportive environment for innovation. The legislators should also consider how to provide suitable protection for innovations, which are in their pilot or experimental stages, and even offer protection for failed innovations.

5.3.3 The Private Sector

The private sector has a substantial role to play in promoting a comprehensive innovation strategy. The first duty of the private sector in supporting innovation is to unify their efforts and resources in the direction of building an innovative nation. It needs to invest a great deal in Research & Development so as to energize and sustain the creative ideas, new technologies and innovations. It also needs to cooperate with universities and research centers so as to promote innovation on both sides. In addition, it needs to sponsor innovative programs for individuals and even institutes. It has to fund public programs to pursue innovation within society and the public sector alike.

The private sector has to launch innovation championships in society, among entrepreneurs and also among public sector enterprises and departments. Other important factors that the private sector needs to take into consideration include the stimulation and hosting of innovative initiatives and the provision of all necessary skills and capabilities for innovators. The private sector needs to establish reliable partnerships with the public sector so as to enhance innovation in both sectors.

5.3.4 The Education Sector

The education sector has to make innovation its core orientation. There is a vital need to develop new and creative methodologies so as to inscribe innovation in all its activities. It needs to take into consideration how innovation could be included in all the basic elements of the education system, elements such as the teachers, students, curriculum and the educational process. It also has to ensure the presence of innovation in the outputs of the educational process, i.e. in skills acquired, along with pupils developing open-minded attitudes to innovation and an entrepreneurial mindset.

The academic community plays a crucial role in supporting and encouraging innovation. Higher education institutions have many strong foundations they can lean on in their mission to enhance innovation. As concerns science and technology, there is a need to work on various aspects, including encouraging patents, and promoting research so as to introduce more creative ideas and new technologies. It has to build effective relationships with the private sector so as to boost innovation and promote new technologies. Such relationships should be especially strong with R&D departments. Opening laboratories and research centers in collaboration with entrepreneurs and the private sector is one important means through which to promote innovation. On the other hand, schools, departments and research centers which specialize in governmental studies can play a substantial role in promoting innovation in the public sector. Conducting various studies, cooperating with the public sector, and enhancing the innovative skills and capabilities of the graduated students are some examples of this vital role.

5.4 Future Work

In spite of the existence of a small number of scholars and practitioners who have referred to innovation in Egypt in their research and studies, they have not systematically tackled the concept using understandings developed by international scholars, as presented in literature of this study. Hence, this study is the first of its kind, tackling both understandings of innovation and the Egyptian public sector, opening a window to new and future research paths.

However, a large amount of work remains to be completed, with considerable efforts necessary for future study. The field of innovation in the public sector in general is still maturing. On a theoretical level, many issues remain controversial. These include the criteria of innovation, the classification of innovation, stages of innovation, the categorization of innovation, etc. on a practical level, there are also many other aspects that need to be developed, including the dissemination of innovations, dampening resistance to change, overcoming barriers, promoting innovative attitudes and so forth.

On the other hand, the field of public sector innovation within the Egyptian context in particular is prolific and promising. Innovation in Egypt needs to be studied using different methods and methodologies. Qualitative and quantitative approaches need to be used, as well as surveying, case studies, and various other methods. There is a vital need to explore, explain and develop expertise on innovation within Egypt's public sector. Egypt's public administration system is experiencing continual reforms and advancements on different levels and in various sectors. Those experiences would benefit from in-depth study with respect to innovation.

Some of these reforms and advances include innovation championship, the innovation support unit, the e-services applications, the one stop shop initiative, leadership and its effect on innovation, and so forth. Other aspects also need to be studied with respect to innovation, including partnerships between the private and public sectors, civil service laws, the role of youth within the public sector and many others.

References:

- Aaref, A. (2015). A Critique of Administrative Reform Programs in Egypt Implications from Riggs' Prismatic Model. Developing Country Studies, 5(8). ISSN 2225-0565
- Abd al-Wahhab, S. (2006). al-Hukm al-maḥallī wa-al-ittijahat al-hadīthah: Ma'a dirasat halat misr. Cairo: Markaz Dirasat wa-Istisharat al-Idarah al-'Ammah.
- Abou El-Zahab, Khaled Amin (2005). Fiscal decentralization and poverty: A cross-sectional analysis and a case study of Egypt. New Your University.
- Ahmed, S. H. (2016). A Study of The Civil Service Law as Part of Egypt's Administrative Reform. American University in Cairo (AUC).
- Albury D. (2005). Fostering innovation in Public Services. Public Money & Management, 25:1, 51-56.
- Amdam, R. (2014). An integrated planning, learning and innovation system in the decentralized public sector; a Norwegian perspective. The Innovation Journal, 19 (3), 1.
- Anggadwita, G., & Dhewanto, W. (2013). Service innovation in public sector: A case study on PT. kereta api indonesia. Journal of Social and Development Sciences, 4(7), 308.
- Arfeen M. I., & Khan N. (2009). Public sector innovation: Case study of e-government projects in Pakistan. The Pakistan Development Review, 48(4 Part II), 439-457.
- Arundel, A., & Huber, D. (2013). From too little to too much innovation? issues in measuring innovation in the public sector. Structural Change and Economic Dynamics, 27, 146-159.
- Ayubi, N. M. (1982). Organization for development: The politico-administrative framework of economic activity in Egypt under Sadat. Public Administration and Development, 2(4), 279-294.
- Ayubi, N. N. M. (1991). The state and public policies in Egypt since Sadat. Reading, Berks, UK: Ithaca Press.

- Azab, N. A. (2009). Assessing electronic government readiness of public organizations: effect of internal factors (case of Egypt) (Doctoral dissertation, Middlesex University).
- Bessant, J. R. (2003). High-involvement innovation: Building and sustaining competitive advantage through continuous change. Chichester: Wiley.
- Berg, B. L. (2009). Qualitative research methods for the social sciences (7th ed.)

 Pearson International Edition. Boston: Allyn and Bacon publishing.
- Bishrī, T. (2015). Jihaz al-Dawlah wa-idarat al-hukm fī Miṣr al-mu'aṣirah (al-Ṭabah al-ula. ed.). al-Muhandisīn, al-Jīzah: Dar Nahḍat Miṣr lil-Nashr.
- Bloch, C., & Bugge, M. (2013). Public sector innovation—From theory to measurement. Structural Change and Economic Dynamics, (27), 133-145.
- Bommert, B. (2010). Collaborative innovation in the public sector. International Public Management Review 11, 15–33.
- **Borins** S. (2001a). The challenge of innovating in The government. PricewaterhouseCoopers Endowment The for Business of Government.
- Borins S. (2001b). Encouraging innovation in the public sector. Journal of Intellectual Capital, 2(3), 310-319.
- Bowden A. (2005). Knowledge for Free? Distributed Innovation as a Source of Learning. Public Policy and Administration Autumn 2005 20: 56-68.
- Brown, L. (2015). A lasting legacy? sustaining innovation in a social work context.

 British Journal of Social Work, 45(1), 138-152.
- Daniela S. (2015),"Designing for public sector innovation in the UK: design strategies for paradigm shifts", Foresight, Vol. 17 Iss 4 pp. 332 348.
- Denhardt, R., & Denhardt, J. (2009). Public administration: An action orientation (6th ed.). Belmont, CA: Thomson/Wadsworth.
- Denscombe, M. (2014). The good research guide: For small-scale social research projects (5th ed.). McGraw-Hill House, Berkshire: Open University Press.

- Ferlie E., Fitzgerald L., Wood M., and Hawkins C. (2005). The Non-spread of Innovations: The Mediating Role of Professionals. The Academy of Management Journal, Vol. 48, No. 1, pp. 117-134.
- Francis, D., & Bessant, J. (2005). Targeting innovation and implications for capability development. Technovation, 25(3), 171-183. doi:10.1016/j.technovation.2004.03.004
- Gow, J. I. (2014). Public sector innovation theory Revisited. The Innovation Journal, 19(2), 1.
- Greenhalgh T., Robert G., Bate P., Kyriakidou O., Macfarlane J., and Peacock R. (2004). How to spread good ideas. Report for the National Coordinating Centre for NHS Service Delivery and Organization. London: NHS SDO.
- Hartley, J. (2005). Innovation in governance and public services: Past and present. Public Money & Management, 25(1), 27-34. doi:10.1111/j.1467-9302.2005.00447.x
- Hartley J. (2006). "Innovation and its contribution to the improvement. A Review for Policy-Makers, Policy Advisors, Managers and Researchers".

 Department for Communities and Local Governments, UK.
- Hartley J. (2012). Public and Private Features of Innovation. Osborne S and Brown L (eds.) Handbook of Innovation and Change in Public Sector Services. London: Sage.
- Hassan, M. K., & Sarker, A. E. (2012). Managerial innovations in the Egyptian public health sector: An empirical investigation. International Journal of Public Administration, 35(11), 760. doi:10.1080/01900692.2012.684142
- Jacobsen, C. B. & Andersen, L. B. (2014) Performance Management in the Public Sector: Does It Decrease or Increase Innovation and Performance? International Journal of Public Administration, 37:14, 1011-1023.
- Kamarck E. (2004). Government innovation around the world. Ash Institute for Democratic Governance and Innovation, J.F.K School of Government.
- Kattel, R. (2015). What would max weber say about public-sector innovation? 1. NISPAcee Journal of Public Administration and Policy, 8(1), 9-19.

- Klas P., Johan L., Håkan W., (2015). "Agencies, it's time to innovate!" International Journal of Quality and Service Sciences, Vol. 7 Iss.1 pp. 34 49.
- Kohli J., and Mulgan G. (2010). Capital Ideas: How to Generate Innovation in the Public Sector. Center for American Progress, The Young Foundation.
- Korteland E., and Bekkers V. (2008): The diffusion of electronic service delivery innovations in Dutch E-policing: The case of digital warning systems. Public Management Review, 10:1, 71-88.
- Lynn L. (1997). Innovation and the public interest: insights from the private sector. In Altchuler A and Behn R (ed.) Innovation in American government. Washington, DC: Brookings Institution.
- Mayfield, J. B. (1996). Local government in Egypt: Structure, process, and the challenges of reform. Cairo: American University in Cairo Press.
- Micheli, P., Schoeman, M., Baxter, D., & Goffin, K. (2012). New business models for public-sector innovation: Successful technological innovation for government. Research Technology Management, 55(5), 51.
- Moore M. (2005). Break-Through Innovations and Continuous Improvement: Two Different Models of Innovative Processes in the Public Sector. Public Money & Management, 25:1, 43-50.
- Moore M. and Hartley J. (2008). Innovation in governance. Public Management Review, 10(1), 3-20.
- Moore M., Sparrow M., and Spelman W. (1997). Innovation in policing: from production line to jobs shops. In Altchuler A and Behn R (eds.)

 Innovation in American government: challenges, opportunities & dilemmas. Washington, DC: Brookings Institution.
- Mulgan G., and Albury D. (2003). "Innovation in the Public Sector". London: Cabinet Office Strategy Unit.
- Nahla, Mahmoud. (2012). The Local Chief Executives: A Comparative Study of International Experiences Focusing on The Role of Governors in Egypt (Master's thesis, American University of Cairo, 2012). Cairo: AUC DAR Repository. Retrieved from http://dar.aucegypt.edu/handle/10526/3105

- Rowley, J., Baregheh, A., & Sambrook, S. (2011). Towards an innovation-type mapping tool. Management Decision, 49(1), 73-86. doi:10.1108/00251741111094446
- Sayed, F. (2004). Innovation in public administration: The case of Egypt. United Nations Department for Economic and Social Affairs (UNDESA).
- Torugsa, N. & Arundel, A. (2016). Complexity of innovation in the public sector: A workgroup-level analysis of related factors and outcomes. Public Management Review, 18(3), 392-416. doi:10.1080/14719037.2014.984626
- Walker, R. M. (2007). "An empirical evaluation of innovation types and organizational and environmental characteristics: Towards a configuration framework". J-PART, 18(4), 591-615.
- Walker R., Jeanes E., and Rowlands R. (2002). Measuring innovation: applying the literature-based innovation output indicator to public services. Public Administration, 80, 201-214.
- Wiesel, F., & Modell, S. (2014). From new public management to new public governance? hybridization and implications for public sector consumerism. Financial Accountability & Management, 30(2), 175-205.
- Wolfe R. (1994). Organizational innovation: review, critique, and suggested research directions. Journal of Management Studies, 31, 405-431.