



**Exploring the Critical Success Criteria and Factors of Adopting Technological  
Innovation in the U.A.E Public Sectors**

استكشاف معايير وعوامل النجاح الحاسمة والمتمثلة في تبني الابتكار  
التكنولوجي في القطاع العام في دولة الإمارات العربية المتحدة

**By**

**Hanan Ibrahim Ahmed Al Marzooqi**

**Student ID: 2013103070**

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Dissertation Supervisor:  
Professor Halim Boussabaine  
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## APPENDIX C

### DISSERTATION RELEASE FORM

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## Table of Contents

<b>DISSERTATION RELEASE FORM .....</b>	<b>Error! Bookmark not defined.</b>
Table of contents .....	3
Abstract.....	5
ملخص.....	6
Acknowledgement .....	7
List of tables and figures:.....	8
<b>Chapter (1): Introduction.....</b>	<b>9</b>
1.1 Overview:.....	9
1.2 Research problem :.....	10
1.3 Research questions:.....	12
1.4. Structure of the Dissertation:.....	12
1.5. Research limitations: .....	13
<b>Chapter (2): Literature Review .....</b>	<b>15</b>
2.1- Overview of the innovation project concept in public sectors.....	15
2.1.1 Innovation in public sector: .....	15
2.1.2- The characteristics of success innovative projects in public services.....	17
2.1.3- Examples of success innovative projects: .....	17
2.2- Introduction to project success criteria : .....	19
2.2.1. Project success criteria: .....	20
2.3 Introductions to project success factors .....	26
2.3.1. Project strategy: .....	29
2.3.2. Knowledge management: .....	31
2.3.3. Open communication:.....	33
2.3.4. Top management support: .....	35
2.3.5 . Project Management style: .....	37
2.3.6 Project manager competencies: .....	38
<b>Chapter (3): Conceptual Framework: .....</b>	<b>43</b>
<b>Chapter (4): Research Methods.....</b>	<b>49</b>
4.1 Research procedures and process:.....	49
4.2. Questioner design:.....	51
4.3. Selected organizations:.....	52
4.4. Sampling: .....	53
4.5 Analysis of responses: .....	55

<b>Chapter (5): Finding:</b> .....	56
5.1 Descriptive statistics.....	56
5.2- Correlation test:.....	59
5.3- Regression test .....	61
<b>Chapter (6): Discussion:</b> .....	64
<b>Chapter (7): Conclusion and Recommendation</b> .....	70
7.1 Conclusion:.....	70
7.2 Limitation and recommendations for future researches .....	72
<b>8. References:</b> .....	73
<b>Appendix (1): Research Questionnaire</b> .....	79

## **Abstract**

Government in the United Arab Emirates stimulates the public sectors to provide intelligent and innovative services to the public users. However, as the concept of innovation in public services is considered a new topic for the U.A.E government, most of the departments need to be aware of the critical success criteria and factors for innovation projects.

This research asserts the great importance of implementing innovation in projects in general and in the public sector specifically. It examines the variables that contribute to project success and failure in details. Those variables are known as project success criteria and factors. This paper explains the effects of each of those variables in project success and failure, besides the effect of organization, project team members and users in those variables. The researcher in this paper investigates the relationship between both variables and how both of them lead to project success or failure. Quantitative methods are implemented to evaluate the research variables and explain the significant effect of project criteria and project factors on the success or failure of innovative projects through 20 federal government departments in U.A.E.

The research findings highlight that the most important factor in project success for the innovative projects across the twenty (20) federal departments in U.A.E is the strategy of innovative projects. The findings support the idea that the U.A.E government spends most of their times to improve the project strategies and deliver the service on the assigned times. In addition, managerial supports for the innovative projects in the U.A.E federal department succeeded to increase the level of satisfactions for the project team members. Moreover, the success of innovative projects through the selected organization in the U.A.E depends on open communication as these factors help the organization to understand the user's demands and to provide suitable innovative services to achieve high levels of users' satisfactions.

**Key words:** Innovative Services, Innovative Projects, Critical Success Criteria (CSC), Critical Success Factors (CSFs), Project Manager, Project Team Members, Users, Organizations.

## ملخص

تسعى حكومة دولة الامارات العربية المتحدة الى تحفيز القطاع الحكومي لتقديم خدماتها عن طريق استخدام اساليب مختلفة للابتكار. إحدى مبادرات حكومة دولة الإمارات لدعم الابتكار انطلقت عن طريق إعلان مجلس الوزراء في دولة الامارات عام ٢٠١٥ كعام الابتكار في القطاع الحكومي. الغرض الأساسي من هذه المبادرة هو تحفيز استخدام الابتكار في الخدمات التي تقدمها الدوائر الحكومية ونتيجة لذلك بادرت العديد من الدوائر الحكومية في الدولة الى إطلاق العديد من مشاريع الابتكار في سبيل تطوير مستوى الخدمات التي تقدم للمستخدم وذلك بإدراج الابتكار في الخدمات الحكومية. يقدم الباحث من خلال هذه الرسالة مجموعه من الدراسات الأكاديمية التي شرحت مفهوم الابتكار في القطاع الحكومي بالإضافة إدراج العديد من الأمثلة لمشاريع الابتكار الناجحة في مختلف دول العالم والتي عززت من استخدام الابتكار في خدماتها الحكومية بنجاح. بالإضافة الى ذلك تم طرح العديد من العوامل والمعايير التي تساهم في نجاح مشاريع الابتكار بشكل تفصيلي في هذه الرسالة فضلا عن ذكر دور المنظمة الحكومية وفريق عمل المشروع والمستخدم في هذه المعايير والعوامل التي تحفز من نجاح مشاريع الابتكار.

في هذا البحث تمت ترجمة هذه العوامل والمعايير على شكل نظريات الغرض الأساسي منها معرفة تأثير عوامل الابتكار والمعايير على نجاح المشروع وعليه تم اختبار نجاح او تأثير هذه النظريات على عشرين (20) منظمة حكومية في الدولة عن طريق استبيان يتضمن ثلاثة (3) أقسام أساسية منها المعلومات الشخصية وتقييم العاملين في المنظمة الحكومية لعوامل نجاح مشاريع الابتكار التي تم طرحها في هذه الرسالة ومن ثم تقييم العاملين في المؤسسة لمعايير نجاح الابتكار ومدى تأثيرها على المشروع.

أهم النتائج التي توصلت لها هذه الرسالة هي اهتمام الدولة بوضع استراتيجيات لمشاريع الابتكار بما يحقق المنفعة وتحقيق الهدف من المشروع للجميع من حيث ضمان توصيل الخدمة بشكل سريع وفوري للمستخدم. بالإضافة الى ذلك تم اثبات دور الإداريين والقيادات العليا في المؤسسة ودعمهم للمشروع ودورهم في إرضاء فريق العمل على المشروع وذلك لضمان نجاحه. علاوة على ذلك تم إثبات دور حلقات الاتصال المفتوحة في المؤسسة في الوصول الى متطلبات مستخدم الخدمة في مشاريع الابتكار.

وقد أكد الباحث في هذه الرسالة على الدور المهم للحكومة في وضع دليل للموظفين يوضح لهم مفهوم الابتكار ومهمته في تحقيق العديد من المعاملات في وقت قصير وبتكلفة أقل للمستخدم. بالإضافة الى التوصية على إدراج البحوث الأكاديمية والاستفادة منها في مشاريع الابتكار الحكومي. بالنسبة للتوصيات للبحوث المستقبلية فقد تمت دراسة عوامل ومعايير نجاح مشاريع الابتكار في القطاع الاتحادي للدولة فقط وعليه يجدر التركيز في البحوث القادمة على القطاع المحلي لمختلف الإمارات في الدولة . بالإضافة الى إدراج مستخدمي الخدمات الحكومية ذات الطابع المبتكر للمشاركة في البحوث المستقبلية وذلك لانهم يمثلون الجزء الأساسي في تقييم مشاريع الابتكار التي من شأنها تطوير مستوى الخدمات الحكومية في الدولة.

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## List of Tables and Figures:

<b>First: List of Figures:</b>	
Figure (1)	Project success criteria- summary for section (2.2.1)
Figure (2)	Conceptual module- the effect of project success factors and project success criteria's in project success or failure
<b>Second: List of tables:</b>	
Table (1)	Critical success factors (Adapted from Fortunes & White 2006)
Table (2)	Various types of innovative project strategies (Adapted from Van der Panne at el 2003 & Veugelers & Cassiman 1999)
Table (3)	Summary for the research project success factors and the sub variables under each factor- summary for section (2.3)
Table (4)	Research hypothesis based on chapter 3
Table (5)	Demographic data
Table (6)	Descriptive statistics for project success factors (part 2) - used in the research questionnaire
Table (7)	Descriptive statistics for project success criteria- part 3 in research questionnaire
Table (8)	Correlated test
Table (9)	Regression test based on research finding

# Chapter One: Introduction

## 1.1 Overview:

Government is considered as a service provider in a competitive environment, therefore they need continually to innovate to be able to serve the community (Potts 2009). Precisely, innovation reflects a fundamental activity in the public sector. Innovation aims to support public service by enhancing service performance and by quick responding to the user's needs and expectations. However, the theory of innovation in public service "one size fits all" indicates that with the variety of community service the innovation activities need to satisfy end user's needs (Tether 2003). Yet, its broadly progressively in practice that government services need to increase the level of efficiency on parallel with innovative project in private sector (Potts 2009). For that's reason, innovation in public sector concentrates on developing, testing, and implementing innovation ideas as an effective project that's aimed to deliver the public organization service successfully to the end users.

Moreover, effective innovation is the development and realization of new process, products, services and approaches of delivery. Those developments reflect enhancement in project outcomes quality and efficiency. From this perspective, Innovation defines as a creation of process that is fully operated with the awareness and cautions actions (Tether 2003). Also, innovation describes as exploring and development new products and new organizational set-ups (Dosi 1988). Based on the concept of innovation, most of the innovations are the outcomes of studied and organized plan. That's means innovation follows a methodology which are similar to any project methodology. Furthermore, it's remarkable that a success innovative projects usually starts with a number of knowledge that translates into information and that's to create a new and useful products or services for the public users (Radhakrishna & Varadarajan 1991). According to the creation of the decree No 9 in 2011, its emphasize that the services of government realized through the efforts of making the service operations closer to reach by the community and by the end users (Van Gobel et al. 2015). That's mean using innovative projects that's contains various technological services helps the users to reach and to accomplish his needs from that services in short time. This is clarified that the reason of developing the majority of innovative projects driven from the emergence of new technologies, which aims to

enhance the overall organizations services and products.

Given the dominance introduction about innovation, its unsurprising that analysts concentrate on developing peculiar innovative project for public services rather than focusing on how to deliver that type of project successfully to the end users (Tether 2003). Since a long time ago, its observed that public sector services experience a deficit in innovative project compared to the private sector or the service that's provides within the same market. At this point, the debates on the comparative efficiency for any kind of services that's provides to the citizen observed by most government department (Potts 2009). Dispensa (2013) points out that the challenge in providing success innovative project exists when there is a lack of knowledge on how to better integrate the technology into the public service. Another challenge is the lack of knowledge on how to make new innovative project successfully.

Overall, successful organization tries to understand the nature of challenge that involves in project success and tries to manage them through development project strategies. Drucker (1998) agrees with the previous statement by pointing out that the more organization recognizes what they are doing, the less chance to fail appear within the project. That means the government needs to understand the critical success factors and criteria for any kind of projects and that to success in delivering their product or service to the end users. However, enhancing any innovative project needs to concentrate into two main components, the success criteria and success factors (Korbijn 2014). The criterion defines as a measurement by which anything can be judge. That means it's the evaluation of project success (Lim & Mohamed 1999). In contrast, critical success factors are defined as variables that's have a direct impact on the proficiency of an organization, program, or projects (Korbijn 2014). Jugdev and Moller (2006) state that success factors are the variables that increase the organization probabilities to achieve the project established goals and objectives.

## **1.2 Research Problem:**

Recently, lot of pressure appears in the U.A.E government department and that to provide more intelligent and innovative services. For that reason, the U.A.E federal cabinet of ministers announces the designation of 2015 as a year of innovation and asked all the public sectors to adopt innovation in their services ( Schiliro 2015) .The story started in 2014 where the U.A.E ministry cabinet established the “national

innovation committee” and that to adopt, implement and follow up with the U.A.E national innovative strategy. The strategy contains around (30) national initiatives for adopting innovation across U.A.E (Elshafea et al 2015). However, government strategy aims to provides an innovative service that concentrates on developing a high quality electronic services through organization delivery channel such as email, websites, telephone, fax, customer services, etc. (AL-Khouri 2012). That means a lot of organizations in public sectors will develop a lot of projects that aim to adopt innovation through organization’s services and activities. Also, most public department strategies for 2015 aim to develop organization service climate that encourages using creative initiatives across organization services and activities (Elshafea et al 2015). As the results, adopting innovative projects create a challenge for lot of organization especially if they did not study the critical success factors and criteria for their innovative projects. Furthermore, adopting innovation in public sector need to consider in earlier stage. Some organizations spend lot of moneys in innovative project that’s aim to enhance organization services but that’s new types of services do not contribute in improving the public user satisfactions. That’s mean the organization project does not success to deliver the adopted innovative services to the public users. Such of this issue appear when the organization develop a program under the name of innovations but in other sides the customers does not accept it and they inform the organization that this program hard to use besides its contains a lot of errors and does not contribute positively in improving organization service. Based on that issue, it’s well known that the development and testing of ideas in a practical way represents an essential part of the innovation process. That helps in replication, learning and focusing on critical success factors and criteria that contribute on delivering the project successfully to the end users.

To sum up, the reasons that motivates to start exploring and studying the challenge of adopting innovative in public sectors through this dissertation is that various government around the world recognize the importance of innovative project through their services (Hartley 2005). For that reason, in the United Arab Emirates, the government initiates smart government as one of the innovative projects that contains different initiatives from different federal government departments. The adopted initiatives require using innovation through organization services. (Sethi & Sethi 2008). However, lacking the comprehensive criteria and factors list creates difficulties

for the project manager and the researchers to evaluate the project. For this reason, answering the questions of which factor and criteria are most critical for project success depends on understanding the criteria's and factors that lead to a project success and that what the research targets to review.

From the above introduction and from the current case study, this dissertation aims to examine the challenge of adopting innovation in the U.A.E federal government department, precisely through organization services. Each selected federal organization aims to offer various innovative services to the public users by adopting various innovative projects that aim to enhance organization services. However, to adopt innovation successfully within government service the research objectives covers the following areas:

- To explore the project success criteria and factors and how both variables contributes to project success or failures.
- To understand the relationship between project factors and criteria.
- To understand the roles and effects of organization, project team members and users on innovative projects factors and criteria.

### **1.3 Research Questions:**

In order to achieve the research aims and objectives, the current research addresses various questions to be measured through these dissertations:

- 1- What are the critical success criteria for innovative projects in public sectors?
- 2- What are the critical success factors for innovative project in public sectors?
- 3- How does the project manager in public sector projects manage innovation?
- 4- How do the project team members and organization affect project success factors and criteria?
- 5- How do the project success factors and criteria affect project success?

### **1.4. Structure of the Dissertation:**

Literature starts with an overview about the innovation in public sectors and the most success innovative project and services among those sectors. Also, literature review examines the theoretical background of the variables that contributes in the success or failure of the innovative projects. These variables are known as project success

criteria and project success factors. Project success criteria are considered as the measurements that judge the project success or failure (Korbijn 2014). The literatures discuss various project measurements such as: meeting user's satisfactions, meeting team satisfactions, delivering the services on time, meeting the quality of the project and adding valuable innovative project to the organization. In contrast, project success factors present a set of circumstances or elements that increase the probabilities of project success (Korbijn 2014). The current research selects various factors such as; project strategies, knowledge management, open communication, project management support, project management styles and project management competencies. Both variables (project success criteria and factors) are discussed through the literature and demonstrate the impact of project users, team members and organization on the success or failure of the projects. However, the relationship between both variables (project criteria and factors) translated into research hypotheses. That's mean research hypothesis's aims to investigate the relationship between both variables and how both of them lead to project success or failure.

However, an online questionnaire was employed through projects participants from (20) federal government department across the U.A.E. These departments offered various public services to the users and communities in large. The research contributes to examine the effect of project success criteria and factors on those U.A.E federal departments. In addition, the current research aims to presents the effects of users, project team members and organization on those variables. Moreover, the research finds a significant positive relationship between most of the research variables except project quality. Furthermore, the most affected variables among project success factors and criteria are project strategies and delivering the service on time. The research finds that the U.A.E federal department gives more efforts to achieve the project strategy and that includes delivering the innovative service based on the users requested times. Overall, by the end of this research, the practitioners of innovation through public sector can recognize the best practice to minimize or to reduce project failures and thus improve project success.

### **1.5. Research Limitations:**

The current study succeeded to cover its objectives but inevitable limitations occurs through the dissertation such as: using an online survey to save more times but that way does not grant full responds from the participants. Some participants drop out the

questionnaire because they feel that the length of the questionnaire is too long. Also, the research sample indicates the project team members instead of users. For that reasons, its recommended for further research to cover the communities and user's assessments in innovative services that offered in U.A.E federal departments.

## **Chapter Two: Literature Review**

This chapter investigates the theoretical background of the variables that contribute to success or failure of the innovative project. On the other hand, those variables known as project success factors and project success criteria. Both variables (project factors and criteria) used in the recent research for the purpose of continuous improvement of innovative project in public services organization. However, critical success factors for any projects are defined as the variables that have significant matters on which the innovative project manager needs to concern about because those variables impact the probabilities of project success (Korbijn 2014). The paper starts by outlining the continuous development initiatives of the innovative project in public sectors and that by giving a brief experience about the development of innovative project and the main challenge that contribute in limiting the expansion of innovation in public services. Later, based on various academic journals, the current study indicates the common project success criteria's and factors that's used in innovative project through public services. Follow up, this section selects a limited number of factors and criteria's that's influence the innovative projects and that's selections aims to study the effects of each variables in project success or failure. In addition, the study aims to recognize how each variable influence by the project team members and project managers.

### **2.1- overview of the innovation project concept in public sectors**

#### **2.1.1 innovation in public sector:**

Innovative project in public service is a project with a progress that is completely operates with awareness and deliberate activity (Van Gobel et al. 2015). That's mean Innovation is concentrated on exploration, discovery, investigation, improvement, and adoption of new public projects that indicates improvements in organization products or services (Dougherty 1992). According to (Van Gobel et al 2015), innovation in public service projects is the activities that intent to meet the goods and services demands for the public users in technological way. Another definition introduced by Barras (1986), indicates that innovative projects in public organization offer products such as a good or service to the users or individuals in innovative way. Based on

(Van Gobel et al. 2015) study, they agree with the previous statement by indicating that innovation in public organization is an idea that applied in the organization and resulted in new product, new service, new technology , or new plan for the public users or organization member.

However, the above definition of innovation in public service stimulate to raise the questions that need to concern; why should government, public service directors and experts need to be interested in adopting innovation (Albury 2005)? The emergence of new technologies drive most of the organization in public sectors to develop and adopt innovation within their service (Stewart & Kastle 2015). For that reason, without innovation and with more investments, these all transforms to raise workloads for most of the professional and service managers within the organization (Albury 2005). It's well-known that the drivers of innovation in public sector are to achieve a common development in governance and service performance and that contains efficiencies in addition to raise public value (Hartley 2005). Moreover, the drivers of adopting innovation in public service projects are commonly users and manager ambitions to create new service or to update the existing service with the latest technology (Damanpour et al 2009). For that reason, the local government require to adopt the innovation that attached the features of relative advantage such as appropriateness, accuracy, sustainability, tradability which means possible to try, observations and that's mean easy to observe the service (Van Gobel et al. 2015). However, adopting innovation by local government mean that public service directors and experts required to have the abilities, chances and inspirations to innovate and to deliver that innovation service successfully to the end users (Hartley 2005). This clarifies that meeting users expectations and enhancing innovation techniques are all worthy tools (Stewart & Kastle 2015).

To sum up, innovation motivates public service organization to develop organization function, in order to responds to the requirements of the public users by adapting new technology that parallel with technology development in the same community environment. That's mean providing an easily development service with technological advancement that are understandable and efficient with the users need (Stewart & Kastle 2015).

### **2.1.2- The Characteristics of Successful Innovative Projects in Public Services**

The induction of innovations in public sector normally contains two stages and that to measure the features of success innovative projects (Walker 2003). First, idea development and that motivate the organization to make an action through using the available resource plans. In addition to ensure that innovation can be implemented through public services. Then, the development of innovation whereas the biggest efforts exists when the organization aims to transfer the innovative idea into something tangible. However, sometime a success initiations of one innovative project lead to support the organization to success in other type of innovative service projects. Moreover, (Hartley 2005) argue that innovation does not consider as new idea but it's a new practice to implement within the public organization activities and that practice aim to create a success innovative service for the public users.

Furthermore, success innovative projects within public services contains various features and concepts. Success innovation adoption means that organization adopts new technology and that to achieve public user's satisfactions, particularly under the condition of changing and developing the existing services that the organization used with current technology. Also, the success innovation adoption usually exists when the organization achieve public users demands for high quality and better services (Damanpour at el 2009). Based on the explanation of the success innovation features in public service, it can be summarized that innovation starts with an idea that implemented by the organizations and that to improve or develop new service to individual users, groups or the community in large (Tether 2003). Most of the success innovative service projects are the minor adjustment of the existing service or procedure. That means innovation could be a new way for organization, individual, and teamwork to meet the requirements of a particular problem or answer. This new way that the organization applies replaces the old ways that the organization used in the past (Stewart & Kastle 2015).

### **2.1.3- Examples of Success Innovative Projects:**

There are different examples of success innovative projects that results from technological advancement (Tether 2003) . Recently, a lot of public organizations

spend a lot of effort to increase their innovations productivity features. For examples, many local organization in Korea use creative management for innovative projects and that's by adopting different initiatives to motivate creativity in employees than use that creativity that the employee earned in tangible innovative projects (Sethi & Sethi 2008). Another example appears in the United Arab Emirates, the local government focus on initiating new type of innovative project to public users and that types of projects used advance technology to collects different services in one projects. Such innovative project called E- government and that project combines the innovation with new technology. This approach raise the efficiency of organizations, decrease the costs, facilitate the process and that's offers numerous benefits to all involved parties that used the approaches (Sethi & Sethi 2008). E- Government in Dubai contains different stages (Sethi & Sethi 2008). First; Emerging stage and that's mean initiate an official online government which aims to offer service innovation. Second; enhancing stage, which mean raise the information about innovation service in government site. Third stage; interactive and that mean users can get benefit from the service by downloading forms, emails and interact with organization through the website by online chat. Fourth stage, transactional, which means the users, can pay online and make any other transactions through online service or application. Final stage is the seamless stage and that's mean complete integration of service through organizational boundaries. Moreover, another type of success innovative services appears in Boston city in the United States. Since 1990, Boston government adopts electronic government and that's known as e- government projects (Chen & Gant 2001). that's type of project aims to offer electronic information and services to the public users and businesses. Boston government aims to provide an online transactions for the users rather than use department lines . The aims of the government are to move beyond the first generation of e-government and that's verified by using electronic option such as online transactions (Chen & Gant 2001). In addition, Boston city offers government services by transforming the government services to the citizens in their residences rather than government facilitates (Chen & Gant 2001).

To sum up, various organizations engaged with the innovation projects and that engagements aims to develop the organization products and services with the latest technological service (Damanpour at el 2009). As the results, updating organization

with the latest technological services helps the organization and users to absorb the new associated knowledge and to raise the probabilities of getting benefit from innovation service projects (Damanpour et al 2009). However, beside success innovative project features, the organization need to determines the project success factors and criteria because these measurements help to determine the public organization priorities in adopting innovation within service projects. In addition, that's measurements help to indicates wither the project indicators drive through project success or failure.

## **2.2- Introduction to Project Success Criteria:**

Section (2.1) gives an overview about the innovative project concept in public sectors and that's includes the definition of innovative project, the characteristic of innovative project in public sectors and examples of success innovative project in public sectors. However, the purpose and the main core of this research is mainly to investigate the challenge of delivering the innovative project in public organization successfully to the end users. The innovative projects in public sector usually consist of developing a technological service based on innovation (Damanpour et al 2009). That kind of technological service is the core activity for the government organization. However, the project challenge in the current case study reflects the project experience with innovation and whether the project succeeds or fails within this field. For more explanation, the success of any innovative project concentrates on delivering the project successfully to the end users. On the contrary, if the organization does not success to deliver the innovative project to the end user that's mean the project failed to achieve the main project objectives (Teece 2010). For that's reason, to determine and to avoid the project challenge, the organization need initially to set up the basic criteria for the success of innovative service projects than concentrate in project success factors (Korbijn 2014). There are few topics in the field of project managements discussed the success of innovative projects. As it's known, project success is a complex concept (Korbijn 2014). In the above literature, various academic studies give an overview about the success of innovative projects and that drive to investigate two main concept that refer to project success : (1) project success criteria's and (2) project success factors (Muller & Judgv, 2012 ). Both items are discussed and determined the effect of project team members and managers in the

success or failure of innovative projects in section ( 2.2) and (2.3). However, Muller & Turner (2007) supports the previous statements by stating that there are two basic components of project success:

First, project success criteria consider as a set of principles, standards, or measures that used to assess the project success or failure. The project success criteria consider as dependent variables that measure project success or failure. Also, the project success criteria's usually answer the questions; how the organization or users determines the project success or failure (Korbijn 2014). That's mean the users are the judgment to determine the project success or failure.

Second, project success factors introduce a set of conditions, facts, or elements that influenced and rise the likelihood of project success (Kerzner, 1987). However, the project success factors consider as independent variables that make the success criteria's' more likely (Korbijn 2014). That mean the project success factors consider as variables that are used to locate the value of project success criteria (dependent variables). The project success factors usually answer the questions of what are the few things that need to go right to determine the project success.

Overall, this section aims to illustrate the effects of project success criteria's than project success factors on project. That's mean the main concentration of this research is to explain the effects of various criteria's and factors in project success. In addition, both project success factors and criteria explains the roles of organization, project managers, project team members, and users in increasing the chance of project success. However, the success of various innovative projects in public organization determined by using various criteria's and that's what the current research discuss in the following section (2.2.1)

### **2.2.1. Project Success Criteria:**

The initial step in exploring the project success criteria's is to agree on the definition of criterion (Dvir et al 1998). The criterion defines as "a principle or standard by which anything is or can be judged" (Lim & Mohamed 1999). Early work in the project success criteria anticipated that the main criteria for success project is when the organization achieve the project within the plan, timeline, budget, and required

quality (Westerveld 2003). In addition, the measurements of project success sometimes differ based on the assessor (Freeman and Beale, 1992). That's mean in public organization the main assessor for the provided services is the users and community in large. Therefore, comprehensive success criteria's need to consider various users interest and views regarding organization services because that views and interest drive the organization to concentrate more on users demands (Cooper and Kleinschmidt, 1987, Pinto and Mantel, 1990 & Freeman and Beale, 1992). Furthermore, the organization considers their projects success if the outcomes of their project main activities such as services, products or systems have met management anticipated return on investments. Therefore, in order to achieve success projects, the current study discuss five measurement in figure (1) to assess the project success such as: meeting user's satisfactions, delivering the project on times, meeting the project quality requirements, and adding valuable projects to the organization. Each criterion discusses in details with these sections and determines the impact on project success.

First measurement for project success is meeting user's satisfactions and that indicates meeting user's adoption and user specifications for the innovative projects. In di Gangi & Wasko (2009) study, they clarify that innovation adoption by the users was based on the capability of the organization to observe the required techniques and to respond to the user's interests regarding innovation. Most of the organizations are more likely to adopt innovative projects that are supposed to offer the greatest relative advantage for the organization service. A major interest for an organization that seeks to adopt innovation is the demand to recognize the technical requirements for the innovative projects. In addition to recognize the end user's needs (di Gangi & Wasko 2009). However, Rogers (1983, p. 15- 16) defined (4) general aspects that effect innovation adoption. First, relative advantage and that's mean the degree to which an innovation is observed as being better than its precursor. Second, compatibly and that identified as the degree to which an innovative project is realized as being appropriate to use by the users and community in large. Third, complexity and that means the degree to which innovative services that are offered by innovative projects is being difficult to use or in other meaning the degree of complexity that's drive from the innovative projects. Finally, observably and that's mean the degree to which the outcomes of an innovative projects are perceived to others. Overall, how an organization indicates which innovative project to adopt and which to ignore demands

on balancing the interest of the organization with the interest of its end users and that's helps to determine the user's specifications for innovative projects (Cooper 1987).

Moreover, public organization usually meet the user's specifications by ensuring that the project achieve the customer demands. However, the project manager needs to recognize how the customer understand and evaluate the organization service projects and based on that he estimates the users demands and determines the best way to deliver a superior innovative projects (zeithaml et al 2002). For that's reason, the customer evaluation for the quality of the submitted service projects is strongly based on the assessment of their current experiences with the service provider (Schuhmacher & Kuester 2012). That's mean the impact of user experiences in the provided innovative services is important because the users determine whether the project success to deliver the innovation concept or not. Moreover, Innovative projects means that organization are creating something new in shape of service or product and that help to raise their user's satisfactions. Because innovation clarifies as coming up with something unique, that's usually results in a positive customer experiences. Therefore, the core of innovative project is to attract the users and satisfy them (Simon & Honore 2012).

Second measurement for project success is delivering the project on times. Various public service organization use innovation to guarantee deliver the service on time. That clarifies that innovation help to grant faster service for the public users (So 2000). For that's reasons, each public service organization needs to provide an innovative service that help to complete more transactions with short time. However, Timely delivery is the basic factors for success of service providers. for that's reasons many public service organization use innovative project in purpose of developing the organization service systems and that development grant faster service for public users at any times (So 2000). For example; some organization provide technological applications that contains their basic service and the users can receive his requirements from that service within 24 hours from completing the required application filed (Alhomod & Shafi 2012).

Third project success criteria represent in meeting the quality requirements and that includes ensuring the quality of the innovative services project. Ensuring the quality

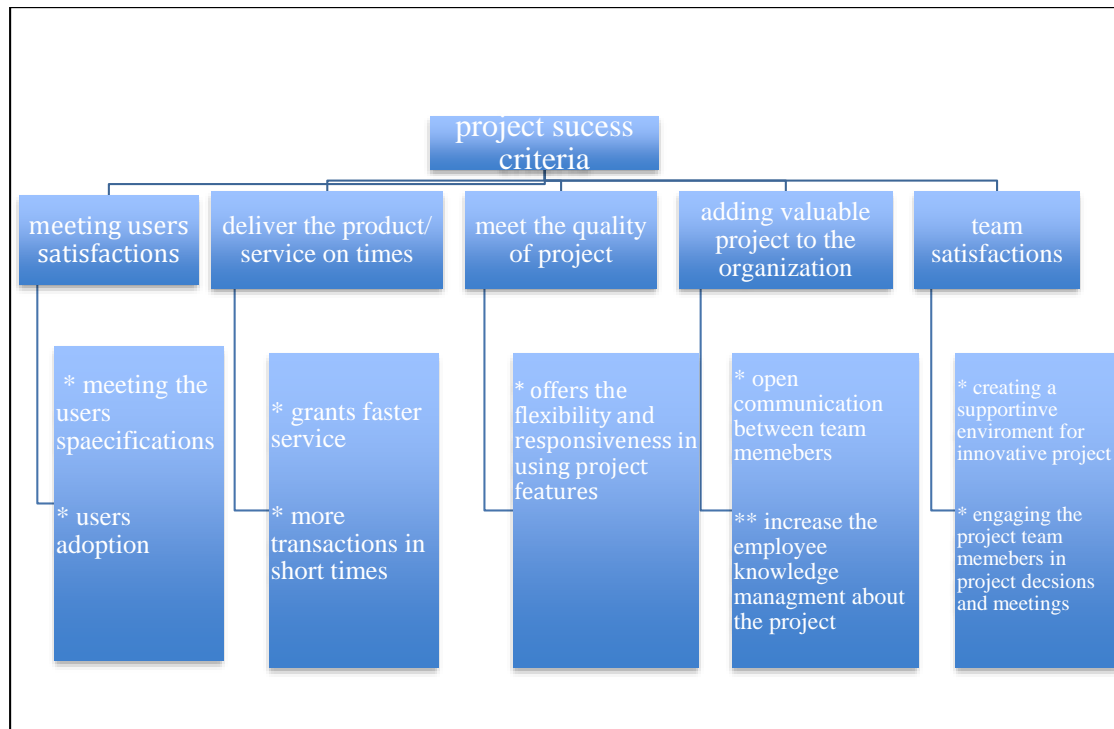
of innovative service helps to deliver the project technical features to the end users successfully (Abetti 2000). However, a technological service needs to obtain quality requirement and that's mean the organization need to concentrate in service quality to be able to deliver the innovative project successfully to the end users (Blazevic & Lievens 2008). In Prajogo & Sohal (2003) research, he mentions that project quality criteria represent various project aspects such as flexibility and responsiveness. Significantly, innovative projects help to increase the flexibility in using organization service based on advance technique. Moreover, the quality of the innovative services projects depends heavily on the knowledge and skills of the team who's involved in the process of innovation because team member knowledge help to provide an innovative service that's meets user's quality requirements. Despite the fact that various innovative service depends on information and communication, project team member's knowledge are decisive for the success of the innovative service (Prajogo & Sohal 2003). Also, for the organization that's seeks for quality in innovative projects, usually organization expect to increase the demands for project team members' knowledge and skills qualifications. That's qualification is important because its help the project team members to prepare to deal with master new tools and techniques across the innovative project. Also, qualified team members usually give a serious consideration to raise the quality of the provided service (Prajogo & Sohal 2003). Nowadays, services depend on an intensive use of technologies. These technologies affect the quality of the service and therefore the wellbeing of the users (Blin & Hipp 2003). Overall, Evidence exists that quality requirement for the provided services are a basic strategy for success project. Moreover, ensuring the quality of innovative projects contributes in adding valuable projects to the organization project portfolio.

The fourth project success criterion is adding valuable project to the organization. The innovative project usually add value to the organization projects and that value exists when the organization success to end up with satisfied users. That's mean the project add value for the organization when its achieved various elements such as focusing on customer demands, building a great project team members, and delivering the project based on organization promises. However, the project team members consider as the greatest asset for delivering the innovative project successfully based on user's needs (smith et al 2005). Also, in smith et al. (2005) journals, the authors determine two

basic tools that assess how the innovative projects add value to the organization activities, that tools represents in open communication and knowledge management. First open communication mean all employee whose involving in innovative project can add value to innovative projects by supporting innovative change and feeling that those change is acceptable to them and to the user at large. Second; knowledge management and that mean the employees shares their knowledge especially about users demands and use this kind of knowledge to recognize users service demands, . Moreover, understanding user's demands helps to develop a suitable service that can add value to the organization projects.

The fifth project success criteria is team satisfaction. Nerkar at el (1996) indicates that innovative project drive many positive consequences for the project team and motivate team satisfactions. For that's reason most of the organization demands managerial and talents skills team members and that to convert employee new idea into real practice (Nerkar at el 1996). That's mean involve the team members' innovative idea in the projects motivates team satisfactions and help to raise their self-confidence to provide more ideas that motivate project success. However, managerial perspective on innovative project usually directing the development of a project and that by concentrating in project team satisfactions because in managerial perspective they believe that team satisfactions and performance at the group level are positively correlated (Nerkar at el 1996). Organization top management usually creates a motivational environment for the project team that participate in innovative projects and that's by engaging them in project decisions and project meeting.

Overall, Dennison (2014) states that every project need a critical success measurement and that help to deliver the users expected services successfully. Critical success criteria conventionally have been measured by the project capability to deliver the service or product within the project timeframe, budget and estimated quality. For that's reason, the current study concentrates on (5) main criteria's that explained in figure (1). Later, if those measurements are determined and approved as the judgment for project success that's mean the organization will depend on many different factors such as manager skills, competencies, project strategies and others to increase the probabilities of project success. Moreover, figure (1) summarizes the five project success criteria and the sub variables under each criterion that have been discussed within this sections.



**Figure (1): Project Success Criteria: A summary for Section (2.2.1)**

Overall, the above discussion concentrate on the criteria that stimulate the success of innovative projects. In addition, those mentioned criteria's in figure (1) encourage to foster innovation and its diffusion in public sector projects (Albury 2005). However, it's significant to realize the barriers and the challenge that appear among applying innovation service and the best way to deliver users' needs successfully. In addition, it's important to recognize if the organization want to preserve high rates of successful innovation (Albury 2005). Furthermore, it's well known that the development process of innovations contains a number of criteria that aims to move the organization towards its expected targets of implementing innovations across organization services and activities (Walker 2003). However, when the organization demonstrates the project success criteria based on organization and users demands, that's means its needs to depend on various project success factors to achieve the success of innovative projects and that's explains within the next sections.

## **2.3 Introductions to project success factors**

The term critical success factors explained in Korbijn (2014) dissertation as the relatively small number of significant matters on which the project manager should concentrate more on. Based on Rockart (1979) definitions, the critical success factors are specified to the project context and must be tailored to the project features.

In Dennison (2014) dissertation, he explains the previous statement by identifying a critical success factors as a specific service or specific activity that contains various features associated within the entity that reviewed by the individual. Moreover, Boynton and Zmud (1984) defined CSFs as those few variables that must go well to ensure project success. That's mean CSF depends on where the organization is and where it wants to be. For that's reason, Brotherton and Shaw (1996) define CSFs as the fundamental variables that need to absorb by the organization. Moreover, Brotherton and Shaw (1996) highlights that CSF are not goals but are the action and procedures that can be monitored to accomplish the organization objectives. In brief, a critical success factors known as a condition that required to ensure project success. That mean the organization mostly need to spend their times to focus on the variables that's aims to enhance and increase the likelihoods of projects success (Poon & Wanger 2001). However, the significance of defining the CSF in innovative project is to rise the success rate, decrease costs and avoid disillusionment with continuous development of innovative projects (Fryer et al 2007). Moreover, the critical success factors in projects aimed to deliver a differentiated products and services with unique customer benefits, in addition, to achieve excellent service value to the user (Cooper 1999).

Various researches discuss project success factors that emerged through the past twenty (20) years, the first investigation of project success factors was SAPPHO study ((Scientific Activity Predictor from Patterns with Heuristic Origins). That's research presented in the early of 1970 in the United Kingdom. The study contains 29 successful and 29 unsuccessful factors of innovative projects in chemicals and scientific instruments. The research recognized 27 failure factor of innovative projects and found that's both project success and failure factors relates to the innovators ability to various use aspects such as: recognize the client needs, marketing capacities, the adeptness of the development process, and the ability of the organization to realize

external information and management skills (Van der Panne 2003). After the SAPHO study, Cooper (1980) study presented later and concentrate on project that offer new product or services to the users. Coopers study contains around 200 Canadian innovative projects and presents three main factors for service success. First, the uniqueness and superior of the alternative service compared to the existing service. Second, the extent of organization to absorb the innovation through the future market development. Third, the service synergy compared to the available technology in other innovators organization. Furthermore, the field of project management has guided a significant part in distinguish the critical success factors of the projects. Moreover, Contributions and efforts drive from various researchers to identify the most critical success variables for projects (Korbijn 2014). Slevin and Pinti (1986) identify ten critical success factors that have been generally used by other research such as (1) project mission, (2) top management support, (3) project planning (4) consumer consultations, (5) personal, (6) team technical skills, (7) consumer acceptance, (8) project supervising and feedbacks, (9) open communication, and (10) trouble- shooting. Other comprehensive study was conducted by Fortune and White (2006), the authors reviewed (26) project critical success variables as its shown in table (1)

#	Critical success factors	#	Critical success factors
1	Senior management support	15	Project sponsor
2	Clear realistic objectives and strategies	16	Effective monitoring / control
3	Strong/ detailed plan kept up to date	17	Adequate budget
4	Open communication and feedback	18	Organizational adaptation / culture / structure
5	User/ client involvement	19	Suppliers good performance
6	Skilled / suitably qualified / sufficient staff/ team	20	Acceptance of possible failure

7	Effective management style	21	Training provision
8	Competent project manager	22	Correct choices of project methodology
9	Strong business case	23	Environmental influences
10	Sufficient / well allocated resources	24	Learning from Past experience
11	Good leadership	25	Project size, level of complexity, duration
12	Proven / familiar technology	26	Different viewpoints ( appreciating )
13	Realistic schedule		
14	Risk addressed / assessed / managed		

Table (1) Critical Success Factors (Adapted from fortunes & white 2006)

Moreover, the challenge in providing success services represents in how the end users perceive the service quality. That's mean the challenge mission for any organization in providing new service depends in verifying the customer experience with the newly developed service (Brentani 1989). For that's reason, (Poon & Wagner 2001) demonstrate the facts that implementing success innovation projects cannot be taken for granted. For that's reason, successful implementation of the project might not be used as intended. Moreover, critical success or failure variables that are suitable to various type of innovative projects might not be suitable for specific type of innovative services. A comprehensive response to the question of which variables are critical to project success usually relay on answering two basic questions such as: what factors lead to manage the project successfully? and what factors that consistently lead to achieve success project? (Davies 2002). Among the literature review, as its presented in tables (1), it's found that there are different views regarding the significance factors behind success of innovative projects (Brentani 1989). However, the aim of this study is not to come up with all the potential critical factors that might affect the innovative project success, which is difficult because of the

variety of projects specifications, but to limit the project success variables in innovative projects and identify the effects of each variables in delivering the project successfully to the beneficiary (Belassi & Tukel 1996).

The examination of project success factors on various studies aims to identify those levers that project management can pull to raise the likelihood of completing a successful outcome of the projects (Westerveld 2003). Optimally, project success factors represent the variables that affect the organization and management abilities to achieve project successfully. Those variables realized the highest possible effects of the management environment in probabilities of success or failure of innovative projects (Van der Panne et al., 2003). Precisely, Initial research on the CSFs for project management concentrate in different aspects of projects such as project manager control aspects and that's include project monitor and project strategies (Westerveld 2003). However, the current studies determined the initial research on critical success factors and concentrates in locating different methods that used in success project management such as: project strategies, knowledge management, open communications, top manager's supports, management styles and project manager competencies. Moreover, those variables need to take into account in managing the innovative project successfully (Westerveld 2003). For that reason, this section explains how each variable contributes in the likelihoods of project success or failure and how the project members contribute to that success (Westerveld 2003).

### **2.3.1. Project Strategy:**

The organization that aims to increase the likelihoods of project success aligns the concept of innovative projects strategies with organization strategies (Berghman 2012). However, in the current case study this mean that the strategy of innovative project is obviously manage to stimulate the customer to use the new development service or projects without letting them trapped in non- innovative services (Berghman 2012). That's mean most of the organization strategy aims to save the users times in service delivery and consider that's strategy supportive to project success. For that reason, Teece (2010) emphasizes that public Organization usually obtain various project strategy to increase the success of innovative project and those strategies verified based on organization strategy. Van der panne (2003) and Veugelers & Cassiman (1999) support the previous statement by mentioned three project strategy that aligned with organization strategy and help to drive the innovative project toward success table (2).

#	Organization	Details	References
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	strategies		
1	Internal research and development center (R & D)	1- Make an internal research based on various research on the same field of organization activities  2- Develop a deep understanding on public requirements.	Van der Panne et al (2003)
2	Use outsourcing company	Aims to hire a temporary project manager to supervise the innovative project.	Veugelers, R & Cassiman, B (1999).
3	Use consultation company	1- Aims to provide feedback and recommendation based on organization activities  2- Based on feedback, choose the suitable innovative project to improve the organization services	Veugelers, R & Cassiman, B. (1999).

**Table (2):** various types of innovative project strategies (Adapted from Van der Panne et al 2003 & Veugelers & Cassiman 1999).

As it's mentioned in table (2). First project strategy verified when the organization aims to use internal research and development center (R& D) and that to develop the innovative projects (Van der Panne et al 2003). (R & d) tasks depends on examine various innovative projects on the same field of organization activities (innovative project type). That's examinations help the research and development center to develop a deep understanding of the users requirements and based on that (R& D) recommend the suitable innovative projects to improve the organization services and to save users time when they want to gain organization service (Van der Panne et al 2003). Second innovative project strategy verified by Veugelers and Cassiman (1999) whose states that some public organization use an outsourcing organization to drive the innovative project successfully to the end user. That engagement between public organization and outsourcing company aims to hire a temporary project manager to supervise the innovative projects. That's types of temporary project manager hired by the organization in case when the organization does not have an expert innovative

project managers (Veugelers & Cassiman 1999). Third project strategy depends in signing an agreement with a consultations company and that's agreement aims to provide the feedback and recommendations based on public organization activities. Later and based on feedback level, the consultation company provides the suitable innovative projects types and that to improve the quality of organization public service (Veugelers & Cassiman 1999).

Overall, most of the project objectives aims to save the user's times. According to Musselwhite (1990), time - based strategy since 1990 is the most powerful competitive methods in improving the organization products and services. That's mean quick responding to user's requirements and shorter cycle of service requirements help the organization to increase the likelihoods of project success. Moreover, when the organization spends enough times to plan for the organization and project strategies that's mean it's give the time to discuss the requirements, opportunities and challenges in developing the projects based on organization strategy (Musselwhite 1990). Furthermore, the above innovative project strategies help the organization to gain guidelines to select the suitable innovative projects strategies that aligned with organization strategy (Van der Panne et al 2003). For example, the organization connection with research and development institutions generate sources of knowledge that motivate to develop an innovative service project based in advance technology. (Camagni 1995). This cooperation between organization and D&R facilitates the spreading of information and knowledge about technological innovation projects. That's mean, this collaboration increase the innovativeness in the organization projects and that through the process of interactions between (R &D) and the organization (Frenkel 2001). Also, the engagement with both, consultation organization and internal research and development center helps to increase the knowledge management in innovative projects

### **2.3.2. Knowledge Management:**

In Gray (2001) dissertation, he mentions that knowledge management through organization environment known as the collective programming of the mind which used to generate more knowledge and experience from the organization members who is involved in different projects. That's mean knowledge management variables support the concept that public organization culture help to develop learning

mechanisms for the project team and that usually results in increasing the probabilities of project success.

Moreover, the adoption of innovation in public service organization over times help to build a project team that contribute in adding valuable innovative project to the organization. Building a strong project team members requires the organization to offer the necessary capabilities and knowledge that help the team to continue outperform with other local government who have an experience with innovative projects (Damanpour et al 2009). Cohen and Levinthal (1990) debates that organizations help the project team to gain new project knowledge by improving their previous project knowledge skills. Furthermore, successful sharing of knowledge between the project team in organization project area is important because the exchange of knowledge allow the project team to use their previous project experience to solve several project issues instead of collecting knowledge anew to solve the current project issue (Fong and Kwok 2009).

Moreover, in Fong and Kwok (2009) study, the researcher's mentions that in Love et al (2005) study, they confirm that there are three types of knowledge sharing between project team across organization environment: First knowledge in projects and that knowledge established in a project in from of documentations, meeting, and discussion between the project team. Second, knowledge about the projects and this type of knowledge contains the fundamental elements that the project team member need to know about the project such as; project designee, project plan, project risks, and skills management. That's type of previous knowledge's need to obtain by the project team member to increase their knowledge about the probabilities of project success. In addition, the project team needs to gain the knowledge about the end products or services and that to grantee that the project will satisfy the end users requirements or not. Third, Knowledge from projects and that drives from the project team experiences that archived from the executing projects. This type of experience reflects the best project team practices and lessons in innovative projects. In some cases, the project lessons are generated too late or are forgetting and that's happened when the review of projects carries out by the end of project instead of reviewing by each project stage (Fong and Kwok 2009).

In contrast, project team may suffer from organization resistance to learn (Van der

Panne et al 2003). That's mean, in some cases the organization does not involve an experts project team within the innovative projects and that's does not help the project team to gain more experience in the project they involved on. Instead of that the organization use the same project team for various types of project (Van der Panne et al., 2003). For example, used an IT project team for various types of innovative project. As the results, that's unqualified team in innovative projects increase the likelihood of project failure because the IT project team suffer from lack of knowledge in innovative project filed (Van der Panne et al 2003). For that's reason In Dougherty (1992), the researcher indicates that in innovative project the project team require perspicacity and knowledge from different expert. However, when the experts in project team shared their understanding about the innovative projects that's they involved on, they usually achieve the organization target which are delivered the project to the end users successfully.

Overall, organization culture is the leverage for the project team to add valuable innovative project to the organization project portfolios (Detert at el 2000). In addition to be successful in the innovative projects, the organization culture need to motivate their project team to obtain enough knowledge and understanding about the project they involve on. However, developing knowledge management in projects team requires the organization to give more attention to the open communication within project environments because knowledge sharing usually obtained by flexible communication across project parties (Lee at el (2016).

### **2.3.3. Open Communication:**

Open communication considers as one of the most important information system through every success projects and that because every project offers theoretical underpinnings for project manager who usually learn and improve the communication skills through the environment of organization project (Gillard & Johansen 2004). Open communication climates usually motivate or deter the project team members to participate in increasing the likelihoods of project success (Gillard & Johansen 2004). that's mean a significant key to success new programs or services development is the degree of cross- functional collaboration achieved within a project team. In Pinto & Pinto (1990) study, they demonstrate that high cooperation teams differed from low cooperation teams and that depends on the extends of using informal approach for communication such as conversations, electronic mails, text messages and phone calls

between team members. That means the cooperation is considered high by using more informal approaches for communication and vice versa.

However, motivations climates for success open communication between the project team exists when the organization provides a theoretical structure for project managers and usually that structure drives from information resource project manager who expect to spend a large percentage of his time in communication activities. The advantage of those communication activities is to recognize that communication channel is interactive and manageable between the project parties (Gillard & Johansen 2004). optimally, Information resource manager (IRPM) occupies a unique position in the likelihood of project success or failure and That because he have a responsibilities to communicate with several project parties whose occupies an important roles in project (Gillard & Johansen 2004). First, IRPM communicate with a diversity of end users and that to determine the user's demands. Second, IRPM communicates with the functional managers and that to understand the project objective. Third, IRPM communicates with the program department manager and senior level management because both of them helps to gain the project resources and to take the responsibilities of the project success. Finally, IRPM communicate with various vendors, contractors, and other external agencies who's involved in projects. Moreover, communication with above four project parties are important to determine the probabilities of project success or failure. That is why each party have responsibilities in part of the project and the IRPM need to recognize and understand that's responsibilities by open communication. Consequently, open communication ensures that those four parties are doing their tasks based in project objectives and customer demands (Gillard & Johansen 2004). In addition, open communication between project parties help to grant the quality of the project (Abetti 2000).

However, some project parties refuse to accept open communication with IRPM because they may hide behind defensive barriers and that barriers drive from lack of self-confidence. For examples, some managers cannot accept any criticism from IRPM and therefore will not share information with the IRPM that lead them to personal critiques. When this type of parties Unable to assert them, that leads to refuse the voice opinions and refuse making suggestions for development. However, this type of managers contributes in project failure and that happened by providing

unquestioned orders and directives in tending to offer self-protective to their occupation (Buchholz 2001).

Overall, open communication climates stimulate or deter the project team to participate in the project information transactions and that's by increasing using the informal communication methods (Buchholz 2001). As its observed above IRPM consider as project team member and occupies a unique position in the probabilities of project success. IRPM motivate open communication with several important project parties such as end users, functional managers, program department manager and various vendors. Those four parties contribute in project success if they agree to communicate successfully with the IRPM. In contrast, some parties' refuse to participate in open communication and this types contribute in the likelihood of project failure (Abetti 2000). For that reason, managing the project participates are important because that contributes in project success. Therefore, project success needs special project management techniques from the organization top manager and project manager's members and these techniques help to increase the likelihoods of project success.

#### **2.3.4. Top Management Support:**

In Page (1993) study, he indicated that's one quarter of all innovators are qualified top management whose encourage adopting innovative project as a requirements of organization success. That's mean Top management supports enables the innovative projects to meet customer expectations and serves as driving force for the major initiatives and efforts that made to meet that expectation's (Van der Panne et al 2003). In West & Anderson (1996) study, the researchers clarify that the value of top management support plays a fundamental roles in locating the probabilities of success or failure for the innovative projects. This clarifies that top management support is fundamental variables in projects success because the support is mostly strong if the project champion come from the top management. Besides that, top management supports helps the project managers in understanding and achieving the project aims and objectives (Belassi & Tukul 1996). For example, top management support the functional manager who have the responsibilities to direct the project team and to ensure that the innovative project objectives associate with the organization overall strategy (Belassi & Tukul 1996).

Top management support requires to give a strong theoretical motivational foundation about innovation in public sectors and that help to raise the success of innovative projects. As the results, that theoretical foundation, help the project team members to understand the effects of innovative project in the organization service and activities (Fairbank et al 2003). In addition, top management support requires to provide a communication infrastructure and that to stimulate the free flow of suggestions, ideas' rationales, and perspectives within and among project manager and project team members (Fairbank et al 2003). Also, based on Fairbank et al (2003) expectancy theory, project team members are most strongly encouraged to contribute in the success of project when the top management ensure that project team members can do so successfully and when the project team members know that the participations or the selected project team members in project are satisfied with the top management support

In contrast, there is an argument that the top management can measure and judge the success of innovation project on the first five years after launching the projects. As the results, the top management requires to consider risk tolerance and that by preventing viable innovative projects to fail before it's officially launched to the public users (Van der Panne et al 2003). However, Kleinschmidt and Cooper (1995) find out that top management support contribute to likelihoods of project failure as well project success. For example, through the implementation phases of innovative projects, some top management fails to maintain a clear communication within the projects team members, therefore, Poor top management responsibilities can raise risks and produce integrations problems through the innovative project phases. For that's reason, it's important for the top management to get a better observation of the causes that contribute to project failure before it's occurred.

Overall, there is a solid argument in previous research that top management have a probable impact on innovative project (West & Anderson 1996). That means, top management supports encourage the project team members to think about a range of skills and mechanisms that they need to promote the project success. In addition, top management support consider the priority of team satisfactions because they believe that's satisfactions motivate the team to work toward achieving the project success. Also, top management experience, knowledge and competencies in innovative project field creates a project management styles and that's styles help to drive the

organization projects towards success (Truner & Muller 2005).

### **2.3.5. Project Management Style:**

A success project manager usually obtained leadership styles that helps to delivers a better project results (Truner & Muller 2005). That means the leaders in innovative service projects is often obtained a significant management function. However, project manager who's acting as a leader play an essential part in innovative projects and that for two fundamental reasons (Truner & Muller 2005). First, leaders creates the organization environment that favor novelty and innovation. As the results, that's mean leaders encourages his project team to work and collaborate in innovative projects. Second, leaders organize the strategic target of innovative project based in organization strategy. Moreover, leadership usually set those targets and drive the organization projects by managing times, budget, and knowledge in orders to complete the project successfully (Truner & Muller (2005). In addition, Managers who's having a strong impact on innovative project procedures obtain substantial leaders features and that occurs by inspiring his project team to works toward project success. In Truner and Muller (2005) study, the writer Thamhain (2004) agrees with the previous statement by mentioning that the project manager contains an essential leadership roles in encouraging his team to work toward achieving project success (Truner & Muller 2005). However, Lee-Kelley et al. (2003) study the effect of leadership styles on project success and find out that project managers/ leadership styles affected by their perception of control. The authors find that there are a strong relationship between leader's perception of project success and his personality as contingent experiences. Therefore, the internal confidence, self-belief, knowledge and experience are likely to play a fundamental role in the manager capacity to increase the likelihoods of project success Lee-Kelley et al. (2003)

The leader's job mostly performed by managers and rarely it's performed by the employee because the employee has a limitation in his decisions making. However, the leader passion for champion and that clarifies why the leaders motivate the project team members to work toward achieving project success (Bossink 2004). That mean the leadership considers as Entrepreneur whose introduces, drives, and control the team members towards completing the innovative project and procedures successfully and that by facing the project challenges and by engaging them in project decisions

(Bossink 2004). Overall, project managers who play leadership roles, consider as fundamental elements in the promotion of team satisfactions across innovative projects. Nerkar et al (1996) agree with the previous statement by indicating that managerial perspective in directing most of the success projects concentrates in team satisfactions because they have view that team satisfactions have positive consequences on project success.

### **2.3.6 Project Manager Competencies:**

Organization attention to the duties of the project manager and the features of that competencies originally determined by Gaddis in his Harvard Business Review by 1959. In addition, Pettersen (1991) conducts a primary research that contribute in understanding the same filed of project management competence. As per above studies about the project success factors and based on different literature review about the project manager competences that contribute in increase the probabilities of project success , there was a finding that various project management competences affect the project success such as knowledge, skills, personal attributes . Those competencies sharing the idea that project manager requires an effective behavioral competencies to be able to achieve the project success (Crawford 2000). Also, in Crawford (2000) studies, it supports the previous statement by finding several behavioral competencies that distinguished project manager in leading the project toward achieving success and these competencies are explained as the following:

First, a success project manager based primarily on his personal characteristics. That means a manager who has qualifications of leadership can make various quick significant decisions about any issue within project phases comparing to the times it takes other manager to understand the project issue itself (Crawford 2000). Several people wonder how the project manager make a quick and success decisions, even under massive pressure. The answer is the process of making success decisions drive from accumulations of project experience's with various circumstances around that projects. Second behavior competency is the efficiency of the manager to develop an expert and corporate project team members (Crawford 2000). That clarifies that the development and introduction of new services or program requires to combine various expertise in the same projects. that's mean the project manager require to develop a

cooperative atmosphere across a project team (Pinto 1990) . Crawford (2000) agrees with the previous statement by indicating that success project manager used to emerge various team members from different culture within the same group. Third, Based on (Crawford 2000 ) study , Communication are the strongest features for project manager because leaders usually motivates the employee to communicate within project environment . Finally, monitoring and controlling appears basically in post 1995 research as requirements in success project manager competences (Crawford 2000). that's means the project manager capability to monitor and control the project performance in each phases of innovative projects are depend on manager abilities to control and monitor the project team member performance and that all helps to increase the probabilities of project success based on users demands.

Based on (Delo et al 2010) study, the project management competence divide into three category: input, output, and outcome competencies. First : input competencies and that's include the basic elements that's need to exists in success project managers such as; knowledge, skills, and decision making ability Other research that align with previous study demonstrate that successful project managers competencies usually depends in a various range of general inter- personal and leadership skills. That competency includes behaviors competencies such as self- control, flexibility, communication, and self-assurance. Second; output competences and that's competencies generally based on manager job description which related to a specific project manager role such as maintains the employee commitment in project tasks. Third: outcome competencies and that's verify as the performance of the project manager in the project. overall inputs, outputs and outcomes for project management competencies all target to achieve a success innovative project .For examples the inputs indicates the basic skills for success project management, the output contains the basic task for project management and finally the output reflects the overall outcome of project management and that's need to approve that the innovative project meet the required quality. In addition, the target of the above competencies aims to deliver the project objectives on course of client satisfactions. However, the competence of project management is obviously a fundamental actor in the likelihoods of projects success or failure because that competences describe what project manager needs in order to obtain a project success (Delo et al 2010).

Factors	Components
Project Strategy	sv.1.organization integrate the project strategies within the organization strategies
	sv.2 considers the customer needs in the project
	sv.3. use various strategy to develop and manage the innovative project
	sv.4 use internal research and development strategy
	sv.5 use outsourcing company to hire an experts project manager
	sv.6 engage with consultation organization and that develop best strategy
Knowledge Management	sv.7. engage the employee in meeting, discussion , and brainstorming session
	sv.8 organization culture encourage the employee to learn or develop their project knowledge management
	sv.9. aware of expertise and overall knowledge available in the team
	sv.10. provides a supportive culture and simulative area to support innovative projects
	sv.11. project team gain knowledge about the project such as project design, risk management, and project plan
	sv. 12. sharing the experience from previous innovative project with project team member
Open Communication	sv. 13. the project manager spend a large percentage of his time in communicating with project parties
	sv.14. communication with users is important to determine their service demands
	sv.15. communicate with externals contractors
	sv. 16.communicate with project parties to ensure that they work toward achieving the project objective based in project plan
	sv. 17. use informal methods for communication such as conversations, electronic mails, and phones calls
	sv. 18. open communication help to receive comments, criticism , and opinions about innovative projects
Top Management Support	sv.19. the degree of support from top manager affects the project team memebbers and project success
	sv.20. the project manager measure and evaluate the impact of innovation
	sv.21.provide a strong theoretical motivational foundation about innovation
	sv.22. provide a communication support to stimulate the free flow of suggestions, ideas and perspectives across the project team members

	sv.23. supports project managers in his task and that's to ensure that the project objective associate with the organization overall strategy
	sv.24. motivatie project team to think about a range of skills and mechanisms that they need to promote the project success
Project Management Style	sv.25.project manager usually obtained leadership style
	sv. 26. leaders creates the organization environment that favour novelty and innovation
	sv. 27. provides an essential leadership soles that encourage the team to corporate toward achieveing project success
	sv. 28. project manager considers as Entrepreneur whose introduces, drives, and control the team members
	sv. 29. leadership in my organization manage times, budget, and knowledge in orders to complete the project successfully
	sv. 30. project manager must have an internal confidence and self-belief from the leadership knowledge and experience
Project Management Competencies	sv.31. competences such as knowledge, skills, and personal attributes affect the project success
	sv. 32. leadership manager can make various quick significant decision's
	sv. 33. e abilities to emerge various employee from different culture and experiences within the same group
	sv. 34. monitor the complement of project procedures successfully
	sv. 35. manager competencies depends in a various range of general inter- personal and leadership skills
	sv. 36. project manager competences describe what project manager needs to be able to accomplish project

**Table (3):** Summary for the research project success factors and the sub variables under each factor. Summary for section (2.3)

Overall, the above (6) project success factors are explained in table (3). The tables indicate the project success factors and the sub variables under each factor. From table (3), it's noticed that's each sub variables have a code and that's codes used as a shortcut in the research sections. However, the mentioned factors identify the effect of organization, project team members, users, project managers, and other project parties in project success.

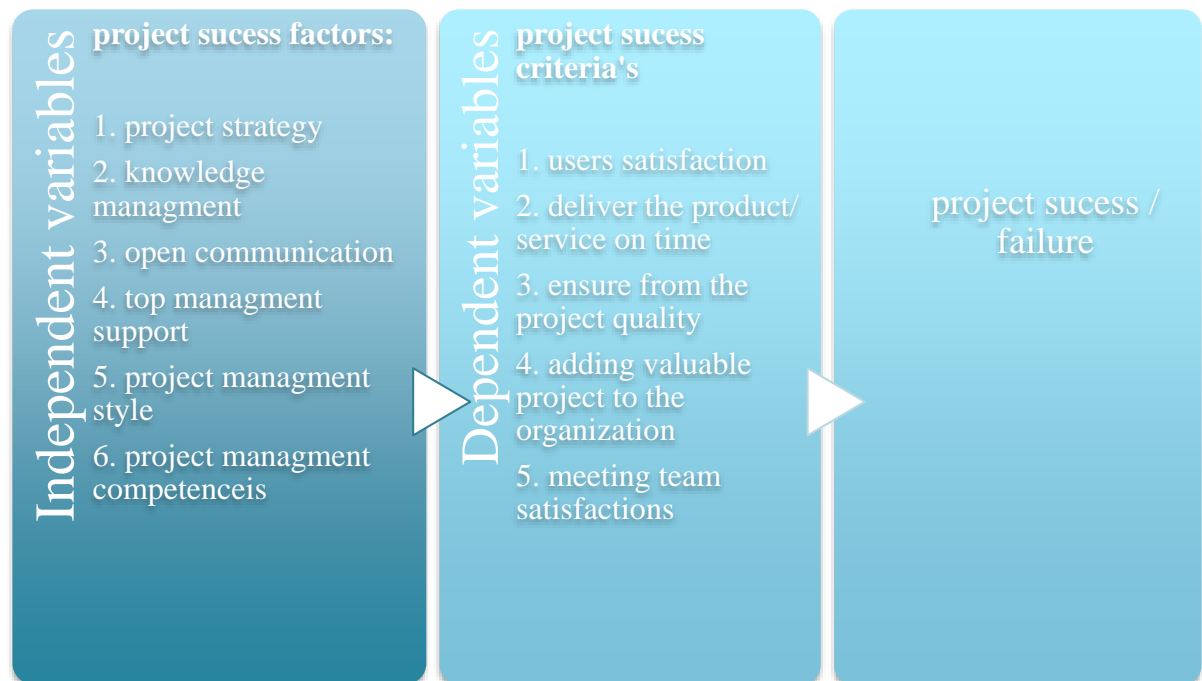
To sum up section (2.2) and (2.3) indicate that research on project success mostly falls into either one of the following classifications based on the subject of the study; either the study concentrates on projects success criteria or the study concentrate on critical success factors (Ika 2009). The current study concentrate on both aspects and verified the effect of independent variables (critical success factors) in the dependent variables (project success criteria). Based on the Canadian oxford dictionary (1998), its proposed that project success criteria are considered as principles standards that the research can judge by (Ika 2009). On the other side, project success factors refer generally to conditions, events, and circumstances that engaged with project result. However, the project success factors are the factors that influence the projects and contribute to a result either the probabilities of project success or failure (Ika 2009).

## **Chapter Three: Conceptual Framework:**

From the above detailed literature review, it's found that various academic studies drive two fundamental concepts that refer to the project success; (1) project success criteria and project success factors (Muller & Judgv, 2012). First the critical success criteria (CSC) defines as the measurement for project success and considers as dependent variables (Korbijn 2014). Second critical success factors (CSFs) defined as the elements that contributes in increasing the likelihood of project success and considers as independent variables (Korbijn 2014). In addition, the critical success factors for any projects known as the organization ability to deliver the activities and services within the timeframe, budget and estimated quality. CSFs are not goals but the organization action that can be coordinate by the organized management. Therefore, successful innovative project mean evolving a better way of delivering organization service by using technology and by making the users adopt that technology. These technological services need to achieve the project success criteria, which usually measure the impact of project productivity on customer, organization, and project team members. Moreover, every success projects needs to concentrate on achieving the target project criteria's and that by focusing on the factors that contribute in increasing the likelihoods of project success.

From the above detailed literature review, the current research concludes and presents the following conceptual framework (Figure 2) that can assist in summarizing, observing and improving insightful directions towards understanding the evaluation of project success factors and criteria of innovative project in public sector organizations (Dar Ibaid 2015). In the current research, the conceptual framework idea is used to approve that project success factors have a significant relationship with project success criteria. Both independent (CSFs) and dependent variables (CSCs) have been adopted from previous research that discussed in the literature review as its shown in table (3) and figure (1). However various hypotheses were created through this section to operationalize the research survey questions and to explain the relationship between the project success criteria's and project success factors. In addition, those hypotheses aim to find the effect of project parties in project success

criteria and factors and that's what explains in chapter (2)



**Figure (2): Conceptual Model: the effect of project success factors and project success criteria in project success or failure.**

However, the following information describes the conceptual framework (figure 2) which indicates that there are two fundamental concepts that refer to the success or failure of the innovative projects. Those category based on figure (2) are project success factors and project success criteria's. However, both factors contribute in project success or failure. The research concludes five variables that measured the project success criteria's and six basic variables that are hypothesized to increase the likelihoods of project success. However, the aims of this section is to explain the relationship between project success factors and criteria's which already translates into hypotheses. For that's reason, this section started by identifying the project related factors which is mentioned in the conceptual model and how each of those factor affect, complete, and contribute in achieving the project success criteria's successfully. Than after each factors this sections translate the relationship between project success factors and criteria's into a hypotheses that need to examine and

approve if its assumed to be true or not based on the survey results within the next chapters.

1-Innovative project strategy: this element indicates that public organization usually used different strategy methods to control the success of innovative project and that by integrating the project strategy within organization strategy. The organization uses various project strategy to increase the likelihoods of project success such as: internal and research developed centers, outsourcing companies, consultations companies. All of those previous methods aims to study and understand the organization activities, users demand by saving the user's times and ensuring to deliver the product/ services on short times (Valentino & Christ 1990).

H1: There is a significant correlation between the strategies that contribute to increase the success rate of innovative projects and the provision of deliver the product/ service on time criteria.

2-Knowledge management: this element motivates Learning mechanisms through project environment, which usually gained by knowledge sharing through the project team members. Based on Love et al (2005) study, they approves that there are three types of knowledge sharing between the project team members and that drives from organization projects and results in increasing the likelihoods of project success such as knowledge in projects, knowledge about the project, and knowledge from the projects. However, all of those types of knowledge sharing consider as the leverage for the project team to gain more experience and knowledge from innovative project environment and that's by engaging the team members in project decision making (Smith et al 2005). As the results, when the project team member's keep feeding the knowledge base through the projects, that knowledge sharing strategies helps to add valuable innovative project to the overall organization projects (Smith et al 2005).

H2: There is a significant relationship between knowledge management factor and adding valuable project to the organization.

3-Open communication: This element actually proves that open communication is one

of the most important information channels through every success projects. In addition to achieve project success, the organization culture needs to contribute in stimulating the team members to obtain enough knowledge from the projects and it exists when the organization gives more attention to open communication elements. Open communication elements derives from the project members who engaged in project information transactions such as information resources project manager (IRPM) . Most of the times IRPM increase the likelihoods of the project success because he occupies responsibilities to communicate with several project parties such as; end users, functional manager, department managers, and various vendors and contractors. Moreover, communication with the above project parties is important because its help to ensure that's projects parties work toward achieving the project objectives (Di Gangi 2009) . In addition, communication help to ensure that the project is meeting the expected quality demands based in organization and users expectations (Abetti 2000).

H3a: There is a significant relationship between encouraging open communication and meeting user's satisfactions criteria

H3b: There is a significant relationship between encouraging open communication and meeting the project quality criteria

4-Top management supports: this variable approves the argument that qualified top management motivates adopting innovation as a requirement of project success. That means top management support identifies as taking the responsibilities in ensuring that project strategy supports the organization strategy. That clarifies that project strategy needs to align with organization strategy and that by developing the organization service based on customer expectations. Overall, the degree of supports that provided by the project managers and team members is depends on the degree of support that gained from organization top management. That's management support usually provide a strong theoretical motivations basis about innovation for the project team members and that's encourage project team members to get a sense of satisfaction regarding their participation in innovative projects. In addition project management support helps to meet the flexibility and responsiveness of the project overall quality.

H4a: There is a significant relationship between top management support factor and team satisfactions criteria.

H4b: There is a significant relationship between top management support and meeting flexibility and responsiveness criteria (project quality).

5-Project Management Style: as it's mentioned in detailed literature review a project manager usually obtained suitable leadership styles that asset to delivers the project successfully to the end users. That's leadership styles created for two fundamental reasons. First leaders motivate his follower (team members) for innovative environment within organization projects. Second leaders align the innovative project strategy with organization strategy. Precisely, project managers who's having leadership characteristics encourage their team members to work toward achieving success innovative project and that's by merging them in innovative environment and by encouraging them to work within innovative projects. That's mean team satisfactions need to gain the priority in project management styles. Moreover, managers who's having a strong influence on innovative project procedure gain substantial leaders features and that by motivating their project team to work in purpose of achieving the project success. Overall, most of the leader's passion for champions and that explains why the leaders encourage organization team to work hard toward achieving successful project.

H5: There is a significant relationship between project management style factor and meeting team satisfactions criteria.

6-Project manager competencies: various literature review about the project manager competencies finds that project manager competencies such as knowledge, skills, and personal attributes affect the probabilities of project success. Crawford (2000) study finds several behavioral project manager competencies that affect the project success. First; project managers personal attributes that distinguish him from other manager and that explained by his quick action in providing the best decisions to solve project issues comparing to other regular manager. Second, team development and that appear when the project manager emerge various nationalities with various experience in one project team. Moreover, In Delo et al (2010) study, he finds that

project competencies contain three fundamental level such as inputs which have the basic manager skills, output and that contains the managers required tasks, and finally outcome and that determines if the project manager succeeds to meet the desired quality of the innovative projects based on users and organization expectations.

H6: There is a significant relationship between project manager competencies factor and meeting the project quality criteria.

Overall, the above hypotheses will be studied in the current study. Thereby, all of the above hypothesis try to find whether if there is a significant relationship between the critical success factors and critical success criteria or not. The following section introduces the methods that used in the current studies to test the research hypotheses. That examination clarifies if the results of the hypotheses is significant and whether it reflects a positive or negative relationship. In addition, if the hypotheses test clarifies a non-significant relationship that means the project factors are not correlated with the project success criteria.

## **Chapter Four: Research Methods**

The purpose of this study is to investigate the potential critical factors and criteria that contribute to deliver the innovative project successfully to the end users, a quantitative method was chosen for the systematic evaluation of project success or failure and that evaluations based on the evidence that provided from the above literature review. The interpretive nature of the quantitative methods was preferred to be able to describe and verify the effect of both project related factors and criteria's in project success or failure. In addition, quantitative approach help to supports, highlight, and reflects the organization best practices and viewpoints about the importance of applying innovation in public services. However, these sections describe the research procedures, questionnaire design, selected organization, sampling, and analysis of the selected response.

### **4.1 Research Procedures and Process:**

A questionnaire survey was employed through projects practitioners from (20) federal government department across the U.A.E. There were (150) questionnaires distributed electronically to government departments that adopt innovation through its public services activities. Respondents were approached through a variety of management hierarchy who's having various amount of project management experience. The sample size of this questionnaire survey is (150), the complete survey respondents were (82) which represents (54 %) of the target sample and the incomplete survey respondents were (35) which represents (23.3 %) of the target sample. Most of the respondents worked directly in innovative project type, some of them have a previous experience with innovative projects and some of them are not. However, statistical package for Social science (SPSS) was employed for data analysis which aimed to examine the relationship between (5) project success criteria's and (6) critical success factors. The relationship between project success criteria's and factors translated into various hypotheses based on table (4) . Those hypotheses need to test and approve if its presumed to be true or wrong.

Hypotheses Elements		Hypotheses
Project success factors	Project success criteria	
Project strategy	Deliver the project/services on time	H1. There is a significant correlation between the strategies that contribute to increase the success rate of innovative projects and the provision of deliver the product/ service on time
Knowledge management	Adding valuable project to the organization	H2: There is a significant relationship between knowledge management factor and adding valuable project to the organization
Open communication	Meeting Users satisfactions criteria	H3a: There is a significant relationship between encouraging open communication and meeting users satisfactions criteria
open communication	meeting the project quality criteria	H3b: There is a significant relationship between encouraging open communication and meeting the project quality criteria
Top management support	Team satisfactions	H4a: There is a significant relationship between top management support factor and team satisfactions criteria
top management support	Project quality (Meeting flexibility & responsiveness)	H4b: there is a significant relationship between top management support and meeting flexibility and responsiveness criteria
Project management style	Team satisfactions	H5: There is a significant relationship between project management style factor and meeting team satisfactions criteria
Project manager competencies	Project quality	H6: There is a significant relationship between project manager competencies factor and meeting the project quality criteria

**Table (4):** Research hypothesis based on chapter (3)

However, this research initiates by introducing the researches and literatures journals that discuss the similar academic finding of the research topic. The literature finding was categorize through different groups, its starts within innovation in general than introducing innovation services in public sectors and examples of success innovative projects in public sectors. Furthermore, the literature introduces the critical success criteria and factors of innovative projects in public sectors. In each category the research explain the effect of users, project team members and organization in project success factors and criteria.

Furthermore, based on the research approaches methods, (20) federal government department that's offered public service to the community were selected, each organization adopt project that aims to develop the organization service based on innovations. The research has selected those organizations due to the nature of services that adopt innovation features. That's mean the core issue of those research is studied, analyzed, examined, and investigated the critical success criteria's and factors that discussed in the above literature review. Also, this research aims to explore how the research criteria's and factors contributes to raise the efficiency of the projects. In addition the research aims to clarify what is the challenges that connect with organization or project related factors.

#### **4.2. Questionnaire Design:**

The survey questionnaire draft as its shown in appendix (1) was created based on the critical success criteria and critical success factors from the relevant literature. The respondents were requested to rate each factor and criterion using scales in a rating method. The scale method that used on this research enable us to capture the respondent's opinions and experience based on a certain statement that provides across the survey. Based on respondents experience on innovative projects. The questionnaire contains (52) questions spread across three main parts.

In part one: the questions aim to collect demographic data and general information about the respondents and that's summarized in table (5)

In part two: the respondents were provided (36) sub variables categories classified on (6) main variables for project success. The respondents need to evaluate the likelihoods of those variables in project success and that on a scale from 1 to 5 (1- strongly agree; 2- agree; 3- undecided; 4- disagree; 5- strongly disagree).

In part three, the current study aims to examine the practitioner's perceptions of the effectiveness of project success criteria on their organization innovative projects. However, this part asked the respondents to examine if their organization achieved the project success criteria that discussed in chapter 2 or not on a scale from 1 to 5 (1- strongly agree; 2- agree; 3- undecided; 4- disagree; 5- strongly disagree). However, part three does not explain the relationship between the project success criteria's and project success factors that discussed on the literature review but SPSS program will be used to examine relationship between both CSFs and CSCs based on the research hypothesis's that introduced on chapter 3

The knowledge and information that obtained through the questionnaire later analyzed and compared with the provided conceptual framework that explained in chapter 3. In addition, the questionnaire aims to obtain a reliable information about the employee and organization best practice of their innovative project.

### **4.3. Selected Organizations:**

Past research demonstrates questionnaire response dominated from public organization firm in Korea, United States, and Dubai (Sethi & Sethi 2008). The geographic spread of the respondents in the current research is weighted towards U.A.E public sector that's mean the research geographic base is slightly different than previous similar research in U.S , Korea and Dubai because the current research concentrates more on federal organization in the United Arab Emirates (Sethi & Sethi 2008). That's mean the respondent sample in the current study is broadly if we compare it with similar studies because in the current study area the selected organization is federal not concentrates on specific city (Sethi & Sethi 2008). However, the selected organizations aim to achieve their visions by introducing the most innovative technological services. Also, the selected organization develop a technological service to public users and aim to develop, test, and implement innovative ideas through public services projects. The selected public organization develop an innovative projects based on specific criteria that the government requests. The projects criteria focus on the efficiency in terms of developing the service productivity such as delivering the service on time, meeting customer satisfactions, meeting project team member satisfactions, adding valuable project to the organization and meeting project quality criteria.

#### **4.4. Sampling:**

In the current study, the questionnaire was distributed electronically to the selected organization. The questionnaire aims to collect 150 respondents but the completed responds was 82 which represents (54 %) of the target sample. However, the demographic data and general information about the respondents are summarized in table (5). The survey respondents represent an employee who occupied a position in project management department and other in innovative department. However both departments supports each other. That means the innovative departments provides the innovative ideas and the structures to apply that's ideas in form of projects. Later the project department implements that project based on various authorities from organization top management. However, some respondents show that their organizations receive about (6-10) innovative awards and the other organizations receive from (1-5) innovative awards. In addition, about 37.8 % indicates that they did not receive any awards. Also, as it's mentioned in (4.2), the main purpose for innovative projects on the selected organization is to provide a programs that facilitate using organization activities and services. The population of this study contains 82 full- time employees and that indicates (23.2 %) female and (76.8 %) male. The analysis shows that the majority of surveyed employees are male and that because most of the employees who's working in project management department and innovative department are from male category. Bachelor's degrees holders comprise half of the participants and master degree holder's represents (21) out of 82. However, more than 50 % of respondents are between 25- 32 years old. The majority of the respondents are at middle level (61%), and 24.4 % are at first level. (46.3 %) of the respondents work in the organization about (2- 7) years and (43.9 %) work in the same position from (2-7) years. however, the respondents contains various parties in project such as information resource manager, program manager, functional manager and various project team members. Moreover, over half of the respondents are from the U.A.E national and the rest from various nationalities.

Variable	Frequencies	Percentage
Gender of respondent		
Female	19	23.2
male	63	76.8
Marital status		
married	42	51.2
unmarried	40	48.8
Education Level		
High school	12	14.6
Bachelor degree	49	59.8
Master or above	21	25.6
Age of respondent		
Less than 25	20	24.4
25-35	52	63.4
36-46	7	8.5
47-57	3	3.7
Number of Years Working in the Org.		
Year or less	27	32.9
2-7	38	46.3
8-13	13	15.9
14-19	3	3.7
20 years or above	1	1.2
Number of Year in the Current Position		
One year or less	27	32.9
2-7	36	43.9
8-13	15	18.3
14-19	4	4.9
Job status		
First level	20	24.4
Middle level	50	61.0
Lower level	12	14.6
Nationality		
UAE national	69	83.1
Non UAE national	13	15.7
Organization size		
250 to 500 employees	19	23
501 to 1000 employees	22	27
More than 1000 employees	41	50
Innovation / performance awards over the last five years		

0 awards	31	37.8
1 to 5 awards	38	46.3
6 to 10 awards	13	15.9

**Table (5):** Demographic data

#### **4.5 Analysis of Responses:**

Analysis of the responses from part 1, 2, and 3 on research questionnaire relied in SPSS descriptive statistics. Part one was analyzed on this sections because it's related to sampling (table 5). Other part such as 2 and 3 will analyze and discusses on chapter (5 and 6). However, Descriptive statistics used to summarize or display the current research data. Usually, descriptive statistics contains significant aspects of data set in the way that assist the reader to understand the research finding. A summary descriptive describes a large volume of data. The summary describe a measure of central tendency such as mean, and standard deviation. In addition, the summary contains confidence intervals, and measures of dispersion such as range mean, standard deviation and variance (Brace at el 2012, p55).

Moreover part 2 and 3 from the research questionnaire used Correlation and regression test and that's to examine the relationship between independent (CSFs) and dependent variables (CSC). First In correlation test, the research question wish to measure the degree of relationship between the independence variable (project success factors) and the dependence variables (project success criteria's). for that's reasons a test of correlation provides the clears answer for that's relationship between variables and determines if the variables are correlated or not (Brace at el 2012, p 153). In addition correlation test provides the current research with a measure of the strength and direction of such a relationship (Brace at el 2012, p153). In Addition, Multiple regression test is used after the correlations test. It consider as a statistical techniques that includes one depended variable and different independent variables. However, If the two variables are correlated then knowing the score in one variable help the researcher to forecast the score on other variable (Brace at el 2012, p153). The stronger the correlation, the closer the scores fall to the regression line and consequently the more truthful the prediction. Multiple regression is simply an extension of this principle, in which the researcher predict one variable on the basis of two or more other variable (Brace at el 2012, p165) . However, correlated and multiple regression test support the current research to determine whether the hypotheses is accepted or rejected.

## **Chapter (5): Findings:**

As it's mentioned in research methods, this section aims to examine the research hypotheses. SPSS programs used to assess the research hypothesis by various levels. First, descriptive statistics used to analyze the responses assessment in part 2 of the survey which reflect project success factors and part 3 which reflect project success criteria's. Second, correlation test aims to allocate the strength and the direction of the relationship among any two variables. The stronger the correlation clarify the closer the scores will probability fall to the regression line. Third, multiple regression is considered as the extension of the correlation test that's mean in the third test (regression test) the examination predicts the relationship between one dependent variables (project success criteria) and various independent variables (project success factors) (Brace et al 2012, p 153 &165). Also, the regression test determines whether the research hypotheses express a significant relationship or not.

### **5.1 Descriptive Statistics.**

As it's mentioned in chapter (2), the selected 36 items (sub- variables) have been identified as a project success factors. A five – point Likert scales is used to assess responses to each sub – variables where (1) reflects strongly agree and (5) reflects strongly disagree. Overall, in table (6), the respondents have a very positive judgment for project success factors. That mean they confident that project success factors such as project strategy, knowledge management, open communication, top management support, and project management style, assess their project and contribute to increase the likelihoods of project success , the only exception here is that open communication register (average score 3.15) and the project management competencies register ( average score 3.25). As table (6) indicates that the average for open communication and competencies higher than other factors. first , open communication gain a high average in various sub variables such as : communicating with project parties ( mean score : 3.24) and accept comments, criticism and opinion about innovative projects ( mean score : 3.30) . Second , project manager competencies also indicates the same average and that because the high score that achieved by various sub variables such as : emerging various team from different

culture and experience in one group ( mean : 3.39) and depending on a various range of general interpersonal and leadership skills that have an essential roles in project success ( mean : 3.35) . However, both open communication and project manager competencies reflect high average, that mean the respondents are less optimistic in assessing those factors in the probabilities of project success. That means both factors gain a higher point likert scales and that clarifies that they choose disagree scale that has (4) scores and strongly disagree which indicates score (5) in rating open communication and project competencies sub- variables. Those score results in gaining a high means score for both factors. In contrast other factors such as project strategy, knowledge management, and top management support gain a lower average which mean that respondents accept those factors more in the probabilities of project success.

Critical Success Factors	Sub variables	Mean	SD ( standard deviation)
Project Strategy	SV1.	2.28	1.046
	SV2	2.48	1.125
	SV3.	2.70	1.151
	SV4.	2.83	1.174
	SV5.	2.72	1.336
	SV6.	2.98	1.267
	average score	<b>2.66</b>	<b>1.183</b>
Knowledge Management	SV7.	3.12	1.201
	SV8.	2.79	1.163
	SV9.	2.66	1.249
	SV10.	3.12	1.169
	SV11.	2.77	1.114
	SV12.	2.70	1.193
	average score	<b>2.86</b>	<b>1.182</b>
Open Communication	SV13.	3.24	1.106
	SV14	2.98	1.207
	SV15.	3.15	1.090
	SV16	3.12	1.126
	SV17.	3.10	1.129
	SV18.	3.30	1.074
	average score	<b>3.15</b>	<b>1.122</b>
Top Management Support	SV19.	3.12	1.201
	SV20	2.79	1.163
	SV21.	2.70	1.130
	SV22.	2.32	0.967
	SV23.	2.43	1.031
	SV24.	3.12	1.201
	average score	<b>2.75</b>	<b>1.12</b>
Project Management Style	SV25.	2.79	1.163
	SV26.	2.34	0.946
	SV27.	2.71	1.149
	SV28.	2.35	0.948
	SV29.	3.12	1.201
	SV30	2.79	1.163
	average score	<b>2.68</b>	<b>1.09</b>
Project Management Competencies	SV31.	3.22	1.006
	SV32.	3.24	1.049
	SV33.	3.39	0.966
	SV34.	3.27	1.007
	SV.35	3.35	0.986
	SV.36	3.02	1.065

	average score	3.25	1.01
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**Table (6):** Descriptive statistics for project success factors (part 2) that used in the research survey

However, table (7) indicates that the project success criteria's also indicates a positive judgment. The general optimist's assessment for the selected criteria reflects that they affected the project success. the only exception here is the judgment of how the general public perceives the quality of the provided services (mean score: 1.82) that means the project quality in the selected organization achieve a low scales rates in project success criteria and that's clarifies that the majority of the survey respondents choose scales (1, strongly agree) and scales (2, agree) in rating the quality criteria's of their organization projects.

Critical Success Criteria	Mean	SD ( Standard Deviation)
Customer / end user adoption	2.18	0.833
Quality of delivery	1.82	0.547
Deliver on time	2.34	0.984
Add value to the organization	2.29	0.987
Team satisfaction	2.35	1.104
Satisfied users	2.16	0.962

**Table (7):** Descriptive statistics for project success criteria's (research survey - part 3)

## 5.2- Correlation Test:

In this study, the correlation test have been used to examine the relationship between the research variables in terms of their significance, strength, and direction as well as if they are related to each other. Table (8) demonstrates the finding of the correlation coefficient test between all variables of project success factors and project success criteria's. The test demonstrates that some variables are significant at the 0.01 level and others at the 0.05 level. Overall, table (8) show that there is a significant positive relationship among most variables except the relationship with quality of delivery which show negative relationship with critical success factors such as open communication, project management support, project management styles, and project management competencies.

	Project success factors						Project success criteria's					
Project success factors & project success criteria's	Project strategy	Knowledge Management	Open communication	Project Management Support	Project Management Style	Project Manager Competencies	flexibility and responsiveness	quality of delivery	deliver on time	Adding valuable project to the Organization	team satisfaction	satisfied users
Project strategy	1											
Knowledge Management	.661**	1										
Open communication	.720**	.599**	1									
Project Management Support	.728**	.611**	.727**	1								
Project Management Style	.722**	.555**	.683**	.731**	1							
Project Manager Competencies	.636**	.557**	.689**	.755**	.812**	1						
Flexibility and responsiveness	0.109	0.121	.285*	0.095	.311**	.262*	1					
Quality of delivery	0.08	0.072	-0.01	-0.003	-0.073	-0.107	0.074	1				
Deliver on time	.401**	0.205	0.177	0.201	.409**	.239*	0.073	-0.021	1			
Add value to the organization	.470**	.316**	.256*	.238*	.284**	.324**	-0.006	0.215	.366**	1		
Team satisfaction	.473**	.298**	.368**	.357**	.352**	.311**	-0.058	0.149	.319**	.527**	1	
Satisfied users	.513**	.311**	.385**	.424**	.471**	.419**	-0.021	0.079	.412**	.535**	.632**	1

**Table (8):**Correlated test : \*\*. Correlation is significant at the 0.01 level (2-tailed).

\*. Correlation is significant at the 0.05 level (2-tailed).

### **5.3- Regression Test**

Table (9) contains the result of the regression test. The test of the delivery service on time variables against project strategy reveals that the F- value of (15.287) is highly significant and (0.000 (P- value) < 0.01) also is highly significant. It can be observed that the beta weight and R is (0.401) which mean it's significant. The R square is (0.160) and adjusted R square is (0.150). This mean that both variables can significantly explain up to (40.1%) of variance in deliver service on time. however, that percentage mean deliver service on time is attributed to project strategies. Having examined the first hypothesis (H1), it's concluded that based on the evidence shown above, there is a significance positive relationship between deliver the service on time and the innovative project strategies. This results supports hypothesis (H1) and therefore, hypothesis accepted.

Table (9) demonstrates the analysis of the relationship between adding valuable project to the organization and knowledge management. The examined projects in the survey is success to approve a significant relationship between adding valuable project to the organization and knowledge management factors in the projects. The test of adding valuable project to the organization reveals that F- value of (8.853) is highly significant and (0,004 (P- value) < 0.01) is also highly significant. It can be noticed that the beta weight and R is (0.316) which mean it's significant. The R square is (0.100) and adjusted R square is (0.088). This mean that both variables can significantly explain up to (31.6%) of adding value to the organization project and that because the organization recognize the role of knowledge management in adding valuable innovative project to the organization project records. Therefore, its conclude from both correlation and regression test, there is a significant positive relationship between adding valuable project to the organization and knowledge management and based on that Hypotheses ( H2) is accepted .

Regression equation	F- value	Sig. level	R square	Adjusted R square	Beta ( )
Deliver service on time against project strategy factor	15.287	0.000	0.160	0.150	0.401
Adding valuable project to the organization against knowledge management factor	8.853	0.004	0.100	0.088	0.316
Satisfied user against open communication	13.572	0.000	0.148	0.137	0.385
Team satisfaction against project management support	11.706	0.001	0.128	0.117	0.357
Team satisfaction against project management style	11.308	0.001	.0124	0.113	0.352

**Table (9):** Regression test based on research finding

Table (9) also, shows the outcome of the relationship between meeting user satisfaction criteria and open communication factor. The regression test demonstrate that the F- value (13.572) and it is significant (0, 000 (P- value) < 0.01), the beta value is (0.385) , R square is (0.148) and this mean that (38.5 %) of change in satisfied user criteria influenced by open communication . to conclude , its observed that there is a significant positive relationship among user satisfactions and open communication and as a result , its concluded that hypotheses ( H3a) is accepted .

Hypothesis (H3b) will not be tested because the both variables (open communication and project quality) is not reliable and cannot be improved.

The test of the team satisfaction and project management support reveals that the F- value of (11.706) is highly significant and (0,001 (P- value) < 0.01) is highly significant. It can be observed that the beta weight and R is (0.357) which mean it's significant. The R square is (0.128) and adjusted R square is (0.117). This mean that both variables can significantly explain up to (35.7%) of variance in team satisfaction criteria and the change of this criteria is attributed to project management support. Having assessed the fourth hypothesis ( H4a), its concluded that based on the

evidence shown above there is a significance positive relationship between team satisfactions and the project management support. This results supports hypothesis (H4a) and therefore, its is accepted

Hypothesis (H4b) will not be tested because both variables (top management support and the project quality criteria such as (flexibility and responsiveness) is not reliable and cannot be improved.

Table (9) also, determines the analysis of the relationship among the fact that the examined project management style factor is success to meet team satisfaction criteria. The test of meeting team satisfaction reveals that F- value of (11.308) is highly significant and (0.001 (P- value)  $< 0.01$ ) is also significant. It can be observed that the beta weight and R is (0.352) which mean it's significant. The R square is (0.124) and adjusted R square is (0.113). This mean that both variables can significantly explain up to (35.2%) in team satisfaction because the organization recognize the role project management style in the success of innovative project. Therefore, its concludes that from both correlation and regression test that's a significant positive relationship exists among team satisfaction and project management style and based on that Hypotheses ( H5) is accepted

Hypothesis (6) will not be tested because the both variables (project management competencies and quality criteria) is not reliable and cannot be enhanced

## **Chapter (6): Discussion:**

In examining of the research hypotheses, the major components of project related factors indicate a significant relationship with project success criteria. Therefore, This section discuss the research hypotheses that is acceptable. Each hypothesis discussed separately and that discussion explained the meaning of each relationship and the effect of project team members and project management in the success of that relationship.

H1: There is a significant correlation between the strategies that contribute to increase the success rate of innovative projects and the provision of deliver the product/ service on time

Looking at the project success variables (strategy of innovative projects), the study result revealed that innovative strategy exhibited a significant relationship with project success criteria (deliver service on time) . Usually innovation take sometimes to achieve its goal and therefore the organization strategy in innovative projects mostly concentrates on innovation concepts and work to adopt that concept across organization services and activities that's offered to the public users . However, the research finding indicates that the strategy of innovative projects can significantly affect deliver service on time criteria up to (40.1 %). that's finding explain the highest affect that's exist between project factors and criteria among other current research hypothesis. Moreover, that percentage mean deliver the service on times is attributed to the project strategies . The project strategy usually aims to understand the users demands and connects that's demands as a priority for project success . Innovation starts by knowing and believing on the users' needs then creating pictures of those needs and finally delivering these needs successfully on short times to the end users. That means, organization strategy concentrates on responding to the user's service requirements as quickly as possible. That clarifies that quick responding is one of the

success project strategy in the U.A.E government services particularly when the users is demanding something that's represented time sensitive. This result reflects similar finding reported in Valentino & Christ (1990) study , the researchers pointing that the project objectives aims mostly to save the public users times. Based on Harvard business review, time- based strategy in various projects since 1990 reported the most powerful competitive tools toward developing organization services and products strategy. Moreover, success to deliver service on time mean that the organization success to accomplish user's orders or transactions within a promised period of time. That means the organization promises the users for time guarantees and that assists to achieve a percentage of transactions within a specific timeframe. Moreover, the result of hypothesis (H1) supports So (2000) statement that public organization aims to provide innovative strategy that target to accomplish more transactions within shorter time.

H2: There is a significant relationship between knowledge management factor and adding valuable project to the organization project.

In examining the knowledge management comparing to the variables that offered to the organization projects, a positive relationship observed between knowledge management factors and the project success criteria (adding valuable project to the organization). The significant of that relationship confirm that's knowledge management development across organization and project team members precisely consider as an important elements in project success. Knowledge management verified as those process that help the organization to generate more knowledge and later organize and transfer those important knowledge to the project team members. That's clarifies in order to reach the best practice in innovative projects most of the public organization in the U.A.E aims to find the value of its team members based on their intellectual knowledge. Gray (2001) in the literature review agree with the previous statement by indicating that a success projects drive from the organization that motivate learning mechanisms for the project team members because the organization believe that the main key for the success is project team members knowledge.

Hypothesis ( H2) approved that the concept of knowledge management in U.A.E government sector provides available information to all project team members inside

the organization . For that reason, the best investment for intellectual capital that turns into a productive force contributes to develop the performance of the project team members and raises the innovative project valuable among organization project portfolio. The strength of the project team members knowledge and experience determine the extends of project success. That means the U.A.E public organization considers as the enablers in every project and that by encouraging the team members to gain more knowledge about the current innovative project. That knowledge usually build based on user's requirements. Also, focusing on customer needs mean delivering the project based on user's demands. The hypotheses (H2) indicates that in U.A.E government institutions the service providers consider the users as the main assessment for the provided services .the target of that assessment is to test the users knowledge about the project and to gain a positive users experience with the organization activities. Moreover, users assessment help to know the extends of his knowledge about the project. That's mean hypothesis H2 approved that it's important to the successful delivery of any innovative projects to gain reliable promises from the organization and that motivates to deliver the projects based on users requirements. This credibility build a trust relationship between the users and service providers (Smith et al 2005).

Overall, previous research in the literature review adopting this approach and indicating that innovative projects commonly add effective value to the organization project portfolio and that's existed when the innovative project success to end up with pleased and knowledgeable team worker and users (Smith et al 2005). That means organization success to leave valuable effect in organization projects when it's focused on customer demands, build a great team members and delivered the project based on organization assurances to the public users (Smith et al 2005).

H3a: There is a significant relationship between encouraging open communication and meeting user's satisfactions criteria.

The hypotheses ( H3a) reflects that's most of the public organization in the United Arab Emirates work hard to strength the relationship approach with various project users such as project team members, public users, dealers and various project managers . That's relationship usually help the organization to take an advantage of users ideas, experiences and expected demands for the users of innovative projects.

Thereby, Communication with various project members from the experts to the dealers is important to rise the likelihoods of project success. Moreover, open communication across projects help the organization in U.A.E government to support, assist the project team members and parties to implement the idea of innovative project among organization projects. For that reason, open communication is important with project parties in multiple early stages. In addition, the concept of open communication in project management associated with choosing various ways to communicate with various department and stakeholders in project management. This is similar to the methods taken by Gillard & Johansen (2004) who states that open communication stimulates the project team members to involve in project information transactions. Project team member such as IRPM occupy a unique position in the likelihoods of project success because of his responsibilities to communicate with various project stakeholders such as end users, functional manager, program department manager and various dealers. The roles of IRPM is to communicate and to ensure that all project parties achieved the user's demands and project objectives.

Hypotheses 3a approved that effective communication with project users helps the project team members to manage user's expectations and determines the project abilities to meet user's requirements. In addition, the hypotheses approved that open communication contribute to improve the level of interactions between the project working group and the project stakeholders such as dealers and users. Overall, Innovative projects means that organization are offering something new in from of service or product and that help to increase the level of users satisfactions and to offer positive users experience (Simon & Yaya 2012). That mean the essential part of innovative projects is to attract the users and satisfy them with the provided service.

H4a: There is a positive relationship between top management support and team satisfaction criteria

Hypotheses H4a approved that top management support is essential variables in project success because the level of support that drive from organization top management to project team members help to allocate the success of innovative projects (West & Anderson 1996). Also, the hypotheses agrees that project team members in U.A.E public government projects is the entrance to achieve a success

innovative projects in public sector. However, that targets usually achieved with the top management support in innovative projects. In the U.A.E public sector, the hypotheses (H4a) approves that the organization support and management commitment to build a satisfied team members are important for project success. However, the project management support creating a satisfied project team members in the U.A.E sector by various methods such as creating a motivational environment for innovative projects and allow the project team members to participate in project decisions making in various project stages. Moreover, a satisfied project team members as it's shown in H4a usually achieved full compliance with the project objectives. For that reason, top management support helps to determine various indicators of project success such as ensuring that project team members understand the project objective and committed to that objective.

Overall, the first mission in project management is to create a supportive and satisfied project team members than use the capabilities and skills of that team member to drive the innovative project toward success .as its shown in H4a, the responsibilities of project management in this situation is to transfer the knowledge and experience about the project to the project team members. This latter statements is akin to that employed by Dougherty (1992), the author approves that project team members demands skills and knowledge from various experts project managers because experts engagement in innovative projects encourage the team members to work with professional team members and results in increasing the level of success projects .

H5: There is a significant relationship between project management style factor and meeting team satisfactions criteria.

That means in the United Arab Emirates public sector, the government concentrates in developing the project management styles upon satisfied project team members. That's relationship exists because the government believes that leaders in project management is the main results for achieving success project objective. that's success achievement occurs in the U.A.E public government projects because the leaders motivates to obtain a specific vision about the projects and for that reason they step forward for various project success initiatives. The project analysis approves that leaders initiative help to solve project problems, to solve project team member's issues and to handle the project monitoring. That's mean the priority in success

project initiative is to satisfy the team members with the innovative projects and that by ensuring that the team understand and accept the outcomes of the innovative projects. H5 indicates that developing and building a project management leadership style is important because its help to increase the likelihoods of project success. in fact, public government in U.A.E success to form a satisfied project team members around the project and that by training the team to participate in the responsibilities of project success and by recognizing how commitment the team is in completing the innovative project successfully.

Moreover, leadership development considers as ongoing project because the guidance term is to feed the project team members by teaching and encouraging them to face the project challenges. Regardless of what the leaders know about the success innovative project, each project team members need to learn and develop his knowledge and skills across the project. In order to face the project challenges. That's methods approved by Nerkar at el (1996) in the literature review when he indicates that most public organization request a managerial and talents skills because it's important to use that's skills for converting project team members ideas into real practice . In facts s supportive leadership share his thoughts about his procedures to increase the probabilities of project success with the project team members. That's sharing satisfied the project users and create valuable experiences for the team members. Overall, Success project management styles adopt leadership characters as a basic elements to promote team satisfaction among innovative project and that's mean there are a positive relationship between leadership style and team satisfactions (Nerkar at el 1996).

From the analysis, regardless to the project success factors and criteria, only 5 out of 8 research hypotheses reflects significant relationship between both variables. That means from the selected project success factors only 5 factors out of 7 factors approve the significant relationship with the project success criteria. The research analysis failed to approve that there are a significant relationship between two factors such as top management supports and project management competencies and one criteria such as project quality criteria. Theses outcomes assist the partial rejection of the null hypotheses H3b, H4b, H6 and that approves that there was no significant relationship between project success factors (open communication, project management competencies, and top management support) and project criteria (project quality). For

these results, those variables were extracted from the research analysis because the research analysis indicates that those variables are not reliable and cannot be improved.

## **Chapter (7): Conclusion and Recommendations**

The current chapter summarizes the main finding of the research. Also, this chapter contains the research limitations and recommendations for the future research.

### **7.1 Conclusion:**

The in – depth introduction for the critical success factors and criteria in innovative projects across public service evaluates the government experience in innovative projects. According to the research problem, a lot of pressure in U.A.E government department appears and that to adopt and offer more intelligent and innovative services. Based on that, the government department starts to adopt innovative projects and that's to develop the organization services and activities. However, the current studies aims to examine the effects of the selected project factors and criteria's on the success of innovative projects through various U.A.E public government services department. In addition, the dissertations aims to explore the effect of users, project team members and organization in large in project success factors and criteria's.

The dissertation approves that the most important factors that increase the likelihoods of project success is the strategy of innovative projects. The finding approve that in U.A.E government, most public service departments spend more time to improve the innovative project strategies. That strategy concentrates in user's satisfactions and the priority of delivering an innovative service to the public users on times. This clarifies that government grants delivering the service on times and that contributes to meet the project objectives successfully. Also, the knowledge management across the project team member is considered as the best investment in project success. That means most public service department in the U.A.E concentrates on developing project team member's knowledge about the project and on the project because they believe that a knowledgeable team member stimulates the project success. However, knowledge management drives from open communication between project parties such as project

team members, users and various project contractors. Open communication across the projects helps to listen to the users demands and based on that the organization adopt a suitable innovative service upon users requests.

In addition, it has been understood thru the current thesis that top management support in U.A.E innovative project allocates satisfied project team members. This means project team members usually gain their power in monitoring and locating the project success from the top management support. The dissertation finds that's public government in U.A.E concentrates in developing project management styles in leading the project success because they believe that management styles contribute in driving the project toward success or failure. Overall, the majority of the hypotheses examinations prove that there is a significant positive relationship between the selected project success factors and criteria. As per the selected public organization department in U.A.E, the examination approves that the government gives a lot of efforts in adopting innovation across organization services and activities. This clarifies that public departments concentrate on developing innovative projects which aim to enhance the provided services and activities to the public users and communities in large.

Overall, the research concludes with various recommendations which are extracted from the finding and discussion chapters such as:

- Each organization needs to add connected systems that contain various innovators who are having different knowledge, skills and experience with innovation practice. That's systems is important to share other organization experiences and to develop the current innovative experience that the federal government use
- The federal government needs to provide the necessary guidelines for the government employees regarding the concept of innovation. Also, government needs to concentrates on how worldwide government agencies achieve innovations from the provided guides.
- Integrate the academic research in innovative projects with the organization research and development center. That's mean sign an agreements with various local universities and that to engage their academic research about the innovative projects within the organization innovative projects.

- Creates an awareness campaigns for using innovative projects across public services and explain the effect of using that's technologies in saving users times and employees efforts.

## **7.2 Limitation and Recommendation for Future Researches**

The dissertation succeeded to reach its objectives but unavoidable limitation exists across the dissertation. The limitation to this research exists in distributing online survey to the government department instead of meeting the employees. An online survey save more times but it does not grant the full responds from participants. This means online survey usually grants limited sampling and limited respondent. Also, some participants noticed that the length for the questionnaire is considered too long and that's the reason why some participants likely to drop out the questionnaire. Also, the limitations of this research represent in selecting a specific group who's working in developing the organization services and activities to answer the survey questionnaire. Those specific groups rate the selected project success factors and criteria. Further research can concentrate on the users and communities in large to assess the innovative project success criteria because they consider an important part in evaluating the project success. Also, it's essential to observe that users assessment usually ensure the efficient utilization of the provided services and activities that offered from the organization.

Moreover, in the current studies, the project quality has been measured as project success criteria but the examination failed to approve the correlated relationship between the project quality and some examined factors. Therefore, further researches need to concentrate on the variables that affect project quality. Also, the current research concentrates on the innovative projects that drive from federal government departments and examine the effect of project success factors and criteria on that category. It is well known that government department in the United Arab Emirates categories to local and federal department and the current research concentrates on federal departments scope, for that reason further researches are recommend to investigate the effect of project success factors and criteria within local departments such as Abu Dhabi local government departments or any other local department across the United Arab Emirates.

## References:

- Abetti, P.A. (2000). Critical success factors for radical technological innovation: A Five case study. *Creativity and Innovation Management*, vol. 9 (4), pp. 208–221.
- Al-Khoury, A. (2012). E-Government Strategies The Case of the United Arab Emirates (UAE). *European Journal of e Practice*, vol. 17, pp. 126–150.
- Albury, D. (2005). Fostering Innovation in Public Services. *Public Money & Management*, vol. 25 (1), pp. 51–56.
- Alhomod, S. & Shafi, M. (2012). Best Practices in E government: A review of Some Innovative Models Proposed in Different Countries. *International Journal of Electrical & Computer Sciences*, vol. 12 (1), pp. 1–6.
- Barras, R. (1986). Towards a theory of innovation in services. *Research Policy*, vol. 15 (4), pp. 161–173.
- Belassi, W. & Tukel, O.I. (1996). A new framework for determining critical success/failure factors in projects. *International Journal of Project Management*, vol. 14 (3), pp. 141–151.

Berghman, L.A. (2012). Strategic innovation in established companies: An empirical study of appropriate ambidexterity strategies. *International Journal of Innovation Management*, vol. 16 (01), pp. 1250007.

Blazevic, V. & Lievens, A. (2008). Managing innovation through customer coproduced knowledge in electronic services: An exploratory study. *Journal of the Academy of Marketing Science*, vol. 36 (1), pp. 138–151.

Blind, K. & Hipp, C. (2003). The role of quality standards in innovative service companies: An empirical analysis for Germany. *Technological Forecasting and Social Change*, vol. 70 (7), pp. 653–669.

Bossink, B.A.G. (2004). Effectiveness of innovation leadership styles: A manager's influence on ecological innovation in construction projects. *Construction Innovation: Information, Process, Management*, vol. 4 (4), pp. 211–228.

Boynton, A. & Zmud, R. (1984). An assessment of critical success factors. *Sloan Management Review*, vol. 25 (4), pp. 17–27.

Brace, N., Kemp, R. & Snelgar, R. (2012). *SPSS for psychologists, fourth edition - 4th edition*. 4th edn. New York:Routledge Academic.

Brentani, U. (1989). Success and failure in new industrial services. *Journal of Product Innovation Management*, vol. 6 (4), pp. 239–258.

Brotherton, B. & Shaw, J. (1996). Towards an identification and classification of critical success factors in UK hotels Plc. *International Journal of Hospitality Management*, vol. 15 (2), pp. 113–135.

Buchholz, W. (2001). Open communication climate. *Bentley College Waltham*, p. Massachusetts.

Camagni, R.P. (1995). The concept of innovative milieu and its relevance for public policies in European lagging regions. *Papers in Regional Science*, vol. 74 (4), pp. 317–340.

Chen, Y.C. & Gant, J. (2001). Transforming local e-government services: The use of application service providers. *Government Information Quarterly*, vol. 18 (4), pp. 343–355.

Cohen, W.M. & Levinthal, D.A. (1990). Absorptive capacity: A new perspective on learning and innovation. *Administrative Science Quarterly*, vol. 35 (1), p. 128-152

Crawford, L. (2000). Profiling the competent project manager. In Proceedings of PMI Research Conference (pp. 3-15). Project Management Institute. Research Conference, 21 - 24 June.

Davies, C.T. (2002). The 'real' success factors on projects. *International Journal of Project Management*, vol. 20 (3), pp. 185–190.

Cooper, R. (1980). Project NewProd: Factors in new product success. *European Journal of Marketing*, vol. 14 (5/6), pp. 277–292.

- Cooper, R.G. (1999). The invisible success factors in product innovation. *Journal of Product Innovation Management*, vol. 16 (2), pp. 115–133.
- Cooper, R. & Kleinschmidt, E. (1987). Success factors in product innovation. *Industrial Marketing Management*, vol. 16 (3), pp. 215–224.
- Damanpour, F., Walker, R.M. & Avellaneda, C.N. (2009). Combinative effects of innovation types and organizational performance: A longitudinal study of service organizations. *Journal of Management Studies*, vol. 46 (4), pp. 650–675.
- Dar Ibaid, Y.S. (2015). *The value and impact of respect on construction projects relationships and performance*. MSc. Thesis. British university in Dubai.
- Delo, A., Hepworth, p & Hepworth, A. (2010). Assessing the competent project manager. *Project Manager Today*, pp. 1–6.
- Dennison, T. (2014). *Critical success factors of technological innovation and diffusion in higher education*. MSc. Thesis. Georgia State University.
- Detert, J.R., Schroeder, R.G. & Mauriel, J.J. (2000). A framework for linking culture and improvement initiatives in organizations. *Academy of Management Review*, vol. 25 (4), pp. 850–863.
- Di Gangi, P.M. & Wasko, M. (2009). Steal my idea! Organizational adoption of user innovations from a user innovation community: A case study of Dell IdeaStorm. *Decision Support Systems*, vol. 48 (1), pp. 303–312.
- Dispensa, M. (2013). *Faculty Survey on Instructional Technology Final Report*. Ithaca:New York, Ithaca College.
- Dosi, G. (1998). Sources, Procedures, and Microeconomic Effects of Innovation. *Journal of Economic Literature*, vol. 26 (3), pp. 1120–1171.
- Dougherty, D. (1992). Interpretive barriers to successful product innovation in large firms. *Organization Science*, vol. 3 (2), pp. 179–202.
- Drucker, P.F. (1998). The discipline of innovation. *Leader to Leader*, vol. 1998 (9), pp. 13–15.
- Dvir, D., Lipovetsky, S., Shenhar, A. & Tishler, A. (1998). In search of project classification: A non-universal approach to project success factors. *Research Policy*, vol. 27 (9), pp. 915–935.
- Elshafea, R., Rashid, A. & Abuhejleh, A. (2015). The dynamic link between workplace climate and employees readiness to innovation in U.A.E private sector organisations. *International Journal of Economics, Commerce and Management*, vol. III (6).
- Fairbank, J., Spangler, W. & Williams, S.D. (2003). Motivating creativity through a computer-mediated employee suggestion management system. *Behaviour & Information Technology*, vol. 22 (5), pp. 305–314.

- Fong, P.S.W. & Kwok, C.W.C. (2009). Organizational culture and knowledge management success at project and organizational levels in contracting firms. *Journal of Construction Engineering and Management*, vol. 135 (12), pp. 1348–1356.
- Fortune, J. & White, D. (2006). Framing of project critical success factors by a systems model. *International Journal of Project Management*, vol. 24 (1), pp. 53–65.
- Freeman, M. & Beale, P. (1992). Measuring project success. *Project Management Journal*, vol. 23 (1), pp. 8–17.
- Frenkel, A. (2001). Why high-technology firms choose to locate in or near metropolitan areas. *Urban Studies*, vol. 38 (7), pp. 1083–1101.
- Fryer, K.J., Antony, J. & Douglas, A. (2007). Critical success factors of continuous improvement in the public sector. *The TQM Magazine*, vol. 19 (5), pp. 497–517.
- Gaddis, P. (1959). The project manager. *Harvard Business Review*, vol. 37 (3), pp. 89–97.
- Gillard, S. & Johansen, J. (2004). Project management communication: A systems approach. *Journal of Information Science*, vol. 30 (1), pp. 23–29.
- Gray, R.J. (2001). Organisational climate and project success. *International Journal of Project Management*, vol. 19 (2), pp. 103–109.
- Hartley, J. (2005). Innovation in Governance and Public Services: Past and Present. *Public Money & Management.*, vol. 25 (1), pp. 27–34.
- Ika, L.A. (2009). Project success as a topic in project management journals. *Project Management Journal*, vol. 40 (4), pp. 6–19.
- Jugdev, K. & Moller, R. (2006). A retrospective look at our evolving understanding of project success. *IEEE Engineering Management Review*, vol. 34 (3), pp. 110–110.
- Kerzner, H. (1987). In search of excellence in project management. *Journal of Systems Management*, vol. 38 (2), pp. 30–39.
- Kleinschmidt, E.J. & Cooper, R.G. (1995). The relative importance of new product success determinants? Perception versus reality. *R & D Management*, vol. 25 (3), pp. 281–298.
- Korbijn, G. (2014). *Success criteria and critical success factors for contractors of urgent and unexpected projects*. MSc. Thesis. Rotterdam School of management Erasmus university.
- Lee, J.C., Shiue, Y.C. & Chen, C.Y. (2016). Examining the impacts of organizational culture and top management support of knowledge sharing on the success of software process improvement. *Computers in Human Behavior*, vol. 54, pp. 462–474.
- Lee-Kelley, L. & Leong, Loong, K. (2003). Turner's five-functions of project-based management and situational leadership in IT services projects. *International Journal of Project Management*, vol. 21 (8), pp. 583–591.

- Lim, C.S. & Mohamed, M.Z. (1999). Criteria of project success: An exploratory re-examination. *International Journal of Project Management*, vol. 17 (4), pp. 243–248.
- Love, p, Fong, p & Irani, Z. (2005). *Management of Knowledge in Project Environments*. Oxford: Elsevier:Butterworth-Heinemann.
- Muller, R. & Jugdev, K. (2012). Critical success factors in projects: Pinto, Slevin, and Prescott - the elucidation of project succes. *International Journal of Managing Projects in Business*, vol. 5 (4), pp. 757–775.
- Musselwhite, W. (1990). Time-based innovation: The new competitive advantage. *Training & Development Journal*, vol. 44 (1), pp. 53–57.
- Müller, R. & Turner, R. (2007). The influence of project managers on project success criteria and project success by type of project. *European Management Journal*, vol. 25 (4), pp. 298–309.
- Nerkar, A.A., McGrath, R.G. & MacMillan, I.C. (1996). Three facets of satisfaction and their influence on the performance of innovation teams. *Journal of Business Venturing*, vol. 11 (3), pp. 167–188.
- Page, A. (1993). Assessing new product development practices and performance: Establishing crucial norms. *Journal of Product Innovation Management*, vol. 10 (4), pp. 273–290.
- Pettersen, N. (1991). Selecting project managers: An integrated list of predictors. *Project Management Journal*, vol. 22 (2), pp. 21–26.
- Pinto, M. beth & Pinto, jeffrey. (1990). Project team communication and cross-functional cooperation in new program development. *Journal of Product Innovation Management*, vol. 7 (3), pp. 200–212.
- Pinto, J.K. & Mantel, S.J. (1990). The causes of project failure. *IEEE Transactions on Engineering Management*, vol. 37 (4), pp. 269–276.
- Pinto, M. (1990). Project team communication and cross-functional cooperation in new program development. *Journal of Product Innovation Management*, vol. 7 (3), pp. 200–212.
- Poon, P. & Wagner, C. (2001). Critical success factors revisited: Success and failure cases of information systems for senior executives. *Decision Support Systems*, vol. 30 (4), pp. 393–418.
- Potts, J. (2009). The innovation deficit in public services: The curious problem of too much efficiency and not enough waste and failure. *Innovation: Management, Policy & Practice*, vol. 11 (1), pp. 34–43.
- Prajogo, D.I. & Sohal, A.S. (2003). The relationship between TQM practices, quality performance, and innovation performance. *International Journal of Quality & Reliability Management*, vol. 20 (8), pp. 901–918.

- Radhakrishna, A.V. & Varadarajan, A. (1991). Maximizing Innovation in Industry and adapting to change”, *Industrial Management*, vol. 33 (6), pp. 19–22.
- Rockart, J. (1979). Chief executives define their own data needs. *Harvard Business Review*, vol. 57 (2), pp. 81–93.
- Rogers, E.M. (1983). *Diffusion of innovations*. 3rd edn. New York, NY:Free Press.
- Schiliro, D. (2015). Innovation in small and medium enterprises in the United Arab Emirates. *International Journal of Social Science Studies*, vol. 3 (5), pp. 2324–8041.
- Schuhmacher, M.C. & Kuester, S. (2012). Identification of lead user characteristics driving the quality of service innovation ideas. *Creativity and Innovation Management*, vol. 21 (4), pp. 427–442.
- Sethi, N. & Sethi, V. (2008). E-government Implementation: A Case Study of Dubai e-Government. *Nanyang Technological University*, (Singapore), pp. 185–190.
- Simon, A. & Honore Petnji Yaya, L. (2012). Improving innovation and customer satisfaction through systems integration. *Industrial Management & Data Systems*, vol. 112 (7), pp. 1026–1043.
- Slevin, D. & Pinto, J. (1986). The project implementation profile: New tool for project managers. *Project Management Journal*, vol. 18 (4), pp. 57–71.
- Smith, L.A., Goodrich, N., Roberts, D. & Scinta, J. (2005). Assessing Your Organization’s Potential for Value Innovation. *Research-Technology Management*, vol. 48 (2), pp. 37–42.
- So, K.C. (2000). Price and time competition for service delivery. *Manufacturing & Service Operations Management*, vol. 2 (4), pp. 392–409.
- Stewart-Weeks, M. & Kastle, T. (2015). Innovation in the public sector. *Australian Journal of Public Administration*, vol. 74 (1), pp. 63–72.
- Teece, D.J. (2010). Business models, business strategy and innovation. *Long Range Planning*, vol. 43 (2-3), pp. 172–194.
- Tether. (2003). The sources and aims of innovation in services: Variety between and within sectors. *Economics of Innovation and New Technology*, vol. 12 (6), pp. 481–505.
- Thamhain, H.J. (2004). Linkages of project environment to performance: Lessons for team leadership. *International Journal of Project Management*, vol. 22 (7), pp. 533–544.
- Truner, J.R. & Muller, R. (2005). The project manager’s leadership style as a success factor on project; A literature review. *the project Management Institute*, vol. 36 (1), pp. 49–61.

Valentino, D. & Christ, B. (1990). Time-based management creates a competitive advantage. *Planning Review*, vol. 18 (6), pp. 8–11.

Van der Panne, G., van Beers, C. & Kleinknecht, A. (2003). Success and failure of innovation: A literature review. *International Journal of Innovation Management*, vol. 07 (03), pp. 309–338.

Van Gobel, L., Akib, H., Tahmir, S. & Made, A. (2015). Innovation of Public service in meeting the basic needs in Gorontalo, Indonesia. *International Journal of Academic Research*, vol. 7 (1), p. 413.

Veugeliers, R. & Cassiman, B. (1999). Make and buy in innovation strategies: Evidence from Belgian manufacturing firms. *Research Policy*, vol. 28 (1), pp. 63–80.

Walker, R.M. (2003). Evidence on the management of public services innovation. *Public Money & Management*, vol. 23 (2), pp. 93–102.

West, M.A. & Anderson, N.R. (1996). Innovation in top management teams. *Journal of Applied Psychology*, vol. 81 (6), pp. 680–693.

Westerveld, E. (2003). The project excellence Model: Linking success criteria and critical success factors. *International Journal of Project Management*, vol. 21 (6), pp. 411–418.

Zeithaml, V.A., Parasuraman, A. & Malhotra, A. (2002). Service quality delivery through web sites: A critical review of extant knowledge. *Journal of the Academy of Marketing Science*, vol. 30 (4), pp. 362–375.

## Appendix (1): Research questionnaire

QUESTIONNAIRE	استبيان
<p><b>Dear Sir/ Madam</b></p> <p>This questionnaire gives you the opportunity to express your views on a wide range of issues related to the challenge that appears when the government departments adopt innovation within their projects and that's</p>	<p><b>سيدي/سيدتي</b></p> <p>إن هذا الاستبيان يعطيك الفرصة لعرض وجهة نظرك لمجموعة من المواضيع تتعلق بمدى التحديات التي تواجه الجهات الحكومية لتطبيق الابتكار في مشاريعها والتي تتضمن مختلف الأنشطة والخدمات الرجاء ملاحظة أنه ليس هناك إجابة خاطئة أو صحيحة.</p>

<p>project contains different services and activities. Please note that there is no right or wrong answer.</p> <p>The questionnaire will be used to collect the primary data needed for a research study. Therefore, we seek your assistance to be as open, fair, honest as possible as you can in your responses.</p> <p>The researcher assure you that no individuals will be identified from their responses and there are no requests for confidential information included in the questionnaire. The results of the analysis will be strictly used by the researchers for study purposes <b>only</b>.</p> <p>The questionnaire comprises into four parts:</p> <ol style="list-style-type: none"> <li>1- General information</li> <li>2- project related factors</li> <li>3- project success / failure measurement</li> </ol> <p>Thank you</p> <p><b>Researcher</b></p>	<p>سيتم استخدام هذا الاستبيان لجمع البيانات الأولية لعمل دراسة بحثية. عليه نطلب مساعدتكم في الإجابة على الأسئلة بكل وضوح وحرية وصدق وأمانة قدر المستطاع.</p> <p>يؤكد لكم الباحث بأنه لن يتم التعريف أو الإشارة إلى الأفراد من خلال الإجابات المقدمة ولن يكون هناك أية إجابات تستوجب السرية يتضمنها الاستبيان. سيتم استخدام نتائج التحليل من قبل الباحثين لأغراض الدراسة فقط.</p> <p>يتكون الاستبيان من أربعة أقسام:</p> <ol style="list-style-type: none"> <li>1. معلومات عامة</li> <li>2. عوامل متعلقة بنجاح المشروع / فشله</li> <li>3. معايير تقييم نجاح المشروع / فشله</li> </ol> <p>مع الشكر</p> <p><b>الباحث</b></p>
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PART ONE: GENERAL INFORMATION		الجزء الأول : معلومات عامة	
Please tick one box for each question:		الرجاء وضع علامة لكل سؤال:	
<b>A. Sex</b> (1) Male (2) Female		أ – الجنس: (1) ذكر (2) أنثى	
	<input type="checkbox"/> ( ) <input type="checkbox"/> ( ) <input type="checkbox"/> ( ) <input type="checkbox"/> ( )		
<b>B. Marital Status:</b> (1) Married (2) Unmarried		<b>ب- الحالة الاجتماعية</b> (1) متزوج/متزوجة (2) غير متزوج/غير متزوجة	
	<input type="checkbox"/> ( ) <input type="checkbox"/> ( ) <input type="checkbox"/> ( ) <input type="checkbox"/> ( )		

<b>C. Education:</b> (1) Less than high school (2) High school (3) Graduate degree (4) High Diploma (5) Masters or above		<b>ج- المرحلة التعليمية:</b> (1) أقل من الشهادة الثانوية (2) الشهادة الثانوية (4) متخرج/متخرجة (5) الدبلوم العالي (6) الماجستير أو أعلى	
	( ) ( )		
	( ) ( )		
	( ) ( )		
	( ) ( )		
	( ) ( )		
	( ) ( )		
<b>D. Age:</b> (1) Less than 25 (2) 25 - 35 (3) 36 - 46 (4) 47 - 57 (5) 58 or above		<b>د- العمر</b> (1) أقل من 25 عاماً (2) 25 - 35 (3) 36 - 46 (4) 47 - 57 (5) 58 وأكثر	
	( ) ( )		
	( ) ( )		
	( ) ( )		
	( ) ( )		
	( ) ( )		
<b>E. No. of years worked in current organization:</b> (1) One year or less (2) 2 - 7 (3) 8 - 13 (4) 14 - 19 (5) 20 years or above		<b>هـ - عدد السنوات التي قضيتها في منظمك الحالية</b> (1) سنة أو أقل (2) 2 - 7 (3) 8 - 13 (4) 14 - 19 (5) 20 سنة أو أكثر	
	( ) ( )		
	( ) ( )		
	( ) ( )		
	( ) ( )		
	( ) ( )		
	( ) ( )		

<b>F. No. of years worked in the position or job:</b> (1) One year or less (2) 2 - 7 (3) 8 - 13 (4) 14 - 19 (5) 20 years or above	<b>و - عدد سنوات الخدمة في نفس الوظيفة أو العمل:</b> (1) سنة أو أقل (2) 2 - 7 (3) 8 - 13 (4) 14 - 19 (5) 20 سنة أو أكثر
<b>G. Job Status:</b> (1) First level (2) Middle level (3) Lower level	<b>ز - المستوى الوظيفي:</b> (1) ادارة عليا. (2) ادارة وسطى. (3) ادارة دنيا.
<b>H. Nationality:</b> (1) UAE National (2) Non UAE National	<b>ح - الجنسية</b> (1) مواطني دولة الإمارات العربية المتحدة (2) غير مواطني دولة الإمارات العربية المتحدة
<b>I. Organization size :</b> a. (0) to (250) employee b. (250) to (500) employee c. (500) to (1000) employee d. more than 1000 employee	<b>ج - حجم المنظمة :</b> أ من (0) الى (250) موظف ب من (250) الى (500) موظف ج من (500) الى (1000) موظف د أكثر من 1000 موظف
<b>J. Innovation / performance awards over the last five years</b> a. (0) awards b. (1) to (5) awards c. (5) to (10) awards d. more than 10 awards	<b>د. جوائز الابتكار / الأداء على مدى الخمس سنوات السابقة :</b> أ (0) جائزة ب من (1) الى (5) جوائز ج من (5) الى (10) جوائز د أكثر من 10 جوائز

Second part: project success / failure related factors						الجزء الثاني : العوامل المتعلقة بنجاح المشروع او فشله
1- the integration of innovative project strategies with organization strategies						١- دمج استراتيجيات مشروع الابتكار مع استراتيجية المنظمة
Please tick one box for each item:						الرجاء وضع علامة لكل سؤال :
statement	strongly agree موافق بشدة	Agree موافق	Undecided محايد	Disagree غير موافق	strongly disagree غير موافق بشدة	العبارة
1. my organization integrate the project strategies within the organization strategies						١. تعمل جهة عملي على دمج استراتيجيات مشاريع الابتكار مع استراتيجية المنظمة
2. Innovative project strategy considers the customer need in my organization						٢. يتم مراعاة حاجة العملاء في استراتيجية جهة العمل
3. my organization use various strategy to develop and manage the innovative project						٣. تستخدم جهة عملي عدة استراتيجيات في سبيل ادارة وتطوير مشاريع الابتكار
4. internal research and development in my organization help to develop the innovative project strategy						٤. ادارة الابحاث والتطوير في جهة عملي تساعد على تطوير استراتيجية مشاريع الابتكار
5. my organization use outsourcing company to hire a project manager who have an experience with innovative projects						٥. تستعين جهة عملي بالشركات الخارجية في سبيل تعيين مدراء ذوي خبرة في مشاريع الابتكار
6. my organization prefer to engage with consultation organization and that develop best strategy for innovative projects						٦. تفضل جهة عملي على الاستعانة بالشركات الاستشارية في سبيل تطوير افضل الاستراتيجيات لمشاريع الابتكار

<b>Second part: project success / failure related factors</b> <b>2- knowledge management</b> <b>Please tick one box for each item:</b>						الجزء الثاني : العوامل المتعلقة بنجاح المشروع او فشله ٢- إدارة المعرفة الرجاء وضع علامة لكل سؤال :
statement	strongly agree موافق بشدة	Agree موافق	Undecided محايد	Disagree غير موافق	strongly disagree غير موافق بشدة	العبارة
7. In my organization the knowledge management drive from the organization by engaging the employee in meeting, discussion , and brainstorming session						٧. في الجهة التي اعمل بها ادارة المعرفة تتبنى من المنظمة من حيث مشاركة الموظفين في الاجتماعات ، المناقشات و جلسات العصف الذهني
8. organization culture encourage the employee to learn or develop their project knowledge management						٨. بيئة جهة عملي تشجع الموظفين على التعلم وتنمية مهارة ادارة المعرفة خصوصا في المشاريع
9. it is important for the project team to be aware of expertise and overall knowledge available in the team						٩. من المهم في فريق عمل اي مشروع في الجهة التي اعمل بها استيعاب الخبرات والمعارف المكتسبة من اعضاء الفريق
10. the organization provides a supportive culture and simulative area to support innovative projects						١٠. توفر الجهة التي اعمل بها بيئة محفزة وداعمة لمشاريع الابتكار
11. the project team gain knowledge about the project such as project design, risk management, and project plan						١١. يحصل فريق العمل على المعلومات الاساسيه عن المشروع في منظمتي مثل تصميم المشروع وادارة المخاطر و خطة العمل على المشروع
12. sharing the experience from previous innovative project helps the project team to enrich their knowledge about innovation						١٢. مشاركة الخبرات السابقة المكتسبة من العمل على مشاريع الابتكار تساعد فريق العمل على اثراء الفرق الأخرى بهذه

						المعارف والمعلومات القيمة
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Second part: project success / failure related factors						الجزء الثاني : العوامل المتعلقة بنجاح المشروع او فشله
3- open communication						٣- التواصل المفتوح
Please tick one box for each item:						الرجاء وضع علامة لكل سؤال :
statement	strongly agree موافق بشدة	Agree موافق	Undecided محايد	Disagree غير موافق	strongly disagree غير موافق بشدة	العبارة
13. in my organization, the project manager spends a large percentage of his time in communicating with project parties						١٣. في جهة عملي يقضي مدير المشروع نسبة كبيرة من وقته للتواصل مع الاطراف المشاركة في المشروع
14. communication with users is important to determine and understand their demands from the organization services						١٤. يعد التواصل مع المستخدمين من خدمات المشروع من العناصر المهمة لتحديد وفهم احتياجاتهم من الخدمات
15. information resource manager in my organization strength the relationship with externals contractors for the reason of getting useful experiences from their innovative ideas in projects						١٥. فريق العمل في المشروع في جهة عملي يساعد على تقوية العلاقة مع المتعاقدين الخارجيين بغرض الحصول على الخبرة من افكارهم المبتكرة في المشاريع
16. understanding and interacting with project parties is help to ensure that project parties work toward achieving the project objective based in project plan						١٦. يعد فهم المتعاملين والتفاعل معهم على درجة بالغة من الأهمية حيث يضمن ذلك التركيز على التأكد من انه الاطراف المشاركة في المشروع تعمل على تحقيق الهدف الأساسي للمشروع وفق خطة العمل

17. In my organization , the project team member use informal methods for communication such as conversations, electronic mails, and phones calls to strength the opportunity of project success						١٧. في جهة عملي تتوفر طرق غير رسمية للتواصل مع فريق عمل المشروع مثل المحادثات الشفوية بين اعضاء الفريق والايملات ،المحادثات الهاتفية والتي من شأنها تعزيز نجاح المشروع
18. comments, criticism , and opinions in my organization help to develop the innovative ideas in government department						١٨. تساعد الملاحظات والنقد والآراء في جهة عملي على تنمية الافكار المبتكرة في الدوائر الحكومية

<b>Second part: project success / failure related factors</b> <b>4- project management support</b> <i>Please tick one box for each item:</i>						الجزء الثاني : العوامل المتعلقة بنجاح المشروع او فشله ٤- دعم إدارة المشروع الرجاء وضع علامة لكل سؤال :
statement	strongly agree موافق بشدة	Agree موافق	Undecided محايد	Disagree غير موافق	strongly disagree غير موافق بشدة	العبارة

19. the degree of supports that provided by project manager to project team is mostly allocated by the degree of support that drive from my organization top manager.						١٩. مقدار الدعم الذي يقدم من قبل مدير المشروع لفريق العمل يعتمد على مقدار الدعم المكتسب من الإدارة العليا للجهة التي تعمل بها
20. the project manager measure and evaluate the impact of innovation in my organization services						٢٠. مدير المشروع يقيس ويقيم تأثير الابتكار على الخدمات التي تقدمها جهة عملي للمستخدمين
21. in my organization, top management ensure to provide a strong theoretical motivational foundation about innovation and that to raise the probabilities of project success						٢١. في جهة عملي تدعم الإدارة العليا توفير دروس نظرية تحفيزية عن الابتكار لأعضاء فريق المشروع وذلك لتعزيز والارتقاء بمستوى الابتكار في المشاريع
22. in my organization top management ensure to provide a communication support to stimulate the free flow of suggestions, ideas, rationales, and perspectives across the project team members.						٢٢. في جهة عملي تحرص الإدارة العليا على توفير دعم التواصل وذلك لتحفيز التدفق الحر للإقتراحات والأفكار والمبررات ووجهات النظر عبر أعضاء المشروع
23. the top management supports the functional manager in his task and that's to direct the project team members toward project success and to ensure that the project objective associate with the organization overall strategy – its correct but I need to read it again						٢٣. تحرص الإدارة العليا في جهة عملي على دعم المير التوظيفي للمشروع والذي من شأنه قيادة فريق المشروع نحو النجاح في تحقيق أهداف المشروع بالإضافة إلى حرص المدير التوظيفي على ارتباط أهداف المشروع باستراتيجية المؤسسة
24. the project manager in my organization help the project team to think about a range of skills and mechanisms that they need to promote the project success						٢٤. يساعد مدير المشروع في جهة عملي فريق العمل على التفكير بكمية المهارات والآليات التي تساعد على تعزيز نجاح المشروع

<b>Second part: project success / failure related factors</b> <b>5- project management style</b> <i>Please tick one box for each item:</i>	الجزء الثاني : العوامل المتعلقة بنجاح المشروع او فشله ٥- اسلوب ادارة المشروع
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						الرجاء وضع علامة لكل سؤال :
statement	strongly agree موافق بشدة	Agree موافق	Undecided محايد	Disagree غير موافق	strongly disagree غير موافق بشدة	العبارة
25. in my organization project manager usually obtained leadership style that's help to deliver the project successfully to the end users						٢٥. مدير المشروع ي جهة عملي يتمتع بأسلوب قيادي يساعده على توصيل اهداف المشروع بنجاح للمستخدم
26. my project manager whose acting as a leaders creates the organization environment that favour novelty and innovation						٢٦. مدير المشروع في جهة عملي والذي يتمتع بالدور القيادي يوفر بيئة داعمة للابتكار والابداع
27. in my organization , managers contains an essential leadership soles that encourage the team to corporate toward aching project success						٢٧. المدراء في جهة عملي يتمتعون بالروح القيادية التي تساعد فريق عمل المشروع على التعاون لتحقيق مشروع ناجح
28. project manager whose acting as leadership in my organization considers as Entrepreneur whose introduces, drives, and control the team members towards completing the innovative project successfully						٢٨. مدير المشروع في جهة عملي والذي يتمتع بالدور القيادي في منظمتي يعتبر كرجل الاعمال الذي يقدم ويقود ، يتحكم باعضاء فريق لهدف اكمال المشروع بشكل ناجح
29. leadership in my organization manage times, budget, and knowledge in orders to complete the project successfully						٢٩. مدير المشروع القيادي في جهة عملي يدير كلاً من الوقت والميزانية والمعرفة بالاضافة الى السعي وراء اكمال المشروع بنجاح
30. the internal confidence and self-belief from the leadership knowledge						٣٠. الثقة الداخليه والثقة بالنفس من خلال المعرفة والخبرات المكتسبة تساعد مدير المشروع القيادي على توصيل المشروع

and experience are likely to play a fundamental role in the manager capacity to deliver the project successfully						بنجاح للمستخدم
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Second part: project success / failure related factors						الجزء الثاني : العوامل المتعلقة بنجاح المشروع او فشله
6- project manager competencies						٦- كفاءات مدير المشروع
Please tick one box for each item:						الرجاء وضع علامة لكل سؤال :
statement	strongly agree موافق بشدة	Agree موافق	Undecided محايد	Disagree غير موافق	strongly disagree غير موافق بشدة	العبارة
31. in my organization project management competences such as knowledge, skills, and personal attributes affect the project success						٣١. في جهة عملي كفاءات مدير المشروع من مثل مقدار المعرفة المكتسبه والمهارات والسمات الشخصية لها تأثير على نجاح المشروع
32. leadership manager can make various quick significant decision's comparing to the times it takes other manager to understand the project issue itself						٣٢. المدير القيادي في جهة عملي باستطاعته اتخاذ قرارات مصيرية مهمة للمشروع نسبة الى المدراء الاخرين ممن يستغرقون الوقت الكثير لفهم اساس المشكله فالمشروع
33. the project manager in my organization have the abilities to emerge various employee from different culture and experiences within the same group						٣٣. باستطاعة مدير المشروع في جهة عملي دمج العديد من الخبرات والثقافات في فريق عمل واحد

34. project manager in my organization can monitor the complement of project procedures successfully						٣٤. مدير المشروع في جهة عملي باستطاعته مراقبة مراحل اتمام المشروع بنجاح
35. in my organization project managers competencies usually depends in a various range of general inter-personal and leadership skills that's have an essential roles in project success						٣٥. في جهة عملي كفاءات مدير المشروع تعتمد على مجموعه مختلفه من المهارات الشخصيه والقياديه التي لها دور بارز في نجاح المشروع
36. project manager competences describe what project manager needs to be able to accomplish not only the project success but the organization success						٣٦. كفاءات مدير المشروع تعكس الأساسيات التي يحتاجها المدير لإدارة مهامه الأساسيه فالمشروع والتي تساهم في نجاح المنظمه وليس نجاح المشروع فقط

<b>Third part: organization related factors</b> <b>project success / failure measurement</b> <i>Please tick one box for each item:</i>						الجزء الثالث :
						معايير نجاح المشروع / فشله الرجاء وضع علامة لكل سؤال :
statement	strongly agree موافق بشدة	Agree موافق	Undecided محايد	Disagree غير موافق	strongly disagree غير موافق بشدة	العبارة

37. the innovative project offers the innovative service based on users and clients groups specifications and demands						٣٧. تسعى مشاريع الابتكار الى توفير الخدمات وفق متطلبات ومواصفات المستخدمين ومجموعة العملاء
38. the innovative project in my organizations seeks to motivate users adoption for the technological service						٣٨. مشاريع الابتكار في منظمتي تساهم في مساعدة المستخدمين لتبني استخدام الخدمات التكنولوجية
39. the innovative projects seeks to deliver the product/ service on time						٣٩. تحقق مشاريع الابتكار مبعتي المنظمة لتوصيل المنتج / الخدمة فالوقت المحدد
40. meet the project quality requirements.						٤٠. تسعى مشاريع الابتكار في القطاع الحكومي الى ضمان جودة الخدمة المطلوبة
41. innovative projects add value to the organization services						٤١. تحرص مشاريع الابتكار على اضافة قيمة لخدمات المنظمة
42. have a sense of professional satisfaction for the team						٤٢. تحرص مشاريع الابتكار على ارضاء فريق العمل