E-SERVICE ADOPTION IN UNSTABLE SOCIETIES

By

Abraheem Alsaeed

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School of Computing

Faculty of Technology

University of Portsmouth

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"Whilst registered as a candidate for the above degree, I have not been registered for any other research award. The results and conclusions embodied in this thesis are the work of the named candidate and have not been submitted for any other academic award."

ABSTRACT

Refugees and displaced people who have been affected by political instability face complex challenges to access government services. Digital (eGovernment) services perhaps have the greatest potential for overcoming these challenges, particularly in societies and developing countries with limited access to traditional infrastructure and resources. There are limited academic works covering the provision and efficacy of eServices for this need.

This work addresses this gap by examining eService provision for three levels of instability (High, Medium and Low, derived from UN data), and focuses particularly on the high-level case of instability in Syria, and on Syrian refugees hosted by other countries.

The topic was challenging to investigate, given the current geopolitical context and issues of access to relevant people and stakeholders, which are distributed across countries and involve multiple agencies.

A combination of research methodologies has been adopted, in this research. We reviewed the literature that focused on factors affecting the adoption of eService during instability, in which an initial conceptual formwork emerged. We compared eService activities in countries that exhibit different levels of instability, isolating factors and behaviours that led to successful experiences in order to repeat those successes in countries that have high-level of instability.

This identified a need for an insightful study within highly unstable countries, therefore, we conducted a questionnaire to capture inputs from groups of displaced people which applied to the Syrian refugees in Syria, Turkey, Jordan, Lebanon and some EU countries.

We received 415 complete responses and 1634 partially completed responses to this study. The results indicate possible areas of good practice in the use of technology to support and engage refugees. To find the full set of these activities and good practices we conducted nineteen interviews with different stakeholders and experts from several case studies. In total, more than thirty hours of interview gathered using field-work and teleconference.

This research provides a novel framework (Instability Framework) as the main contribution, in which we suggest technology-related strategies, barriers, and enablers that may assist in the effective adoption of eService delivery in unstable countries. Furthermore, Institutional Theory and examples of similar work in government support e.g. reinventing government principles by (Osborn &Gabler and Heeks in the information age) were extended to reflect the adoption of eService delivery in unstable society and used as theoretical lenses to comprehend our results.

ACKNOWLEDGEMENT

In the accomplishment of my Ph.D thesis, I would like to express my sincere appreciation to all those who have helped, assisted and contributed to the successful completion of this thesis. Without their help and support, this journey would not have been possible. To who have shown me the support and the encouragement when I most needed. Primarily I would thank god for being able to complete this work and for everything.

I wish to express my gratitude and love to my beloved wife Khawla for her endless and unconditional support and encouragement. Also, to my adorable son Mohamad and to my precious daughters Anna and Sana for their endless love, emotional support and continuous encouragement throughout my research journey! Thank you for all the joy you brought to my life and, for cheering me up when I was feeling down.

To my beloved late father. To my beloved mum, brothers and sisters, thanks for your always support and encouragement (love you all).

I cannot adequately express my appreciation to all my friends, I am so grateful for being a member of their social communities.

My special thank goes to both Dr. Carl Adams and Dr. Rich Boakes for their support, guidance, and inspirational enthusiasm throughout the duration of this research.

I would also like to thank all people who offered their valuable time to participate in the questionnaires and the interviews as a part of this research.

Finally, I dedicate this thesis to the Syrian children who have been displaced and uprooted from their surroundings who are struggling to receive a decent education or a proper healthcare, as a result of, the Syrian conflict. And, I wish for the Syrian instability to be overcome, and for the refugees to be able to return home soon.

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1 CHAPTER 1

INTRODUCTION

1.1 OVERVIEW

The scope and application of electronic government have rapidly grown and evolved as it has been adopted worldwide. Complexity aspects associated with the electronic government portfolio (social, economic, technology and politics ...etc.), have been motivated by the advanced development of technology and the diffusion of information and communication technologies (Heeks & Bailur, 2007a). This advanced technology facilitates governments, around the world, to reach citizens and vice versa via different methods to exchange information, to deliver services and to perform transactions.

The number of people using the internet is increasing over time, which has resulted in changes to the way governments interact with citizens (International Telecommunication Union, 2015).

e-Government strategies tend to include every segment of society, however, governments have not been so successful in providing eServices to unstable societies or encouraging refugees to adopt or continuously use the eServices provided, especially those people who are living in camps and isolated (Transtec S.A., 2015).

Delivering services electronically through different channels to serve vulnerable people (refugees, displaced people and people in war zones) have attracted many researchers and policymakers around the world in searching for possible methods to include those people. Thus, enabled governments to consistently strive to improve their online services for citizens & businesses and enhancing digital capabilities at different levels to provide benefits to all stakeholders (Rabaiah & Vandijck, 2009).

The purpose of this chapter is to highlight the research background and the research gap; an introduction to the Syrian eGov initiative and its level of instability. To discuss the research motivations, the research question, aims and objectives. Finally, to present an overview of the thesis chapters. The following figure 1.1, highlights the e chapter 1 outline.

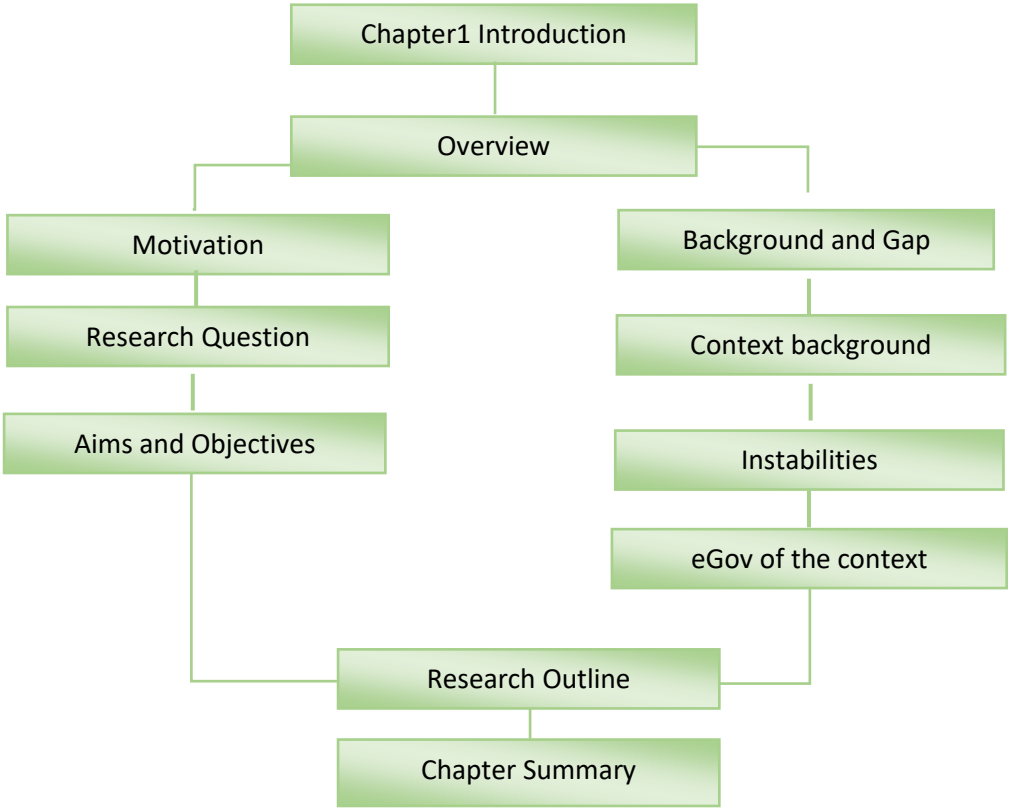


Figure 1-1: Chapter 1- Introduction Outline.

1.2 E-GOVERNMENT OVERVIEW

Electronic Government (hereafter eGov) is a transformative agent upon political and civic activity: it involves the provision and use of information and services by citizens, businesses and governments; and thus has the potential to increase civic efficiency and transparency; to facilitate interaction between public, private and government entities; and ultimately to promote service delivery, democracy and political stability. The scope and application of eGov have rapidly grown and evolved as it has been adopted worldwide.

"*Electronic government (eGovernment) encompasses a wide range of strategic intent, enabled through Information and Communication Technologies (ICTs), which must be formulated and implemented within a complex, diverse political context*." (Hackney, Desouza, & Chau, 2008)

eGov consists of the digital interactions between governments and stakeholders hence eGov delivery models include: G2C (government to citizen), G2B (government to business), G2E (government to employee), G2G (government to government), and C2G (citizen to government), (for further detail about eGov, Chapters 2,3 presented in depth literature review on the topic). However, in our study, the focus will be made on the G2C model (government to citizen) or the so-called the government online service (hereafter eService). The focus, in particular, in a situation where the geopolitical instability considered to be high (chapter 5 discuss in details the three levels of instability). (United Nations, 2012) states that the progress of eGov is not just providing online information about public services (static information), but also considered with the number of government web-pages increases as information becomes more dynamic with users having more options for accessing information, more formal exchange between user and government service provider takes place , users easily access services prioritized by their needs, and fully complete integration of all eServices through a one-stop-shop access and in a later study, include vulnerable people such as refugees and displaced people. Governments consistently strive to improve their eServices for citizens. Enhancing digital capabilities at different levels to provide benefits to all stakeholders. According to United Nations (2010), eGov is "the use of ICT, and its application, by the government for the provision of information and public services to the people". The ultimate benefit of implementing eService is to reduce the paper-based public service and replace it with a digital one in which, the citizens will have the luxurious to obtain the government services delivered anywher and at anytime. Understanding to what degree eService meets the user's expectation under the citizen-centric approach is a fundamental base for efficient and effective implementation and development of eGov services (Btoush, 2009). eGov has been recognized as a change agent for

public sector reform. (Ebrahim, Irani, & Al Shawi, 2004) argues that through this change, eGov increasingly tries to build information-sharing and improve communication with other organization as well with the public to meet the current demands. The emphasis of this research on the enabling and barriers that contribute to the successful adoption and the ensure of the efficiency and effectiveness of the eService delivery system during instability. Therefore, the main focus is the use of the electronic service in supporting the Syrian refugees and displaced people .

1.3 SYRIA AND INSTABILITY OVERVIEW

Syrian Arab Republic, is a country in Western Asia, bordering Lebanon and the Mediterranean Sea to the west, Turkey to the north, Iraq to the east, Jordan to the south. Damascus is the capital and is considered to be the oldest inhabited city in the world, Syria is home to diverse ethnic and religious groups, including the majority Arab population where the Sunni make up the largest population group in Syria. (Michael, 2011). Syrian state was established after gained independence in April 1946 from French Occupation, as formed a parliamentary republic and later on become a member of the United Nation. Syria and Egypt have united for 3 years between 1958 and 1961 which was terminated by a military coup. Syria was under Emergency Law from 1963 to 2011: this means suspending most constitutional protections for citizens, hence, the system of the government is considered to be non-democratic. Bashar al-Assad has ruled the country since 2000 and was preceded by his father Hafez al-Assad, who was in office from 1970 to 2000 (Michael, 2011). The President is Head of State and the Prime Minister is Head of Government, The Peoples Council is the body responsible for passing laws, approving government appropriations and debating policy; the executive branch consists of the president, two vice presidents, the prime minister, and the Council of Ministers.

In March 2011, Syrian people took to the street protesting against the Syrian Regime who is ruling the country, whose forces responded with violent crackdowns. The conflict gradually morphed from

popular protests to an armed rebellion after months of military sieges, As consequences, millions of people have fled their homes to seek refuge in the neighbouring countries and some other have been displaced internally (Sengupta, 2012). The Syrian Interim Government was formed by the opposition umbrella group, the Syrian National Coalition, in March 2012 and was recognised as the sole representative of the Syrian people by several nations (Schofield, 2012). This new situation placed Syria among the high level of the unstable countries which triggered an alerts for world nations and NGOs to consider the Syrian humanitarian crisis as a high priority and to provide the Syrian people (displaced internally and Refugees outside Syria) every possible help such as health, education, services, welfare, children protection and to support their need and to be considered as a new emerging society and to be treated as such.

According to the world level of instability, Syria becomes one of the high level instability country. Where countries are vary on their level of stabilities, United Nation Capturing the levels of stability for governments around the globe (Institute for Economics and Peace, 2015).

Figure 1.2, illustrates the instability position of Syria amongst the rest of the world and clearly that you may see Syria among the very high unstable countries. In chapter 5, we divided this scale into three domains; high, medium and low instability. We further study one example of each domain on the eGov strategy.

Syria becomes an unstable country after the start of the Syrian Civil War in March 2011. According to the UNHCR (2012), a number of two and a half million Syrian have fled Syria to neighbouring countries to seek refuge and about 4 million Syrians were internally displaced because of the Syrian Civil War as the end of 2012 statistics.

After four years, Information Management Unit (2016) concluded that the Syrian people have endured one of the most ferocious, barbarous and brutal conflicts of the 21st century which has lasted for five years and is still going. The survey reported over 250,000 people killed, over a

million injured, 6.5 million displaced within Syria, 4.6 million refugees who have fled to neighbouring countries and the remaining population (13.5 million people) are in an unbearable situation and much of them lack humanitarian support.

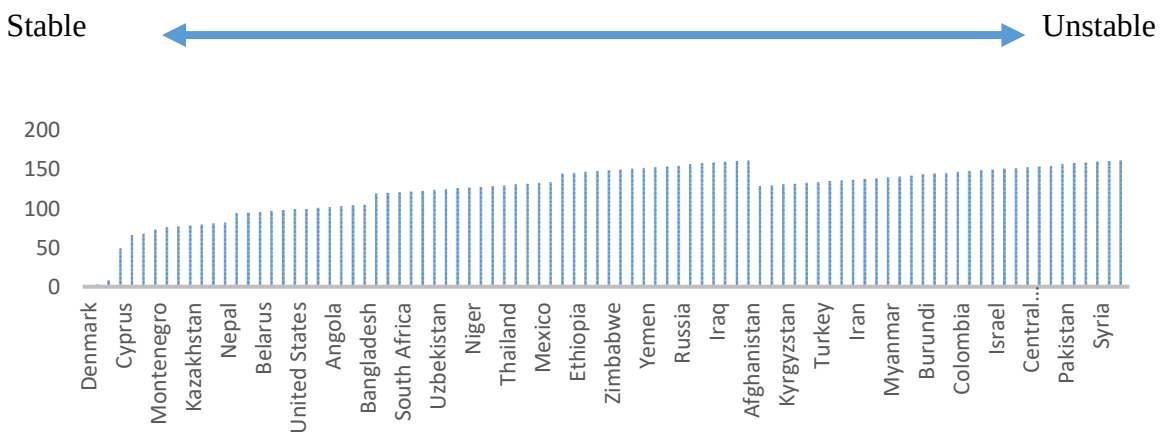


Figure 1-2: Global Peace Index (GPI) for 2013

(UNHCR, 2014b) gave an example as a result of the Syrian conflict, that more than 30,000 children in Lebanon borne without registered citizenship. Where both, Lebanese and Syrian, governments have refused to issue any paper proof or birth certificate to the born Syrian Refugees in Lebanon. (UNICEF, 2015) call for concerted action for the Syria's children does not become a lost generation. Syrian people facing extra challenges of proving their entities in the housing countries. This is an example where eService could fit and may fulfil and solve individual, society and government issues where also could make a difference to the displaced and refugees people.

1.4 eGov INITIATIVE IN SYRIA OVERVIEW

Syrian's eGov initiative is still at a primitive stage by offering only static information about public services. The Syrian eGov strategy: "Enhancing Institutional Capacity for eGov Implementation" has been adopted as a five-year plan from 2011 to 2015 and agreed with the United Nations Development Program (UNDP). (Syria Arab Republic, 2008) stats that the goal of this project as "to initiate the implementation phase of strategy through enhancing the operational capacity and the

institutional framework for overall coordination of e-Gov initiative with the following six expected outputs:

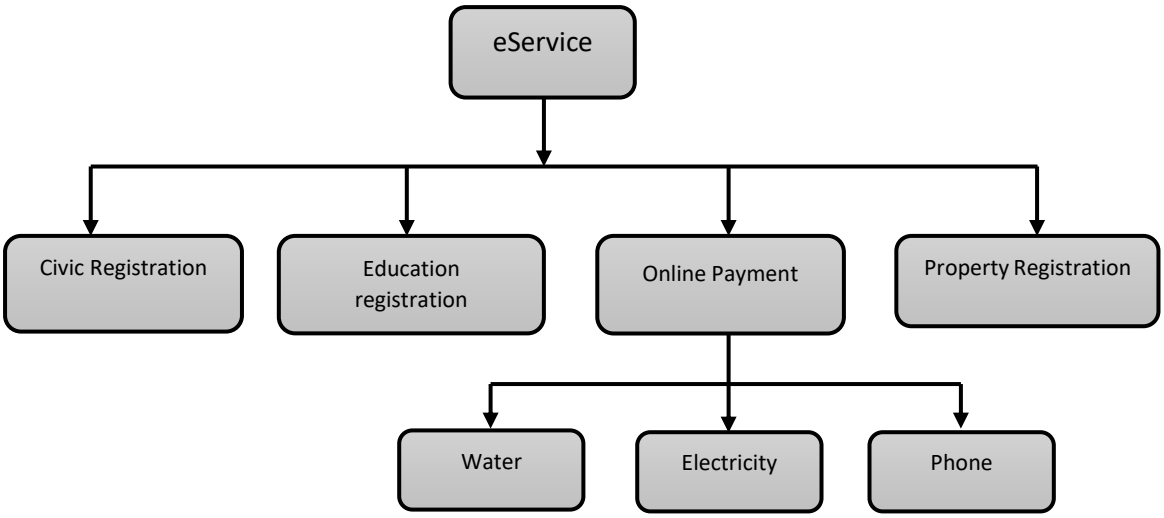


Figure 1-3: Syrian eServices framework, (Syria Arab Republic, 2008)

(1)An eGov Monitoring and Evaluation Unit will be established (2) An eGov Portal Unit will be created and launched (3) Standards will be adopted and supporting tools developed and required shared services developed (4) Efficient and timely Consulting Services will be available for eGov programs (5) A Communication and Public Relations strategy for eGov Projects will be in place and (6) An Enhanced institutional capacity for eGov Implementation should be supported. A step taken to initiate the implementation phase of the strategy as an executive team has been created comprising a consulting unit, a monitoring and evaluation unit, a development and standardization unit, and a national eGov portal unit and all units work under the provision of (and report directly to) the Syrian Prime Minister.

The units' tasks are (a) to support and develop IT strategies, (b) to provide technical support, (c) to enable and nurture eGov best practice, (d) to provide a monitoring service and (e) to implement a communication plan.

The main components of the eServices provided are online payment of electricity, water, and phone bills, civic, education and properties registration. Figure 1.3, represents the Syrian eServices framework which is the focus of the Syrian Units.

Table 1-1: United Nation eGov development survey 2012, (United Nations, 2012) .

Country	eGov 2012	Rank 2012	Rank 2010	Rank Change
United Arab Emirates	0.7344	28	49	+21
Bahrain	0.6946	36	13	-23
Saudi Arabia	0.6658	41	58	+17
Qatar	0.6405	48	62	+14
Kuwait	0.5960	63	50	-13
Oman	0.5944	64	82	+18
Lebanon	0.5139	87	93	+6
Jordan	0.4884	98	51	-47
Syrian Arab Republic	0.3705	128	133	+5
Iraq	0.3409	137	136	-1
Yamen	0.2472	167	164	-3

According to (United Nations, 2012) as a result of the aforementioned steps taken, the Syrian eGov has reached its highest world eGov development ranking in 2012. Therefore, an improvement has been made since the adoption of the eGov strategy mentioned earlier. (Table 1.1) illustrates the Syrian eGov ranking amongst Middle East Arab Countries between 2010 and 2012.

The table above shows that Syrian eGov Development Index (EGDI) scored 0.3705 for the year 2012 whereas the year 2010 has scored 0.3103.

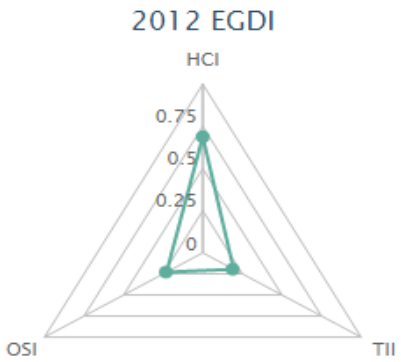
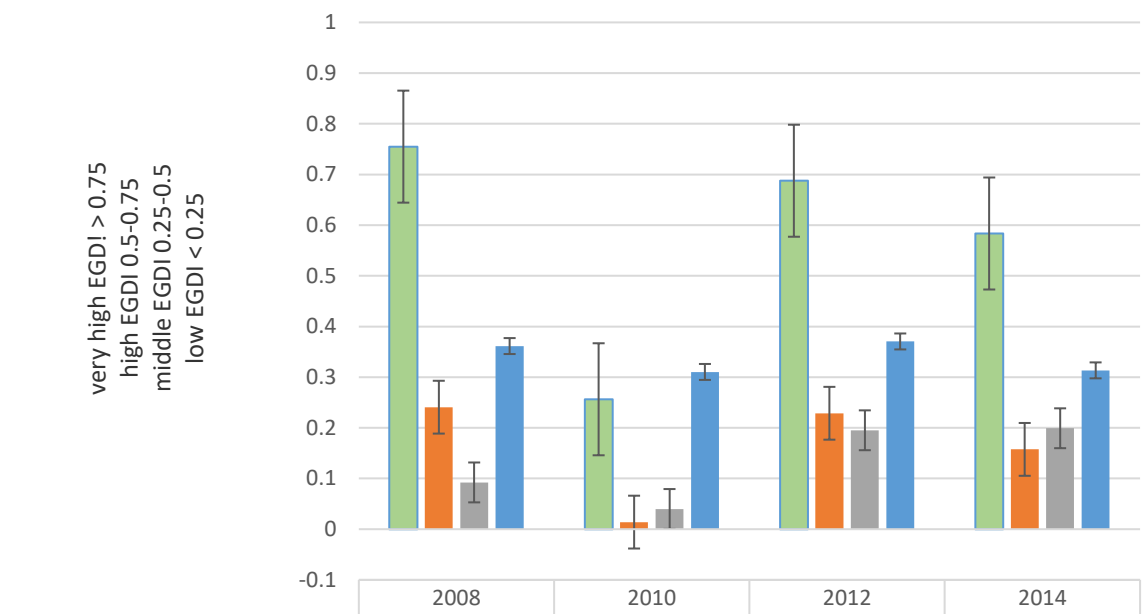


Figure 1-4:Syrian eGov Development Index year 2012, (United Nations, 2012)

The difference between the two figures is an indication of the improvement of the overcoming of the challenges that face the implementation during this period. (United Nations, 2012) defined the eGov Development Index (EGDI) as "is a weighted average of three normalized scores on the most important dimensions of eGov, namely: scope and quality of online services, development status of telecommunication infrastructure, and inherent human capital. Each of these sets of indexes is itself a composite measure that can be extracted and analyzed independently"; figure 1.4, shows the Syrian eGov Development Index that combines the following three measurement component: Telecommunication Infrastructure Index (TII), Human Capital Index (HCI) and the Online Service Index (OSI).

A combination of the three important dimensions of eGov: provision of online services, telecommunication connectivity and human capacity is a measuring tool to indicate the development of eGov in any giving country. By Combining data from the United Nations survey report for the years (2008), (2010), (2012) and (2014) showing the Syrian eGov Development Index EGDI ranking and according to the (United Nations, 2014b) Syrian index stays in Middle, figure 1.5, shows index changes



	2008	2010	2012	2014
Human Capital	0.7549	0.2564	0.6876	0.5835
Online Service	0.2408	0.014	0.2288	0.1575
Telecomunication infrastructure	0.0923	0.0399	0.1952	0.1992
EGDI	0.3614	0.3103	0.3705	0.3134

Figure 1-5: Syrian EGDI for the years 2008-2014, (United Nations, 2014b).

1.5 REFUGEES, AND THE NEEDED TECHNOLOGY

A challenge for many countries is how to address the issues of refugees. It is difficult for a country hosting large volumes of refugees, especially, with short of resources. A big influx of refugees can have a significant impact on local hosting communities as well as the wider hosting country. Take for instance the case of Jordan. According to the World Bank 2017 (World Bank 2017) figures, Jordan has a population of a little over 9 million people with over 2.8 million refugees. However, there is significant complexity with any refugee context, for instance, a large cohort of refugees in Jordan are the Palestinians, some of which may be second or third generation 'refugees' and are now part of the economic and social fabric of Jordan. One of the most recent and significant influx of refugees in Jordan has been Syrians as a result of the internal turmoil and wars in Syria (UNHCR 2017). The refugees also have an impact on the countries of origin as they deprive those countries

of key skills and human capital (Collier 2008). Refugees issues affect many of the themes usually covered in politic, economic and social science yet it is not well recognised in a great deal in the literature (Betts et al 2016). For instance, Brett's (2009) solid work covering the main themes in development theory shows that the thought at the time had very little on the impacts of refugees in development theory. The influx of aid and humanitarian support can sometimes provide significant economic shocks to the local economies hosting the refugees.

UNHCR (2016) indicated that more than 65 million people – the largest number since the second world war and 80% of them are found in developing countries - are living as refugees or are internally displaced, who uprooted from their surrounding in search for safety, and they often struggling to obtain the basics for survival. But, they are also living without the technology they need to obtain vital information, communicate with the local and international communities, and link to basic services (such technologies and access to information may result in long-term solutions and empowering both refugees and the hosting communities). This is due to many obstacles and challenges surrounding their environments such as network infrastructure, connectivity cost and many others. Although Digital Technology the driving force for changes transforms much of the way people live and work, is leaving refugees and displaced people behind. For example, the Syrian conflict, which began in March 2011, has affected all aspects of life and de-stabilized the country's infrastructure. Today, Syrian citizens may face difficulty and danger when travelling to and visiting government sites to use offline government services. This demand for services by Syrian citizens, therefore, presents a major challenge for both the Syrian government and governments hosting Syrian refugees. Services provided by the eGov are therefore an attractive option for mitigating these difficulties and dangers.

1.6 BACKGROUND TO THE RESEARCH PROBLEM

Digital Technologies has become a driving force for change, it transforms much of the way people live and work, thus it revolutionized the way people communicating and interacting with each other. As eGov has developed rapidly which was the result of the digital revolution has transformed the way people communicate and interact with governments and access services. eGov services perhaps have the greatest potential in developing countries and societies with limited access to traditional infrastructure and resources. Refugees and displaced people who have been affected by disaster or political instability (uprooted from their homes in search of safety) are an interesting group of citizens when we consider eServices since they face extra challenges of access to such government services. We need to capture the factors that affecting eService delivery to refugee and displaced people which are often characteristic of unstable societies. The recent focus, especially, on improving public access to information and service by vulnerable people, who have been affected by political instabilities. Implementing eService activities within unstable environments required more attention to increase its availability, affordability and accessibility in an efficient and an effective way. The focus of this study on elements that play big roles in this process of implementation and comparing the running activities contribute to a better understanding of those elements. looking at how technology can support Governments in supporting people in unstable societies. This is a challenging and extremely important area of research given both the topic domain and the current geopolitical context surround those people. In unstable countries where the challenges and barriers are graters than the more stable ones, strategies in such environments should pay more attention to newly emerging social categories (such as displaced people and refugees). (United Nations, 2012) suggest that "*there is a need to reach out to all citizens, particularly the disadvantaged and vulnerable groups, in order to bridge the gap and maximize the utilization of online service delivery. However, governance processes for the effectiveness and benefit of all*

cannot be realized without a well-established coordination framework encompassing the involvement of all national and international stakeholders".

A new finding from the (UNHCR & Accenture, 2016) survey shows that developing countries are hosting 86 % of the world's refugees, the largest humanitarian crisis since the Second World War with the 65 million refugees and displaced people. Therefore, there are a huge benefit for the refugees and the host communities if, however, they get connected by any digital means. Some of the benefit but not limited to; connecting them to education and healthcare, the opportunity to integrate with the surrounding societies and get access to employment. Digital technologies can bring together businesses, public administrations, NGOs and civil society to solve some of the refugee's most pressing challenges. On the other hand, it is not that simple for refugees to benefit from the government eServices due to the difficulties associated with the environment, infrastructure, and internet connection in such unstable societies as well as the cost of getting connected. UNHCR & ACCENTURE (2016) state that "*Refugees and displaced people are living without the connectivity they need to obtain vital information, communicate with loved ones, access basic services and to link to the local, national and global communities around them*".

However, there has been little research done to investigate the barriers and drivers that contribute to successfully implement the eService delivery to people in unstable societies. These issues represent a significant gap in the research literature that required further investigation.

Although some studies focusing on eService in developing countries and its benefits and challenges have shed light on the developments of eGov literature (Elsheikh, 2011; SWEISI, 2010; Al-Busaidy, 2011), there is little research that investigates the driving factors that prevents ordinary citizens, refugees and displaced people of adopting the eServices in unstable societies. This is considered to be an important aspect which unleashes new models of eService targeting new segments of the society which appeared as a result of the instability such as refugees and displaced people, as well

as ordinary citizens. Therefore, it is important to address the obstacles that affecting the use of eService in unstable societies and Syria is a good current example of such an unstable society as it is going in a period of unrest with many displaced people and refugees. It is a difficult, but important topic since it covers people often in distress and need of government services.

1.7 RATIONALE, MOTIVATION AND SIGNIFICANCE OF THE STUDY

It is an important issue to understand the best practice in supporting refugees and displaced people within a positive capability approach and the best solution to deliver eServices to those groups. By capturing examples of good practice in supporting the provision of social welfare, education, health services and encouraging self-reliance and integration. In order to grasp the essentials in this field, our study builds on research into Syrian refugees and displaced people including fieldwork in Jordan, Turkey, the UK and within Syria itself. To identify good practice in the provision of these services and in encouraging self-reliance and integration. And for the research to be able to capture and understand this good practice in its context, which will help inform the support of displaced people more widely.

The need to capture this good practice is to help inform how we can best support and integrate such displaced people. by giving examples of positive interaction between the refugees/ displaced communities and the hosting communities (this is the 'positive capability' approach and lenses). That informs us on how we research the good practice elements in the field studies. Consequences, it motivating to articulating good practices in supporting displaced people along with the hosting communities, and so lead to better humanitarian practices.

1.8 RESEARCH DIFFICULTIES

The topic was challenging to investigate, given the current geopolitical context and issues of access to relevant people and stakeholders, which are distributed across countries and involve multiple agencies. The geopolitical situation in Syria has resulted in millions of displaced people across the

Middle East and Europe, resulting in refugees asylum seekers and of course impact on the host communities and associated difficulties. To overcome the related challenges, the researcher has developed suitable methods to capture input from groups of displaced people based on (BUT not limited to) an online survey and case studies Skype-based interviews. Which applied this to Syrian refugees based in Turkey, Jourdan, EU, UK, some Middle East Arab countries as well as people within Syria itself. Researching process in countries going through instabilities is very difficult. Our research is one of the very few examples where explicitly trying to do that (which gives the novelty to our research). The associated difficulties to our research include limiting the options for research, Limiting the access to get robust responses from people and stockholders, limiting the data that can be trusted that limiting the options to get robust research. Therefore, our approaches were the most suitable ones that we could have used, the normal luxurious of doing robust type research in the giving context was not possible. Although the research was not an easy process in such circumstances, it highlights those difficulties, guidance and methods that will help other researchers to pick up and do further work in refugee study or on people from instability countries in related of the roles of ICT for supporting those people.

1.9 AIM, QUESTION, OBJECTIVES

The aim of this research is to address factors that influence the successful adoption of eService in unstable societies. Furthermore, to inform policymakers and researchers (in such environment) for the adoption through articulating best practice in supporting displaced people and refugees. Therefore, this research aims to answer the following research question:

> "What are the main factors that contribute to a successful adoption of eServices in supporting refugees and displaced people in unstable societies?".

In order to realise the aim of this research and to answer the research questions, the following objectives will be carried out in the study:

1. To suggest technology related strategies that may assist in the effective adoption of the eService in developing countries that suffer from instability.
2. To review the literature in order to identify best practice in supporting displaced people and highlight the complexities of the successful eService delivery in different levels of instability.
3. To develop an initial conceptual framework for classifying barriers and enablers affecting the successful adoption of eService delivery in developing countries with different level of instability.
4. To adopt the most suitable methodology in realizing the research objectives and answering the research question.
5. To expose the gaps between design and implementation and to produce a guide for policymakers to enhance future policies based on studying eGov in a different level of instability.
6. To find evidences about the users' needs and demands from unstable context through questionnaires and interviews.
7. To find evidences in supporting the adoption of the eService through case studies in unstable societies.
8. To update the initial conceptual instability framework to reflect the changes based on the found evidence
9. To adopt the reinventing government principles & Institutional Theory as a conceptual lens to better classifying and understanding the collected data.

1.10 RESEARCH METHODOLOGY

The following is a brief introduction to the research methodology used in this research but full details will be covered in Chapter 4. However, our methodology uses the following four different methods to answer the research question:

- Combinations of methods have been adopted to undertake the research Literature Review, on related topics, such as desk research and Snowball systematic methods.
- A comparative case studies of the eGov strategies among three countries with different level of instabilities was conducted. Using qualitative data collection initiated by collecting data published via the undertaking studied government's different channels method.
- Paper-based and Virtual-based questionnaire was conducted. The survey collected information from refugees and displaced Syrian people in Turkey, Jourdan and people within Syria (2 samples questionnaire were conducted).
- Case study interviews used for the final phase of data collection. In addition, desk research and literature review have been performed to aid data collection the undertaken case studies.

1.11 RESEARCH OUTLINE

This research is structured (Figure 1.6, shows the Research Outline) into nine chapters as follows:

1.11.1 Chapter 1: Introduction

It starts by giving an overview of eGov domain in general and overview of Syrian context which is the base context for our investigation. Follow, a brief introduction to the eGov initiative in Syria and its current state. Next, we discuss instabilities in general and in particular, the factors led Syria to be as such. This led us to define the background research problem and gaps and to conduct various elements of the rationale, motivation and significance for conducting this study. Finally, research

aim, questions objectives have addressed and highlights the different methods for answering the research questions and delivering its objectives.

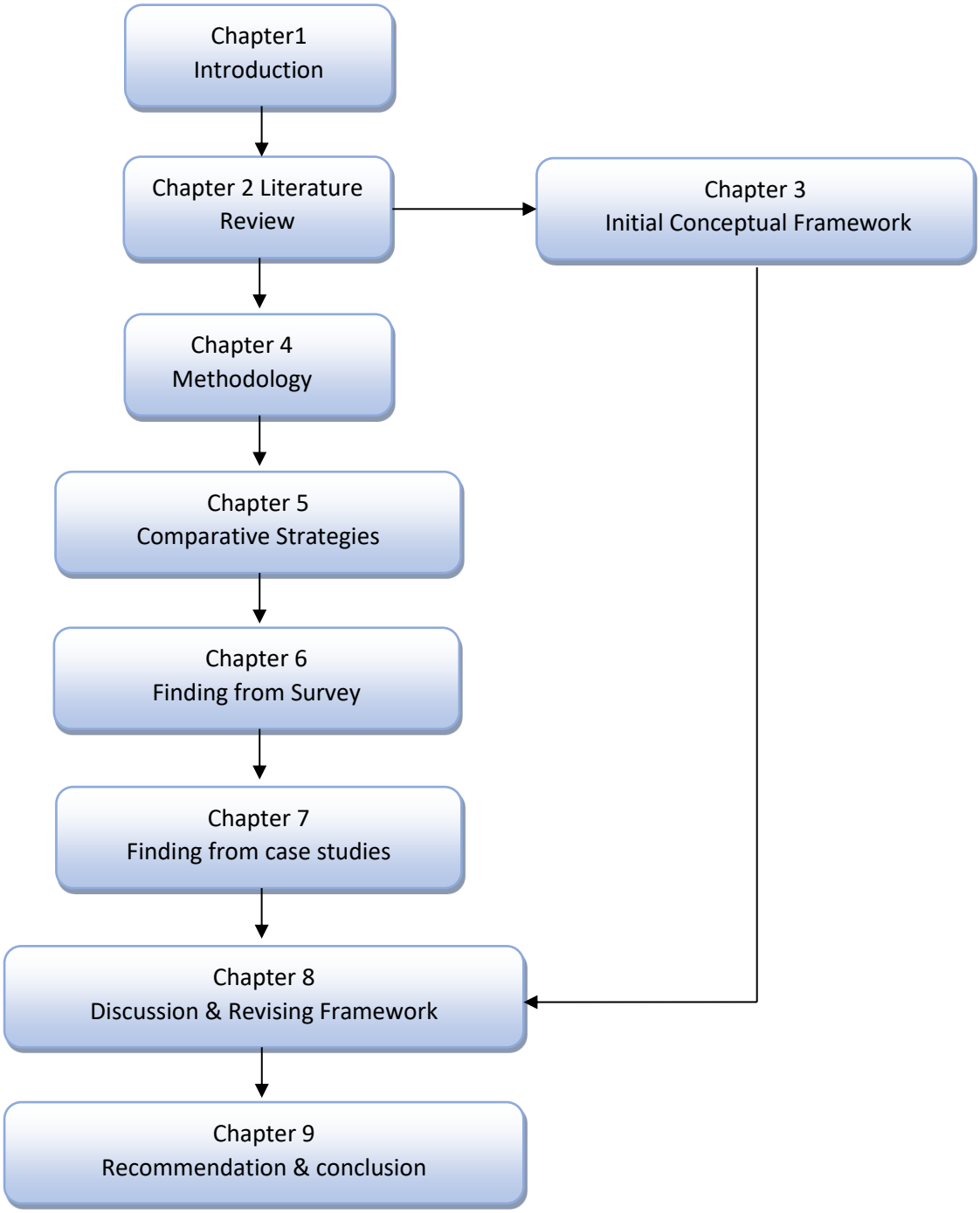


Figure 1-6: Research Outline

1.11.2 Chapter 2: Literature Review.

The purpose of this chapter is to present a critical review of the academic literature on eGov related topics such as eGov different definitions, different models of eGov and different development stages. Also analysing the factors affecting the implementation of eService in developing countries including barriers and enablers will be discussed. Furthermore, analysing the literature on the various benefits of eGov implementation. On the other hand, we will critically assess the current implementations of eService system delivery in stable and unstable environments to identify any research gaps in the existing pool of knowledge. And finally extracting and classifying key themes from the literature under political, social, economic and technology similar challenges that influencing the implementation of eService to provide a better understanding of the investigated areas.

1.11.3 Chapter 3: Conceptual Framework.

This chapter proposes an initial conceptual framework which captures the main factors (both enablers and barriers) influence and contributes toward a successful implementation of eServices in countries that have unstable status. We use the example of Syria and other developing countries facing similar challenges to tackle this problem. In this chapter, we will review the literature on a number of relevant frameworks to comprehend the contributions made towards governmental eServices. Review and justify the adoption of the Institutional Theory and the Reinventing Government Principles as theoretical lenses that to be adopted for analyse and discussion in chapter 8. Toward the end of this chapter, we will present our initial framework along with a description of the main parts of the framework.

1.11.4 Chapter 4: Methodology.

Design methods and a suitable research strategy will be provided in this chapter in order to provide answers to the research questions and achieve its aim and objectives. In this chapter, we will discuss

how quantitative and qualitative research approaches will be conducted through questioners and case studies interviews for data collection. In this chapter also, we will give a discussion of the research epistemology and a justification of the selected domain approach than the research methodology and research method and the reason behind the chosen methods.

1.11.5 Chapter 5: Comparative Strategies.

In this chapter, we undertake a comparison of eGov strategies among countries at different levels of geopolitical instability that highlight the different approaches for implementing activities which, consequently, direct policymakers in highly unstable societies to important aspects and to embrace gaps during the implementation process. The aim is to emphasise the factors that influenced strategic planning in societies with different levels of stability to adopt eService successfully. This comparison study explores the eService strategies among three cases namely: eGov Strategy in Syria, eGov Strategy in Saudi Arabia and eGov Strategy in the United Arab Emirates.

1.11.6 Chapter 6: Finding from the survey.

The chapter explores challenges faced by eService delivery to refugee and displaced people which are often characteristic of unstable societies. This chapter reports on a study of Syrian refugees and displaced people using a survey exploring the use of eServices for citizens inside and outside of Syria. The findings reveal an emergent set of good practice integrated into themes that impact eService delivery to refugees and displaced people.

1.11.7 Chapter 7: Finding from case studies.

This chapter, discuss the process of conducting qualitative research approach through adopting comparative case studies of eService activities in unstable societies to address the factors may affect the running activities in unstable societies. The findings reveal an emergent set of good practice

integrated into themes that complement the findings from chapter 6 from the experts perspective that impacts eService delivery to refugees and displaced people.

1.11.8 Chapter 8: Discussion and Framework Revising.

In this chapter we will propose a revised framework which will validate the initial conceptual framework proposed in chapter 3, this will cover all investigated factors in the context of the unstable countries. Furthermore, theoretical and practical aspects of the research will be included and discussed.

We apply the Reinventing Government approach by Osborne and Gaebler (1992) as a theoretical framework. By using their ten principles of transforming governments this provides understanding about the context and issues of providing eGov services within the three case studies (studied in chapter 5) and to what degree each case strategy has influence on the activities implemented, we also apply Institutional Theory as a theoretical lens using the dimensions of Economic, Political, Technical and Social to understand the context and issues of providing eGov services within this very challenging domain.

1.11.9 Chapter 9: Recommendation and Conclusion.

This chapter, we will give a review of the whole research as well as a summary discussion of the important findings, theoretical and empirical contributions, limitations, recommendations and future research in this thesis.

1.12 CHAPTER SUMMARY

In this chapter, we discuss the fundamental research topics where an overview of the domain of eGov service, in general, was introduced. Then our focus was on geopolitical instability issues and the factors that led Syria to be classified as one, we also discussed the eGov services initiatives in Syria as a case study of eService implementation during this geopolitical instability. This discussion

revealed a number of factors that affect the development and implementation of eServices in such environments. Hence, this collective information clearly showed the wide gap for establishing and promoting service successfully.

In this chapter, we also discuss the various elements of the rationale, motivation and significance for conducting this study. Then we discuss the research aim, questions objectives and the different methods for answering the research questions and delivering its objectives. Finally, we highlighted the scope of this thesis by giving an overview of each chapter's topics

2 CHAPTER 2

LITERATURE REVIEW

2.1 OVERVIEW

In chapter 1, we introduce the fundamental research issues, including the background to the research problems, the research context, and the rationale, motivation and significance of the study. The research aim, research questions and objectives, and the research chapters structure have been outlined and discussed. This chapter (this is part one of the literature review phase of our research, chapter 3- initial conceptual framework - is part two) focuses on reviewing the literature of eGov related topics in general and searching for gaps in supporting vulnerable people in unstable societies. This is a fundamental step to form our base or guides for the research. Therefore, this chapter examines and reviews the literature on eGov related issues, including the different definitions of the eGov, and their models and stages of developments. Further, initial and preliminary reviews of the eGov challenges in the Middle East are investigated and classified under related sets of themes. Furthermore, the literature review focuses on and examines the factors that contribute to the eService adoption in countries with high level of geopolitical instabilities. "*A review of prior, relevant literature is an essential feature of any academic project. An effective review creates a firm foundation for advancing knowledge. It facilitates theory development, closes areas where a plethora of research exists, and uncovers areas where research is needed"* (Webster & Watson, 2002). Therefore, the main aim of this study is to provide a clear understanding of the investigated topic to identify any related gaps through a critical academic literature review. In order to achieve this aim, the rest of this chapter is organized as follows and illustrated in figure 2.1. Section2.2, discuss the methodologies adopted to achieve the research potentials of the literature review. In

section 2.3 the different definitions, benefits, models and development stages of eGov are introduced.

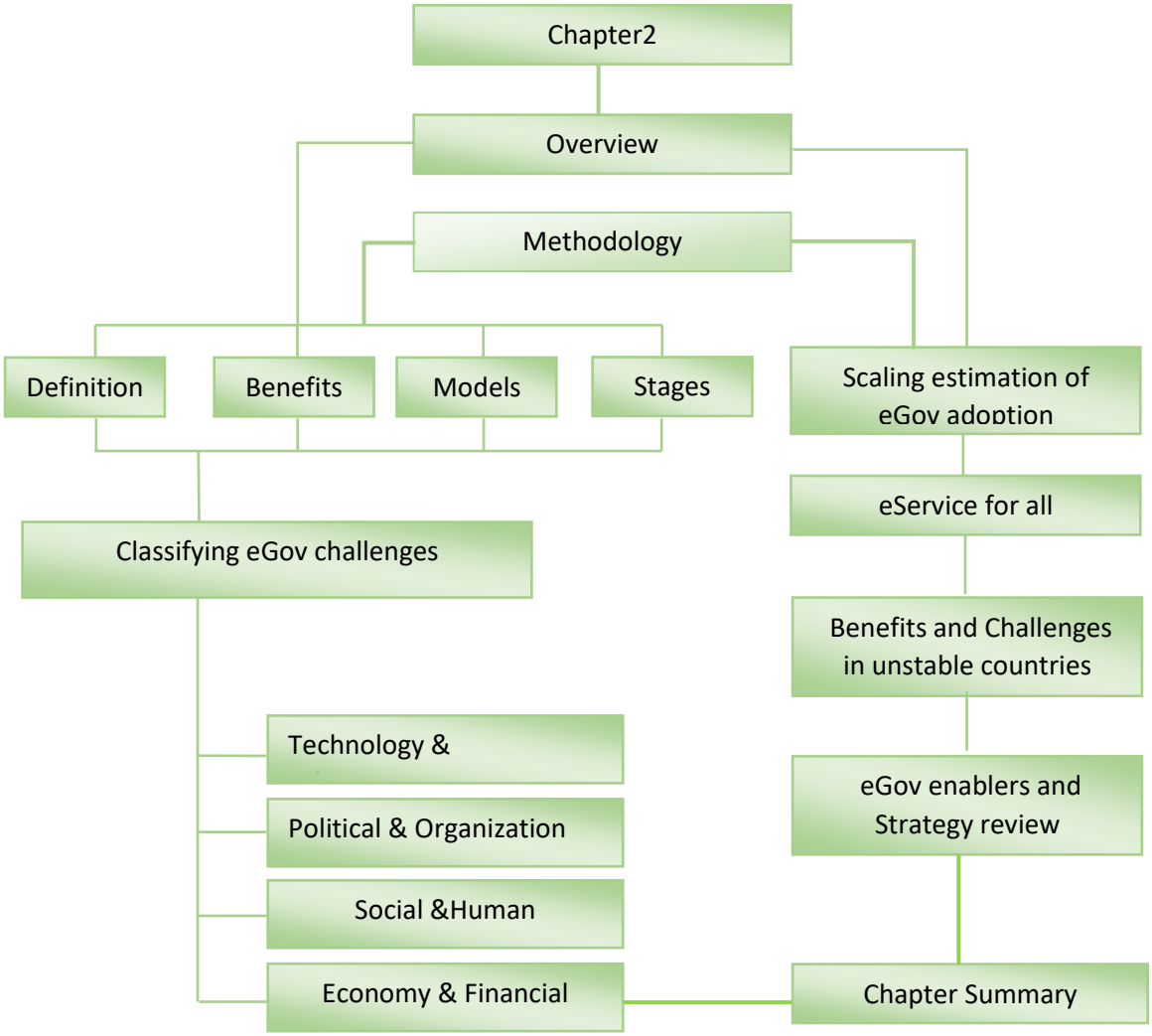


Figure 2-1: Chapter 2- Literature Review Outline.

This is followed in section 2.4 by a classification of the silent challenges facing eGov implementation in the Middle East between the years 2000-2013. It is a preliminary review with the following themes found: Technology and infrastructure challenges, Political and organizations challenges, Social and human challenges and Economy and financial challenges. Next Section 2.5 provides a scaling estimation of eGov adoption based on our findings, followed in section 2.6 by the review of the literature review on how eService can serve all segments of the societies including vulnerable people. Then section 2.7 reviews the benefits and the challenges found in unstable

countries. Section 2.8 reviews eGov Strategy and best practice adoptions and finally, section 2.9 provide a chapter summary.

2.2 METHODOLOGY OF THE LITERATURE REVIEW

We conducted a systematic review following guidelines suggested by Watson (2002). Reed (1989) suggests a "jump-start" technique which also contributed to the investigation. The need for a robust search method is driven by the number of published eGov articles, for example, a search made on Google Scholar for "eGov" keyword gives over 5,000 results. The life cycle of this literature review is illustrated in figure 2.2 below. In this process, we have used a range of techniques to synthesise evidence, guided by (Scott, et al. 2012). We started by searching different databases and academic papers, then selected relevant results. This process formed a loop as relevance feedback offered us an opportunity to improve our search strategy. Any suitable papers found were added to a database for later analysis.

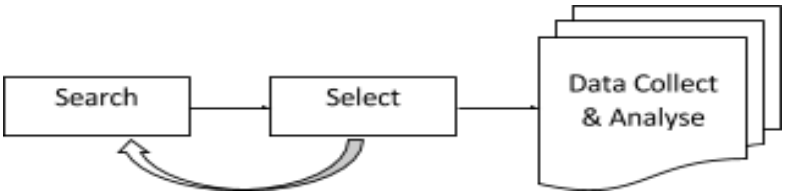


Figure 2-2: Lifecycle of Literature Review Level 1

2.2.1 Search

Initially, we used search services such as Google Scholar and Web of Science to gather articles related to keywords including e.g. "eGov, eService, instabilities, Syria, developing countries" and filtered articles to include those relevant to years 2001 to 2013 (Choosing this period just as a start point for our investigation). Web portals of Middle-East Countries(Syria, Jordan, UAE, Saudi Arabia, Turkey, Lebanon, Egypt, Qatar, Iraq) were then explored to gain an understanding of their extant e-services. At this stage the resources were insufficient to build research themes, however,

key Journals and Conferences were identified e.g. European Conference on eGov (ECEG)&the International Conference on eGov (ICEG).

2.2.2 Select

We employed the snowball method to group articles by comparing their reference lists and examining particular paper's bibliographies: the relevance result groups afforded the emergence of thematic classifications also gave us the chance to review the top 5 basket of eGov journals, i.e. (Government Information Quarterly, International Journal of eGov Research, Information Policy, Transforming Government: People, Process and Policy and electronic journal of eGov). This section corresponds to the Select phase in figure 2.2.

2.2.3 Collect

Articles and themes identified in the Select phase were more formally organised in the Collect phase; Figure 2.3 illustrates this process. To identify the most suitable papers for our criteria we used quality appraisal categories devised by (Scott et al., 2012) with some enhancement. Categories used were: Credibility; the extent to which the data supports the conclusions, Transferability; the degree of a reliable generalisation to other settings, Transparency; the explicitness of the study evaluation criteria and process and Suitability; the degree of suitable paper content to our criteria.

Figure 2.3 illustrates the 347 papers that were analysed based on their Abstract and Introduction sections. 106 papers were deemed not relevant and thus excluded. 53 additional articles were identified using the snowball method (i.e. retrieving and assessing cited works from articles that have been identified as relevant). Finally, 32 articles were excluded as they did not meet our search criterion, which is based on the eGov challenges facing developing countries in the Middle East. This left us with 262 papers to form our synthesis of the evidence by constructing a tabular analysis of the studies, (Scott, et al. 2012).

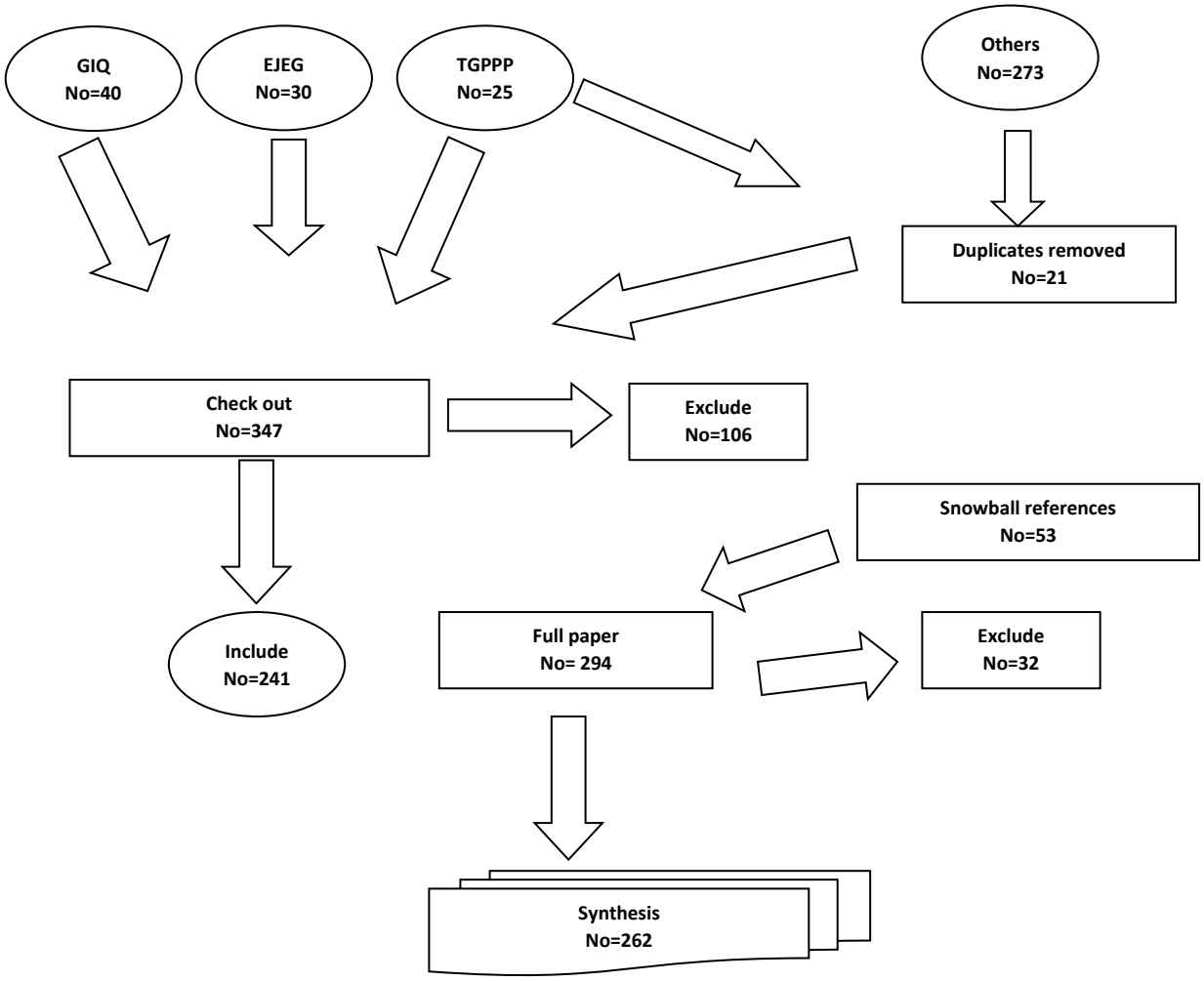


Figure 2-3: Process of Collecting and Selecting Relevant Papers, (Scott, et al. 2012).

2.3 EGOV DEFINITIONS, MODELS AND STAGES OF DEVELOPMENT

eGov has been defined in different ways, with each prospective definition dependent on the functionalities, benefits and levels of development. However, eGov is a transformative agent acting upon political and civic activity: it involves the provision and use of information and services by citizens, businesses and governments; and thus has the potential to increase civic efficiency and transparency; to facilitate interaction between public, private and government entities; and ultimately to promote service delivery, democracy and political stability. The United Nations (2010) defines eGov as "*the use of ICT, and its application, by the government for the provision of*

information and public services to the people". Similarly, World Bank (2010) defines eGov as the " *the use by government agencies of information technologies (such as Wide Area Networks, the Internet, and mobile computing) that have the ability to transform relations with citizens, businesses, and other arms of government. These technologies can serve a variety of different ends: better delivery of government services to citizens, improved interactions with business and industry, citizen empowerment through access to information, or more efficient government management. The resulting benefits can be less corruption, increased transparency, greater convenience, revenue growth, and/or cost reductions*", whereas the European Commission (2001) decrees that Information and Communication Technology (ICT) is "*a powerful tool for good governance, with five key principles: Openness, Participation, Accountability, Effectiveness and Coherence*". The transition to eGov must improve all of these dimensions if ICT is to help strengthen democracy, develop communities and increase political and civic awareness and interest. Gant (2008) argues that eGov is the use of ICT in government to provide public services, to improve managerial effectiveness and to promote democratic values; as well as a regulatory framework that facilitates information-intensive initiatives and fosters the knowledge society.

A study of developing countries' best practices by (Azab, Kamel, & Dafoulas, 2009) suggest that the availability of an effective eGov assessment framework is a necessary condition for advancing eGov implementations and the potential benefits of implementing eGov, particularly for those in developing countries and rural areas, can dramatically reduce transaction costs and improve internal planning mechanisms. Moreover, the introduction of eGov and its integration with services usually requires a government to streamline its administrative processes, thus improving efficiency and reducing costs where in some cases, new revenue may be generated and used to offset service fees or reinvested into more sophisticated applications and services (Heeks, 2006).

eGov consists of the digital interactions between governments and stakeholders. eGov delivery models include the following relationships: G2C (government to citizen), G2B (government to business), G2E (government to employee), G2G (government to government), C2G (citizen to government) as shown in figure 2.4:

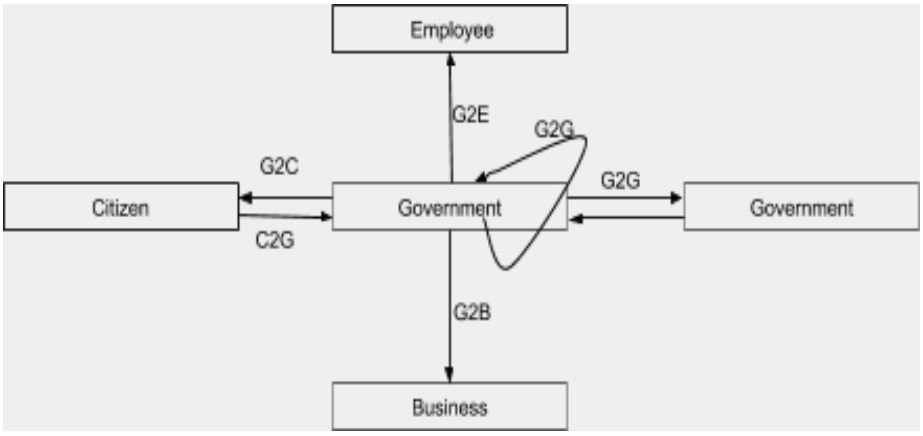


Figure 2-4: Models of eGov

Where G2C is the functionality that allows and facilitates the citizen interaction with the government which evolves around all digital types of service delivery solutions as well as the citizens' engagement with the government (Zhi & Zhenhua, 2009). G2G is the online interactions among government agencies for data sharing and controlling the traffic exchange and integration among different systems between government's departments for achieving the best results and for improving efficiency, accessibility and availability (Bonham, Seifert, & Thorson, 2001). G2B is the digital interaction between governments and private sectors, including various services and information exchange between the public sector and various types of business in order to improve the business process and to reduce cost which in turn will improve the economy (Dong et al., 2010). G2E is the digital interaction between the public employees and the government which involves transactions and administrative procedures such as employment, retirement or any staff related service. However, each of these eGov models has developed into a stage which depends on many factors.

United Nations (2014) highlights the top priority needs of citizens to include offering online information and providing eServices and sharing e-tools. While these two stages are considered to be the base for fully functional eGov and since there are many years of developing the four stage model of fully functional eGov by (Layne & Lee, 2001), many countries face challenges in progressing to the third stage (transactional stage) and the fourth stage (connected stage). Figure 2.5 illustrates the four stages of eGov development.

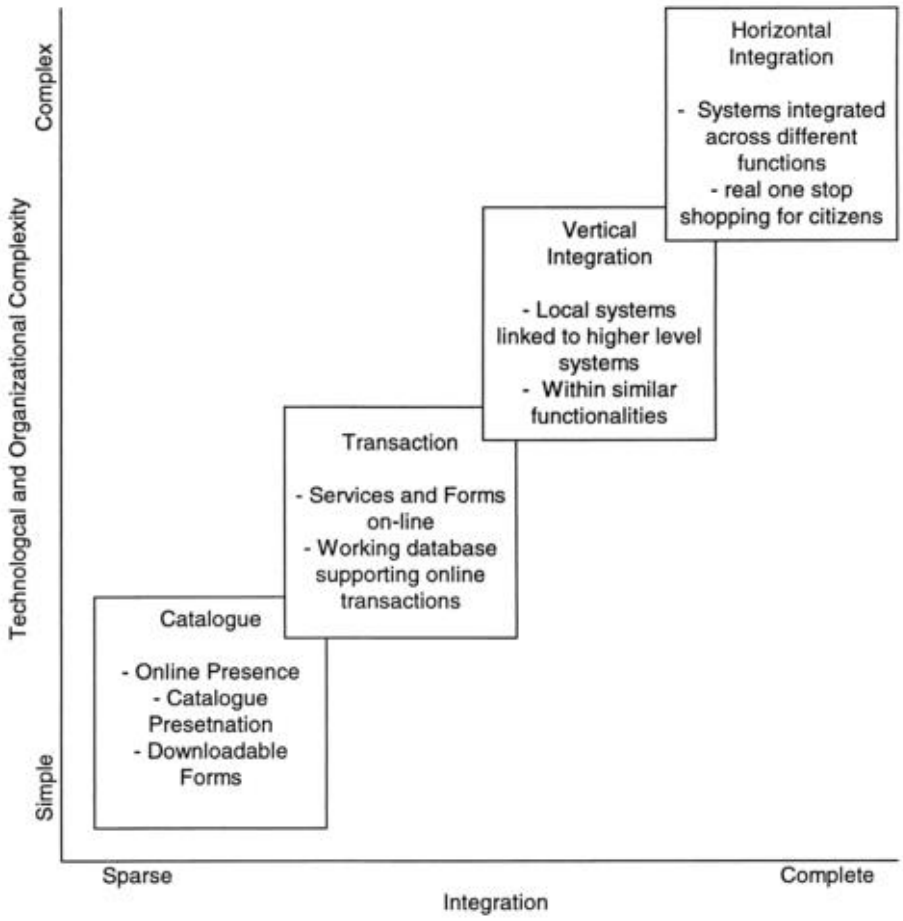


Figure 2-5: Dimension and stages of eGov development(Layne & Lee, 2001)

The emerging presence (catalogue stage) offers a basic online information through basic website channels or public kiosk where citizens can download government forms. The enhanced presence (transaction stage), gives greater sources of information, e-tools and eServices which are provided through web portals, SMS text, mobile portal, public kiosk. In the transactional presence, a two way

interactive application is provided where citizens have the opportunities to make an online transaction, financial and non-financial transaction through coordinated channels such as web portals, SMS text, mobile application, mobile portal, public kiosk; in this stage a vertical integration is maintained where low-level system integrated with a higher level system. Finally, the horizontal integration or the connected presence integrated systems across different functions where government transforms itself into a connected entity and as a result, a real one-stop shopping for citizens is established (Layne & Lee, 2001).

The implementation of eGov initiatives in most developing countries resulted in failure as reported by (Heeks, 2002) which shows that 35% of eGov projects in developing countries are total failures, 50% are partial failures, while the remaining 15% are successes. Thus there is a need for research in order to be able to overcome the barriers and challenges of eGov initiatives in the Middle-East Arabic Countries. In Syria and in unstable societies, in particular, where different and more difficult barriers have emerged, due to the instability factors and as a result of the civil war in Syria, the new situation has triggered the attention for deeper and wider research in order to realize and overcome those barriers.

Btoush (2009) states that in the process of implementing an eGov national strategy, it is an essential to understand the importance of the barriers to eService implementation in countries under stress, as these barriers are the outcome of different factors that affect the national strategy of eGov in general, and consequently the provision of eService, in particular.

United Nations (2012) Survey pays specific attention to vulnerable groups and their possibility to access and use government information and to interact with its eService. People who are living in war zone countries, people who forced to flee their countries or people living in camps may classify within the vulnerable groups that may utilise the benefit of accessing online services. In next section, we will study and classify challenges facing the eGov implementation in the Middle East including Syria.

2.4 CLASSIFYING EGOV CHALLENGES IN THE MIDDLE EAST: PRELIMINARY REVIEW

The initial study of our literature review identified relevant works which focus on the period between 2001-2013 and captures the challenges, barriers and opportunities of eGov activity relevant to Middle-East Arabic Countries and Syria, in particular.

In addition to the challenges of implementing eGov, Syria faces extra challenges given the current geopolitical situation. The following table (Table 2.1) lists the references, topics and the contributions of the papers that have been reviewed (the following examples are the start point for this reviewing stage, from this point, we follow their bibliographies for further evidence – snowball method literature review process). The focus was, mainly, on the barriers, enablers and benefits of the eGov in the Arabic reign and the focus was on unstable areas.

Table 2-1: Start point papers for reviewing and analysing.

Researcher	Topic	Contribution
(Abanumy, Al-badi, & Mayhew, 2005);	M-government implications for e-government in developing countries: the case of Saudi Arabia	Discusses the implications of e-Gov in developing countries and evaluate mGovernment applications in Saudi Arabia. Provide an evaluation of the role of mGovernment and eGov applications for enhancing information and service delivery to citizens.
(Ciborra & Navarra, 2005);	Good Governance, Development Theory, and Aid Policy: Risks and Challenges of eGov in Jordan	Identifying risks and challenges of eGov in the Jordanian context by adopting the New Institutional Economics (NIE) as the framework for the analysis and early design of eGov solutions in Jordan.
(Al-Omari & Al-Omari, 2006)	E-Government Readiness Assessment Model.	This study presents a general framework model for eGov Readiness Assessment to help as a general guideline for the Jordan eGov initiative
(Hassna & Ahmad, 2006);	E-Government in Syria Concepts, Strategies and Implementation Policies	Framework for Syrian eGov which include strategic planning, implementation concepts, protocols, criteria and standards for information

		exchange, security, services modelling and eGov infrastructure.
(Sallard & Alyousuf, 2007)	Measuring and Evaluating eGov in Arab Countries.	Developing a range of measurement and evaluation tools used by countries to justify eGov investments, assess impacts, and better meet citizen and business expectations which will increase the effectiveness of government actions.
(Wanous, Mofleh, & Strachan, 2008)	Developing countries and ICT initiatives: lessons learnt from Jordan's experience	Literature review for the adoption factors that contribute to successful implementation of the eGov in Jordan.
(Syria Arab Republic & UNDP, 2008)	Enhancing institutional capacity for eGovernment implementation.	Framework for initiating the implementation phase for the Syrian eGov after launching the eGov Strategy 2009 by enhancing the operational capacity and the institutional framework coordination.
(Almarabeh, Mohammad, & Abu Ali, 2009);	E-government in Jordan Hiba	Literature review based paper which identifies concepts on the government project in Jordan such as strategic, technical challenges and risk factors affecting the development of the eGov in Jordan. suggestions have also been given to overcome such difficulties.
(Chatfield & Alhujran, 2009);	A Cross-Country Comparative Analysis of E-Government Service Delivery among Arab Countries	Two stages eGov comparative analysis first amongst the Arab countries to assess their development stages in eGov service delivery capability. And second, the top Arab eGov with the global top eGov in developed countries regarding e-democracy and service delivery capability.
(Obeidat & Abu-Shanab, 2010)	Drivers of E-Government and E-Business in Jordan	Investigating factors contribute to the successful adoption of eServices among business organizations for transparency, availability of information, and interaction enhancement.
(Almarabeh & Amer, 2010)	A General Framework for E-Government: Definition Maturity Challenges, Opportunities, and Success	Produce a general framework for eGov different definitions, maturity and addressing the challenges and opportunities for developing a successful eGov

(Khan, Moon, Rhee, & Rho, 2010)	eGov skills identification and development: toward a staged-based user-centric approach for developing countries.	Propose and validate user-centric approach for e-skills identification. And Identify skills required for e-services
(El-qawasmeh & Owais, 2010);	E-Democracy in the Middle East: hard to approach	Provide an investigation on issues of democratic participation and social inclusion in the eGov domain in the Middle East from benefits and challenges perspective. Examples to aid their argument are provided.
(Al-Shboul & Alsmadi, 2010);	Jordan E-Government Challenges and Progresses	Investigate the Digital certificate factor as it is an important element for building an infrastructure for the eGov and e-business. This evaluates the strength and weaknesses in eGov websites and identifying the lack of local certificate authorities in Jordan.
(Abu-Shanab, 2012)	Digital Government Adoption in Jordan: An Environmental Model	Explore the environmental obstacles that the Jordanian people are facing in using the electronic government services. By proposing three dimensions' framework including infrastructure, social and organisational factors.
(Alanezi, Mahmood, & Basri, 2012);	E-Government Service Quality: a Qualitative Evaluation in the Case of Saudi Arabia.	Investigate factors contribute to the development of eServices, and to raise awareness of user attitudes to public websites in Saudi Arabia. It produces a model of interaction between users and eGov website which contains the following categories: system function, content, procedure, and citizen support
(Farzali, Kanaan, Kanaan, & Atieh, 2012)	E-Government in Syria: Obstacles and Interoperability Framework	Interoperability framework is designed to address effective Implementation of eGov in Syria, where barriers explored. It utilizes the Enterprise Integration technologies to overcome barriers of policy, economics, administrative procedures, society, and technology.
(Abdul Rahim & Al Athmay, 2013);	eGov in Arab countries: status and challenges	This paper reviews data published by the United Nations to assess Arab countries global ranking. Furthermore, primary data collected from experts interviews to conclude and identified the most critical factors affecting the likely adoption of

		good e-governance practices in the Arabic countries.
(Al-Khouri, 2013);	eGov in Arab Countries: A 6-Staged Roadmap to Develop the Public Sector	Provides a review of the current eGov field with a focus on Arab countries and as a result, present a framework contains a conceptual six-staged roadmap which provides guidelines and suggestions on how Arab countries should prioritise their eGov short and mid-term efforts.
(Altaany & Al-zoubi, 2013);	A Comparison between E-Government Ranks in Jordan and Malaysian Government	The comparative study investigates of eGov adoption in Jordan and Malaysian based on UN surveys between 2007 and 2010. The findings provide a useful benchmark for which each business can assess its level of eGov adoption and usage against other businesses in Jordan.
(Kafaji, 2013)	Evaluating the role of service quality as a mediator on user satisfaction in eGov applications	Evaluating the role of service quality on user satisfaction in eGov applications. The study indicates that the integration of Service Quality during the implementation of eGov systems plays crucial roles in meeting user expectations.

Through the analysis of the papers identified in Table 2.1, we distinguished the challenges identified in Table 2.2. However, we noted that there are similar challenges to eGov initiatives in many different countries, with each countries emphasis on its implementation to cope with local demands. Accordingly (Abdul Rahim and Al Athmay, 2013) argue that *"despite the similarities shared by the majority of Arab countries on social, political and cultural aspects and E-Government barriers, each country has its own unique combination of political, economic and social constraints that affect the development of good practices in e-governance"*. For facilitating the comprehension of the challenges presented in Table 2.2 we classified barriers into four categories (Infrastructure, Human, Political, and Organizational),

Furthermore, adding to those challenges, the difficulties that Syria, currently, is facing since the start of the civil war 2011 which has forced instability and damages the country's infrastructure, moreover, the country's human capital resources were badly affected due to the large volume of

migration, which resulted into people seeking refuge in the neighbouring countries and the in the EU.

Table 2-2: Challenges found for the period 2000-2013 listed alphabetically

Challenges 2000-2013		
Ability	E-Service	Organizational Compatibility
Acceptance	Fragmentation Projects	Organizational Motivation
Access	Framework	Organizational Resistance
Accessibility	Freedom Press	Ownership and Authority
Adoption Issues	Gender Inequality	Private and Public Sector Partnership
Perceived IT Value	Goals and Objectives	Permanent Availability and Preservation
Attitude of Employee	ICT Systems Harmonization	Permanent Availability and Preservation
Awareness	Human Capacity	Policy and Policy Digital Divide
Benchmarking	Human Development	Political-Administrative System
Bureaucracy	Human Resources	Political Situation
Change Management	ICT Infrastructure	Political Will
Citizen Inclusion	Illiteracy	Poverty
Collaborating Systems/Mechanisms	Information Access Culture	Power Supply
Commitment	Information Sharing	Privacy
Competition Environment Data Systems	Institutional Challenges	Procurement Regulation
Connectivity	Integration	Public Reforms Administration
Coordination	Internet Access	Public Support
Corruption	Internet Cost	Public/Private Competition/Collaboration

Cost Of E-Gov Services	Interoperability	Recruitment Of ICT Personnel
Culture	IT Experts	Regulatory Issues
Cyber Security	Knowledge	Resources
Data Possession	Knowledgeable Personnel	Roadmap
Data Standards	Lack of Communication	Skills and Education
Deficiency of Implementation Guidelines	Language Barriers	Social and Cultural Barrier
Digital Divide	Law and Public	Strategy
E-Participation	Leadership	Sustainability
E-Banking	Learning Content/Resources	Top Management Support
E-Commerce	Legal Framework	Training and Capacity Building
Economic Development	Legislation	Transparency
E-Crime and Protection Low	Literacy	Trust
E-Gov Capacity	Low Citizen Participation	Unemployment Rate
E-Gov Policy Execution	Maintenance Of Government Websites	Vision
E-Gov Strategy	Management	Web Portal
E-Literacy	National Policy On The Use Of ICT	Workforce Issues
E-Readiness	Non-Contextualization of E-Gov Practices	Tele-Density

2.4.1 Technology & Infrastructure Challenges

Infrastructure challenges include the provision of: stable power supply for all citizens and offices providing internet services, accessible, appropriate and localised ICT, sufficient ISP capacity to support widespread adoption, reliable data storage and retention policies and practices, reliable web services with the capacity to support widespread use, security, privacy and sharing policies, backed by robust authentication and authorization services.“ *ICT in the developed world is entering into all*

aspects of life including public services, commercial activities, education and health" (Strachan et al. 2008). The ICT infrastructure is recognised to be one of the main challenges for eGov Internetworking which is required to enable appropriate sharing of information and open up new channels for communication and delivery of new services. Security is another important challenge. (Alsmadi 2011) gives a great attention to e-security where security has been widely recognized as one of the main obstacles to the adoption of Internet services and it is *"considered an important aspect in the debate over challenges facing Internet banking*", furthermore (Alsmadi 2011) shed a light on the importance of the personal data (that eGov portal may collect) and the need for security implementation in order to protect such information, In the scope and vision of using and expanding the types of services eGov portals can offer to citizens, one of the major challenges and possible barriers is the security concern. "*Unlike typical websites that include large data to browse and download, such portals are expected to have sensitive private personal data about country citizens, the threat of possible intrusion or identity theft is high and may cause serious consequences"* (Alsmadi 2011). Table 2.3 lists challenges under Technology & Infrastructure category for the period 2000-2013.

Table 2-3: Technology & Infrastructure Challenges for the period 2000-2013

Technology & Infrastructure Challenges 2000-2013			
Connectivity	Internet Access	Data Standards	Cyber Security
ICT Infrastructure	Security and Privacy	Information Sharing	Collaborating Systems
Interoperability	Data Possession	Tele-Density	Power Supply
Policy and Policy Digital Divide	Scarcity of Computers	Maintenance of Government Websites	Explicit Reference to ICT Access

2.4.2 Political & Organizational Challenges

(Hackney et al., 2008) argue that many of the eGov emerging challenges *"facing its adoption are not technical but feature organizational, political and cultural issues"*.

Based on the number of times cited from 2000-2013, the most important themes found in this study under Political challenges are Leadership, political situation, E-Government Policy Execution, National Policy On The Use Of ICT and clear of the policy-making cycle. As an example of political barriers in Syria as Blakeley and Matsuura (2001) highlighted that "*Internet access is available only through a government-owned provider, thus furnishing the opportunity for government-imposed limitations on the sites that may be accessed".* (Ebrahim & Irani, 2005) assert that it is important for government leadership to support eGov initiatives but on the other hand some government officials, especially in developing countries such Middle East Countries, consider eGov as a threat to their power; therefore, for eGov initiative to be implemented and to succeed laws and policies supporting such implementation should be in place. In terms of organizational challenges, (Sallard & Alyousuf, 2007) argue that the widespread evaluation of culture and experience in countries' administrations is very important where in developing countries eGov initiatives are designed and implemented by individual units where there are still very loose institutional links with other agencies. They added that "*This could prevent the development of a common culture and experience of implementation and evaluation across governmen*t". Dubai is an example where eGov faced several challenges from government departments regarding the quality of services (Sethi and Sethi, 2008). Here we can find some institutional departments exaggerating a claim of offering eServices but their services were of little value to customers and some others focussed on quantity rather than quality. Table 2.4 lists challenges under the Political &Organizational category for the period 2000-2013.

Table 2-4: Political & Organizational Challenges for the period 2000-2013

Political Challenges 2000-2013			
Political Situation	eGov Strategy	Data Standards	Leadership
Legal Framework	ICT Roadmap	Fiscal Policy Resources	Political Will
Transparency	Freedom of Press	Change Management	Regulatory Issues
Evaluation Framework	Internal Efficiency	Political Administrative System	Citizen Inclusion
eGov Policy Execution	Vision and Deficiency	Recruitment of ICT Personnel	Data Privacy Legislation
Public Administration Reforms	Management Support	National Policy on The Use of ICT	Procurement Regulation
Implementation Guidelines	Human Capital Development	Ability And Commitment	Information Management
Partnership Between Private And Public Sector	Non-Contextualization Of E-Government Practices	Organizational Motivation	

2.4.3 Social & Human challenges

In their study of the challenges to implementing a successful e-Gov (Khan et al., 2010) found that the level of *ICT literacy and skills of eGov users* in developing countries is very low, on the other hand, they also suggested that citizens should be aware and must accept the eGov initiatives and e-service in particular to overcome this barrier; he also argues for improving the awareness by using the government e-services in a Knowledge Management perspective. They added, "*Education and marketing of eGov services have become one of the ten most pertinent challenges for developing a successful eGov*". Table 2.5 lists challenges under the Social and Human category for the period 2000-2013.

Table 2-5: Social and Human Challenges for the period 2000-2013

Social & Human Challenges 2000-2013			
Awareness	Human Resources	Attitude	E-Readiness
Accessibility	Trust	Public Support	Capacity Building
Gender Inequality	Digital Literacy Skills	Training	Human Capacity
Learning Content/Resources	Knowledgeable Personnel	Low Citizen Participation	Lifelong Learning
E-Services In Knowledge Management.	Human Capital Development	Harmonization Of ICT Systems	Digital Culture
Illiteracy	Culture	Demography	Language Barriers
E-literacy			

2.4.4 Economical & Financial

Table 2-6: Economical & Financial Challenges for the period 2000-2013

Economical & Financial Challenges 2000-2013				
Poverty	Economic Development	Corruption	Competition Environment	Permanent Availability
Unemployment	Financial Constraints	Cost Structure Internet Cost	Cost of eGov Services.	

Economic challenges such as financial constraints, corruption and poverty are the main economic challenges added to the unemployment rate gone up due to the civil war. (Ebrahim & Irani, 2005) The cost of the eGov service is also a significant element which affects the implementation of the eGov in those countries and the highest under financial factors, especially as the war has drained the economic resources which reflect on supporting the eGov service. Table 2.6 lists challenges under the Social and Human category for the period 2000-2013.

2.5 IMPACT DEGREE OF INSTABILITY

Although each country in the Middle-East has its own scope for implementing eGov initiative, there are still some commonalities among those implementations. "*Despite the similarities shared by the majority of Arab countries on social, political and cultural aspects and e-government barriers, each country has its own unique combination of political, economic and social constraints that affect the development of good practices in e-governance*" (Abdul Rahim & Al Athmay, 2013).

However, those challenges have a different impact on different sides of the Syrian life due to the ongoing war. A full categorized list of the found barriers in table 2.7 below, along with the degree of the impact of the instability on each entry, that showing in terms of High (H), Medium(M) and Low (L).

Table 2-7: Challenges found between 2000 and 2013 and the Impact of instability

Type	Challenges 2000-2013 Found Impact of instability (L) Low, (H) High, (M) Medium			
Social & Human challenges	E-Readiness(M)	Human Resources(H)	Awareness (M)	Attitude(M)
	Accessibility(L)	E-Services In Knowledge Management. (L)	Public Support	Capacity Building(M)
	Harmonization Of ICT Systems(L)	Digital Literacy Skills(L)	Training	Human Capacity(H)
	Learning Content/Resources(L)	Knowledgeable Personnel(L)	Low Citizen Participation	Lifelong Learning(L)
	Gender Inequality(L)	Human Capital Development(L)	Trust(H)	Demography(M)
	E-literacy(H)	Illiteracy(M)	Language Barriers(M)	Digital Culture(M)

Political & Organizational Challenges	Fiscal policy resources(H)	national policy on the use of ICT(H)	data privacy legislation(M)	ICT roadmap(M)
	e-government strategy(H)	political administrative system(H)	political will(H)	
	e-government policy execution(H)	public administration reforms(H)	regulatory issues(M)	
	E-Government Vision(M)	Change Management(L)	Deficiency(L)	Transparency(M)
	Recruitment Of ICT Personnel(L)	Partnership Between Private and Public Sector(L)	Citizen Inclusion(L)	Evaluation Framework(M)
	Implementation Guidelines(M)	Human Capital Development(L)	Organizational Motivation(L)	Information Management(L)
	Management Support(L)	Non-Contextualization Of E-Government Practices(L)	Ability and Commitment(L)	Internal Efficiency
Technology & Infrastructure challenges	Connectivity(M)	internet access (M)	digital divide(H)	cyber security(H)
	ICT infrastructure(M)	information sharing(L)	security and privacy(H)	collaborating systems(M)
	interoperability(H)	data possession(L)	data standards (M)	power supply(M)
	explicit reference to ICT access(L)	maintenance of government websites (H)	Scarcity of computers(L)	teledensity(L)
Economy &		economic development(M)		

		competition environment	corruption(M)	Poverty(M)
	appreciation of IT value(L)	permanent availability (M)		
	Communication cost (H)	unemployment rate(H)		
	Financial constraints(M)	Cost of eGovernment services. (M)	cost structure Internet cost(M)	

2.6 E-SERVICE FOR REFUGEES AND DISPLACED PEOPLE

(United Nations, 2016) "*The year 2015 marked a milestone in efforts to eradicate poverty and promote prosperity for all people on a safe planet. With the adoption of the 2030 Agenda for Sustainable Development and other major international commitments, we embarked in an unprecedented endeavour to transform our world. The 2030 Agenda is centred on a set of far-reaching and people centred universal Sustainable Development Goals (SDGs). Reaching these goals in all countries and creating peaceful, just and inclusive societies will be extremely difficult in the absence of effective, accountable and inclusive institutions. Institutions need to be capable and equipped to adapt the Agenda to the national situation. They need to be able to mobilize the society and the private sector in implementing the SDGs. Capacities and innovation will be required to promote policy integration, enhance public accountability, promote participation for more inclusive societies as well as ensure equitable and effective public services for all, particularly for the poorest and most vulnerable groups. ICT and e-government are important tools to realize these objectives.*"

eService utilizes the provision and use of information, services and communications by citizens and governments to improve the efficiency and effectiveness of service delivery and transactions in the public sector. Seo & Bernsen (2016) point out that eService has developed in many ways, which

has been enhanced by the citizens' requirements. Alshehri, Drew & Alfarraj (2012) argue that Governments usually provide eServices to people within its authority, which depend on the people's needs and thus provide the opportunity for better development, especially, in terms of the varieties of service provided and their availability. Thus, many governments have put financial investment and effort into developing and enhancing eGov for better use of the eService across people's categories (such as poor, old, young, displaced and settle ...etc.) (Chatfiel & Alhujran, 2009**;** Seo & Bernsen, 2016)**.**

On the other hand, recent studies such as (United Nations, 2016; UNHCR & accenture, 2016) are starting to realize the important of bridging the digital gap amongst refugees and displaced people, in order to experience the benefit of the eService provided. Although the digital divide element usually stands as a significant barrier to implementing eGov successfully, governments are trying to avoid excluding certain categories (for example elderly, disabled and vulnerable people) and are trying to include all people for eService adoption (displaced people and refugees should not be an exception).

Helbig, Ramón Gil-García, & Ferro (2009) argue that using sophisticated information technologies in government has little social value if the people cannot use the service, or benefit from this innovation in a meaningful way. Otherwise, the negative impact would be an inevitable consequence if, however, a segment of the society left behind where everyone should be included (United Nations, 2012).

Transtec S.A. (2015) argues that governments have not been so successful in providing eService to unstable societies or encouraging refugees to adopt or continuously use the eService provided, especially those people who are living in camps where they are isolated. However, as the world is experiencing the largest humanitarian crisis since the Second World War with 65 million refugees and displaced people, new trends and studies are start emerging on eService within those societies and, hence, highlighting its benefits (Elsheikh, 2011; SWEISI, 2010; Al-Busaidy, 2011).

On the other hand, there are still little researches that investigates the driving factors that prevents ordinary citizens, refugees and displaced people from adopting eServices in unstable societies. This is considered to be an important aspect which unleashes new models of eService targeting new segments of the society such as refugees and displaced people.

United Nations (2012) consider concepts of eGov such as the effectiveness of multichannel service delivery; the importance of eService to vulnerable groups; digital divide; enhancing and increasing the internet connection as driving factors for sustainable development that lead to advance economic sustainability and social equity and stability. eService allows the government to interact with its citizens and vice versa to deliver the best service solution by electronic methods (Zhi & Zhenhua, 2009), therefore, people in unstable societies may benefit for such interaction in many ways. Table 2.8 below, summarises the recent literature in the domains of eService and eService during instability.

Table 2-8: Examples of literature review of eService and eService during instability.

Researcher	Research topic	Methodology	Contribution
(Seo & Bernsen, 2016)	Comparing attitudes toward e-government of non-users versus users in a rural and urban municipality	Quantitative research method questionnaire based-survey	Model to show different factors enhance the adoption of eService among users and non-users in rural and urban places, which contribute a more nuanced perspective to the e-government.
(Alshehri et al., 2012)	Analysis of eServices adoption in Saudi Arabia: Obstacles and Challenges	Quantitative research method questionnaire based-survey	Important challenges in the Saudi eGov context were found and a list of recommendations for a successful adoption of eService was proposed
(SWEISI, 2010a)	Exploration of Factors Contribute to a Successful Implementation of eServices an in Libya	Mixed method (quantitative and qualitative)	Roadmap to policymakers and key stakeholders in Libya which may assist in the successful implementation of

			e-Government services programmes.
(AlKhatib, 2013)	E-government systems success and user acceptance in developing countries	Quantitative research method questionnaire based-survey	A model provides decision-makers in developing countries an approach to determining which factors require attention in order to reap the highest benefits from e - Governments' projects
Farzali, Kanaan, Kanaan, & Atieh (2012)	Designed an Interoperability framework to address effective Implementation of eGov in developing countries with the focus on Syria case study	Mixed method research.	The framework investigates eGov activities in Syria, where eGovernment barriers explored. It utilizes the Enterprise Integration technologies to overcome barriers of policy, economics, administrative procedures, society, and technology

2.7 REVIEW OF BENEFITS AND CHALLENGES DURING INSTABILITY

The potential benefits of eService adoption in developing countries, particularly,in the rural and unstable areas can dramatically reduce transaction costs and improve internal organizational mechanisms (International Telecommunication Union, 2009).

eGov has evolved rapidly to solve the increasing and the overwhelming workload of the governments' paper-based service delivery (Heeks, 2006b). Which present the need for organisational reforms to ease the citizen's transactions and communications with the government on all levels, therefore, the development of various related technologies in order to overcome those challenges has driven many innovations.

Such innovation, therefore, started to find its way to be adopted by wider segments of societies including vulnerable people, people in needs and displaced and refugees people. the United Nations (2014a) concluded that `"*Governments in many parts of the world are becoming more collaborative,*

open and transparent, innovative and inclusive by engaging citizens, communities, NGOs and the private sector in devising and implementing together solutions to society's challenges".

Janowski (2015) argues that governments sought to enhance the eService delivery by improving and grasping the social, economic and political aspects that influencing the adoption process. Furthermore, a study by (Savoldelli, Codagnone, & Misuraca, 2014) confirms that the focus on the electronic government service was mainly a technological and operational related study, that has been typical for a long time. They added that just recently the attention has switched to institutional and political issues which have a great impact on shaping the eService delivery and opens gates for wider adoption including people in unstable societies.

eService can help refugees and displaced people worldwide by offering opportunities to connect with education, healthcare, integration, security, safety and employment. Hence, they can share the social, political and economic activities in the digital space which eService affords (Janowski, 2015). The report from International Telecommunication Union (2015) shows that 6.7 % of households in developing countries had Internet access compared with 46 percent of households worldwide and more than 80 percent of households in developed countries. the number of countries using social media has more than tripled from 2010 to 2012 and increased by another 50 percent in 2014 (United Nations, 2014a). Developing countries are making significant improvements and continue to evolve in the worldwide digital society (International Telecommunication Union, 2015). The improvement has shown, particularly, the increase of household ICT access, international Internet bandwidth and mobile-broadband penetration. The United Nations (2014) states that a wider range of people will benefit from connecting to the internet, especially, vulnerable people such as refugees and displaced people. Developing countries who showed significant improvement have developed detailed strategies for realizing their eGovernment programmes (Rabaiah & Vandijck, 2009). Some of those strategy approaches are relevant to other developing countries and

consequently, most of the unstable societies within those countries will be affected, where the most of the world's refugees have found.

However, it is important to realize the factors preventing the adoption of the eServices by citizens in unstable societies. United Nations (2012) state that "*there are challenges to reducing the digital divide and increasing access to public services by vulnerable populations and distant communities. More than ever, mobile services, crowdsourcing, cloud computing, e-service kiosks and other innovations of this sort must be nurtured and supported and made available to all segments of society"*. The following discusses and addresses some of the benefits and challenges during instability (found during this phase of our literature review):

- Although (Strachan, Wanous, & Mofleh, 2008) stated that "*ICT in the developed world is entering into all aspects of life including public services, commercial activities, education and health*", the ICT infrastructure (which include providing internet services and reliable web services with the capacity to support widespread use) is recognised to be one of the main challenges for eGov Internetworking which is required to enable appropriate sharing of information and open up new channels for communication and delivery of new services.
- Security is another important challenge. Alsmadi (2011) gives great attention to e-security where security has been widely recognized as one of the main obstacles to the adoption of Internet services and it is "*considered an important aspect in the debate over challenges facing Internet banking*".
- Additionally, Alsmadi (2011) sheds a light on the importance of the personal data that e-Gov portal could contain and the need for security implementation in order to protect such information, In the scope and vision of using and expanding the types of services eGov portals can offer to citizens, one of the major challenges and possible barriers is the security concern. In their study of the challenges to implementing a successful e-Gov.

- (Khan et al., 2010) found that the level of ICT literacy and skills of eGov users in developing countries is very low, moreover, they suggested that citizens should be aware of the eService in order for eGov to be adopted successfully. These researchers argued that eService would be improved by awareness from a Knowledge Management perspective. For example, some institutional departments exaggerated the claim of offering eServices but their services were of little value to customers, and some others focussed on quantity rather than quality.
- The institutional and government organisations in developing countries suffer from corruption in big details. Andersen (2009) argues that the increase in using eGovernment can reduce corruption over time. It works as a strategy for administration reform as it eliminates many of the arbitrary actions by making rules simpler and more transparent. Furthermore, he added that "*Corruption is commonly considered to be one of the most significant obstacles to economic development*".
- Citizen demand for eService is one of the main pillars when planning for eService delivery. A study by Alfawwaz (2011) shows the gap between the citizen demands and the eServices provided by the Government. It reflects on the ambiguity of the user' real needs and their expectations.
- Bridging the digital gap and the process to reach to the majority of the society requires more effort by politicians and policymakers. (Basamh, Qudaih, & Suhaimi, 2014) suggest that there is a need to bridge the digital divide gap among the Saudi's society as well as providing better eServices that required more efforts from the government. In addition (United Nations, 2014a) states that digital divide and low user take-up are great challenges in preventing users from eParticipation and wider adoption of the innovation.
- The adoption of eGov can be increased vis awareness programmes which are an essential step to disseminating the purpose and the benefit of adopting the service among the citizens. Public

awareness can be promoted through different ways such as training sessions, TV, radio, etc. (Moaman Al-Busaidy, 2011).

- Connecting people to government services, especially people in a war zone or in unstable societies such as refugees or displaced people, can Improve Refugee Well-Being, it faces great challenges. UNHCR & ACCENTURE (2016) argue that "*Mobile communications and social media provide an ever-expanding variety of ways to stay in touch with friends, family and colleagues. Cloud computing, remote working and networked global teams are reshaping the way that we interact and connect.*"
- Kavanaugh, Sheetz, Sandoval-Almazan, Tedesco, & Fox (2014) state that there is an increase in the adoption of social media as one of the main communication channels for government's disseminating information and services and as well as for political developments. For example, the recent refugees' crisis in Europe created huge attention on the news and social media (Hadgu, Naini, & Niederée, 2015).
- Mobile communication made it easier to reach out to more people in unstable societies regardless of their illiterate or isolation states. United Nations (2012) argue that mobile communication has the power of providing eService to people in different locations and hence plays role in bridging the digital divide.
- Collaboration with NGOs and private sectors is considered to be one of the important enablers that play a role in solving social challenges by devising and implementing related solutions(United Nations, 2014a).

2.8 E-SERVICE ENABLERS AND STRATEGY REVIEW

In order to find out whether eGov Strategies may impact the successful adoption of eService delivery to citizens in countries with high level of instability such as Syria, it is essential to examine

the benefits and challenges of eService Strategy and the impact on successful eService delivery at different levels of instabilities.

In Syria (as in many other developing countries) a comprehensive design and implementation of eGov are crucial to encourage adoption and help prevent the initiative from failing. Dada (2006) suggests that practitioners must understand the importance of the specific context within which they are working. (Heeks, 2002) suggests that such challenges must be met by strategic building of national infrastructure. Additionally, he suggests that "*everyone involved in the project must fully understand the eGov initiative and be aware of its objectives, otherwise it will face failure".*

Heeks also highlights that such projects should consider the reality of citizen behaviour with their design "*stakeholders must be sensitised to the large gaps that often exist between project design and public sector reality*". Furthermore, he argues that such services must be available: "*for 24 hours a day during the seven days of a week citizens of any given country should have full access to government information at any moment and everywhere*".

By taking into consideration related previous work and eGov best practice experience from different countries, we may reduce the risk of failure in future eGov initiatives.

In chapter 5, we compare eService Strategies among countries with different level of stability (different places on stability ranking scale provided by UN), where the focus was on the best practice and the successfully implemented activities, with the focus on unstable context.

HEEKS (2004) state that eGov is a global project of technology transfer, taking designs from one context into a different context. Where the goals behind such projects vary across countries. Hence, Rabaiah & Vandijck (2009) argues that governments have the tendency to learn from each other and most governments have developed detailed strategies for realizing their eGov programmes.

Yesser, (2012) stated that "*eGov cannot be implemented individually but needs collective efforts to achieve one national objective which requires interconnection and integration between all government agencies to provide better services to the public and enhance the efficiency of the public*

sector. Therefore, the implementation of the strategy and action plan is a collective responsibility for government as a whole".

In addition, Heeks (2006) states it is important to establish the eGov strategy and the supporting infrastructure to increase the ability of management and to meet the organisational objectives. Al-Khouri (2012) added that with the government eService success can be greatly enhanced by developing a clear vision, mission, objectives and detailed action plans, hence, eService strategy determines the government process and activities to be achieved in the next few years.

Therefore, every government develop a strategy with the emphasis on the citizens' requirements and the resources capabilities, therefore, the strategy should be updated accordingly in order to overcome any emerging challenges.

The successful adoption of eService depends on many factors including the level of instability (Alsaeed & Adams, 2015). Therefore, comparing strategies between different initiatives that have been implemented in different societies with different level of instabilities shed light on pivotal factors and aspects of different approaches for implementation in each environment and lead to better analyses of the current problem and also may suggest better solutions for eService delivery.

Countries are sharing best practice and experiences where the learnt lessons may unleashed many unsolved problems. Rabaiah & Vandijck (2009) define the best practice as the "*concept, technique, methodology, or solution that has proven reliable in achieving desired objectives, through experience, research and best available knowledge or technology and that has proven effective through replication*".

In unstable countries where the challenges are greater, strategies in such environments should pay more attention to new emerging social categories (such as displaced people and refugees). United Nations (2012) suggest that "*there is a need to reach out to all citizens, particularly the disadvantaged and vulnerable groups, in order to bridge the gap and maximize the utilization of online service delivery. However, governance processes for the effectiveness and benefit of all*

cannot be realized without a well-established coordination framework encompassing the involvement of all national and international stakeholders".

Joseph & Avdic (2016) argue that an effective eGov strategy is a significant step in the development and in eGov adoption. They found many examples of governments that took the leading role by adopting a certain strategy which makes it interesting to study by different governments and to learn lessons upon which they based **.** They argue that each country has a strategic focus with different directions which relate to the nature of the requirements by that country.

For example, the Nordic countries set a strategic direction with public sector reforms as the main focus, the economic reforms took second place and even less on political reform. They concluded that Sweden, Norway, Denmark and Finland have succeeded in becoming the leading nations in the eGov ranking as a result of having adopted their strategies. In addition, the public sector services have been improved efficiently and effectively in those countries due to the inclusion of the electronic information and communication technologies in their reform strategies (Wallström, Engström, Salehi-Sangari, & Styvén, 2009).

Several scholars have considered eGov strategy as one of the main drivers for successful implementation and adoption. Where many studies give guidance on eGov strategy yet some others have suggested a models and frameworks for comprehending the concept and suggesting recommendations for wider adoption.

Conducting a strategy must consider the different aspect that influence changes such as political, economic, social and technological factors (Lee, Tan, & Trimi, 2005). Similarly, Porumbescu, Vrabie & Ahn (2012) argue that a strategy should take into account the socio-economic and political elements for the long-term and solid eGov planning, as those elements have a direct Influence on participatory eGov Applications. Furthermore, political, economic, social and technology factors are the driving factors in the formulation of eGov strategies where the Institutional arrangements and the characteristics of policy processes play a crucial role in shaping the implemented eGov

strategy (Saint-Martin, 2004; Timmermans, 2001; Peters, Pierre, & King, 2005; Hay, 2006; Eom, 2012). "*Lessons drawn from developed countries indicate that political, fiscal, social, strategic and organisational issues need to be addressed when formulating plans for deploying e-government*" (Weerakkody et al., 2012).

Planning for eServices during instability, where every aspect of life has been affected, new barriers appeared and different approaches for planning are required. In such societies eGov strategy informed aspects, to be include, such as political, socio-economic, human, organizational, infrastructure and financial elements in order (Alsaeed & Adams, 2015). Related researches are included in Table 2.9.

Table 2-9: Examples of recent literature in the eGov Strategy domain.

Researcher	Research topic	Methodology	Contribution
(Joseph & Avdic, 2016)	Where do the Nordic Nations' Strategies Take e-Government	Comparative qualitative analysis method among Nordic e-Government strategies	"The results show that the major focus of Nordic e-Government strategies is on public sector reforms"
(Rabaiah & Vandijck, 2009)	A Strategic Framework of e-Government: Generic and Best Practice	Qualitative cross-case comparisons of 21 eGov strategies from different countries around the world	Generic strategic framework of e-government
(Al-Khouri, 2012)	eGov Strategies The Case of the United Arab Emirates (UAE)	Desktop research, based on the dissemination of the UAE document publications.	A proposed framework to enhance the electronic transformation of all government services in the UAE.
(Linnefell, Hallin, & Lagergren, 2014)	E-government Policy Formation – Understanding the roles of change drivers	Case study of e-government policy process in the municipality of Vasteras in Sweden	"Develop the understanding of e-government policy failure by elucidating how individuals' actions, behaviours and decision affect endeavours to improve e-government policy agendas"

(Meijer, 2015)	E-governance innovation: Barriers and strategies	A case study in The Netherlands between police and citizens.	A theoretical model of eGov strategy which includes innovation process, government and citizen barriers and structural and cultural barriers.

2.9 CHAPTER SUMMARY

From conducting a semi-structured snowball literature review and other approaches we were able to identify a set of factors likely to impact the success of eGov projects in Middle-East Arabic Countries, in particular, unstable societies. We explored the specific geopolitical context of Syria and, the impact degree of instability, where we found examples of eServices for refugees and displaced people. furthermore, we reviewed a set of benefits and challenges during instability and the impact of enablers and strategy factors that contribute in successful adoption of eService during instability. Based on our study, we can conclude that the most common factors that will affect the success of eGov initiatives, in the Middle East Arabic Countries and Syria, in particular, are classified in four categories (Social & Human, Political & Organisational, Technology & Infrastructure and Economic & Financial) and each has impact on the others. In attempting to overcome any of the above challenges it is necessary to consider the others in parallel. Hence, these factors will be added to the framework next chapter which will be the base for our empirical study later in our research.

However, we can learn from case studies of different countries and identify the challenges& enablers that affect the successful adoption of eGov initiatives: each government exists within unique circumstances, so the challenges and opportunities must be carefully interpreted. The scope and search strategies adopted in this study lead the research for building the blocks for our

framework where the initial framework is discussed in chapter 3, in which , each element described and further insght is carried in chapter 8.

In the next chapter, we construct a conceptual framework in which to evolve our analysis of eGov in Middle-East Arabic Countries/Syria (from 200-2013) and highlight the extra challenges & opportunities of achieving eGov transformation in the context of geopolitical instability. This framework will provide the base for our future work which will build, populate and extend our conceptual framework that is based on the emerged themes from our empirical work.

3 CHAPTER 3

INSTABILITY FRAMEWORK

3.1 OVERVIEW

In chapter 2, we examined the literature in supporting vulnerable people in unstable societies by carrying out an in-depth review of related eGov topics and provided a better understanding of the investigated areas, furthermore we highlighted a number of gapes that will examine empirically in the coming chapters. In this chapter (this is the second part of our literature review), we aim to develop a conceptual model (Instability Conceptual Framework) for the eService delivery system during geopolitical instabilities which targeting those people who forced to be uprooted from their environments and surroundings and becoming displaced and refugees people. it is important to capture those factors which influence the eService implementation. The proposed conceptual framework captures the main factors both enablers and barriers that contribute toward the successful implementation of eServices in countries that have unstable status. In such countries, eService is still necessary and governments face extra challenges in their provision. We use the example of Syria and other developing countries facing similar challenges to tackle this problem. Our framework will be developed based on the finding and gaps extracted from reviewing the literature in eService for instabilities area and utilizing aspects from different models and frameworks of eGov related studies. It also examines those findings through the lens of the roadmap of the government transformation which utilizes the ten principles of reinventing government by Osborne & Gaebler (1992). Furthermore, the factors affecting the adoption will be classified according to the institutional theory's pressures.

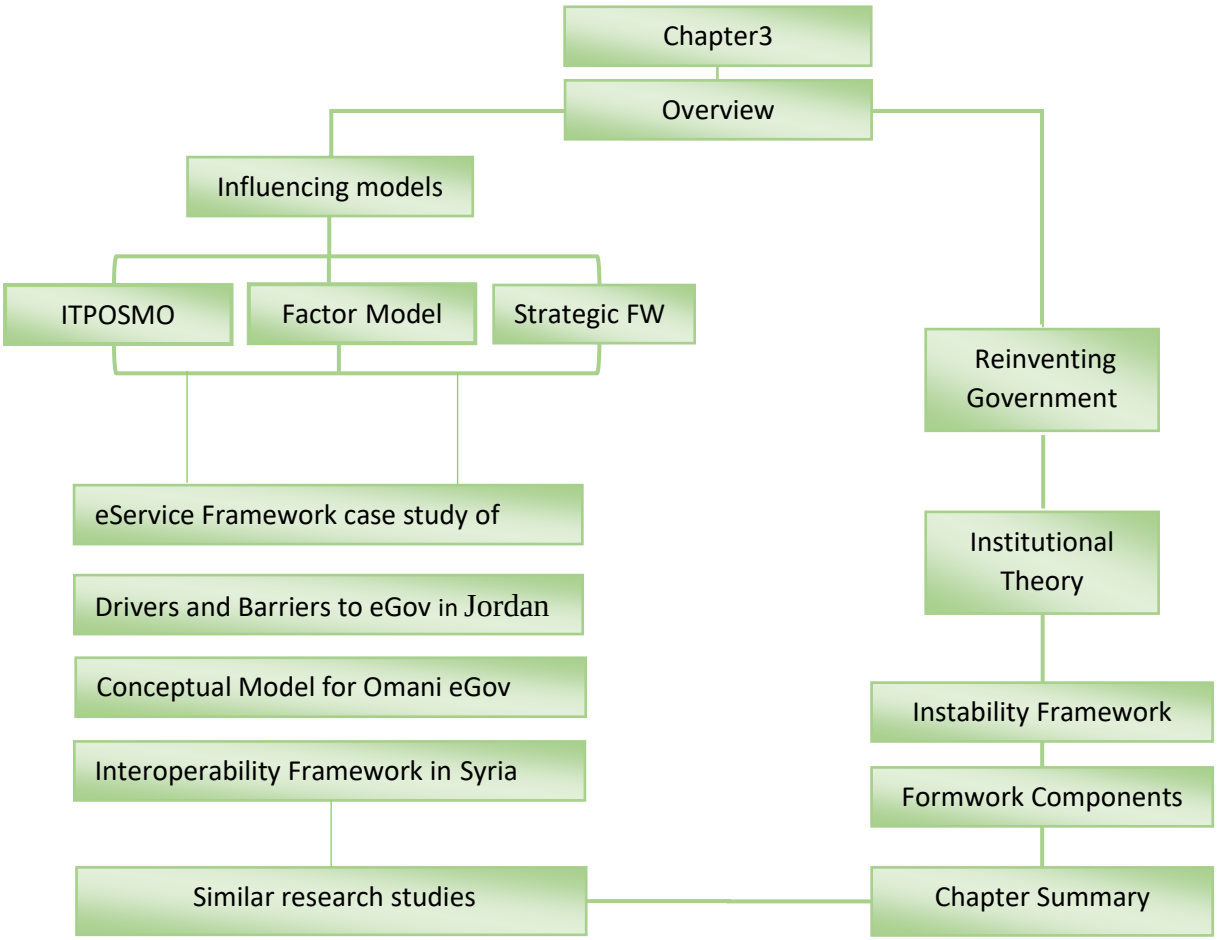


Figure 3-1: Chapter 3- Instability Conceptual Framework Outline.

The resulting derived conceptual framework in which we suggest technology-related strategies that may assist in the effective implementation of eGov for countries with instability status where the Syrian case was used, it provides a base to understand eGov activity for nations going through geopolitical uncertainty. Our proposed framework will work as a guideline and a roadmap for our later work from collection data stage to analyse stage. Furthermore, there is an absence of framework which outlines enablers and challenges through eGov prospective in such situation which suggests for a better explanation to overcome barriers and to encourage drivers and best practices from a different context. The rest of this chapter is organized as follows and illustrated in

figure 3.1. In section 3.1 the influence models such as ITPOSMO Model and Factor Model discussed, follows in section 3.2 identify five similar research studies: eService framework case study of Egypt; strategic framework to eGov adoption; Drivers and Barriers to eGov in Jordan; Conceptual Model for Omani eGov; Interoperability Framework in Syria. Section 3.3 provides a reviewing summary of the ten principles of the reinventing government, follows in section 3.4 the institutional theory pressures discussed, follows in section 3.5 instability conceptual framework proposed and in section 3.6 we discuss the different components of the proposed framework and finally, in section 3.7 chapter summary.

3.2 MOTIVATION MODELS &DRIVING ELEMENTS.

Heeks (2001b) argues that we should adopt methods or tactical in the individual eGov projects during their implementation for avoiding failure and achieving success. He explained in details how to predict eGov project success and failure through investigating and study analysing dozens of eGov projects, as a result, new models have emerged and developed to explain those factors of success and failure. The following models highlight aspects of understanding the factors affecting the successfully implementing any eGov project. In fact, it is crucial to study the elements that reduce the risk of failing such projects which the following IPOSMO and Factor Models influencing such thought. Furthermore, (Heeks, 2001) argue that improvements and legitimacy will only be delivered if two things are in place. First, the strategic e-readiness infrastructure, especially the leadership and integrated vision on which e-governance depends. Second, the tactical best practices that are needed to close design-reality gaps and to steer e-governance projects from failure to success.

3.2.1 Factor Model

Factor Model by Heeks (2004) identifies a set of success/failure factors that the presence or the absence of these factors may determine success or failure of eGov projects, namely: external pressure, internal political desire, overall vision and strategy, project management, change

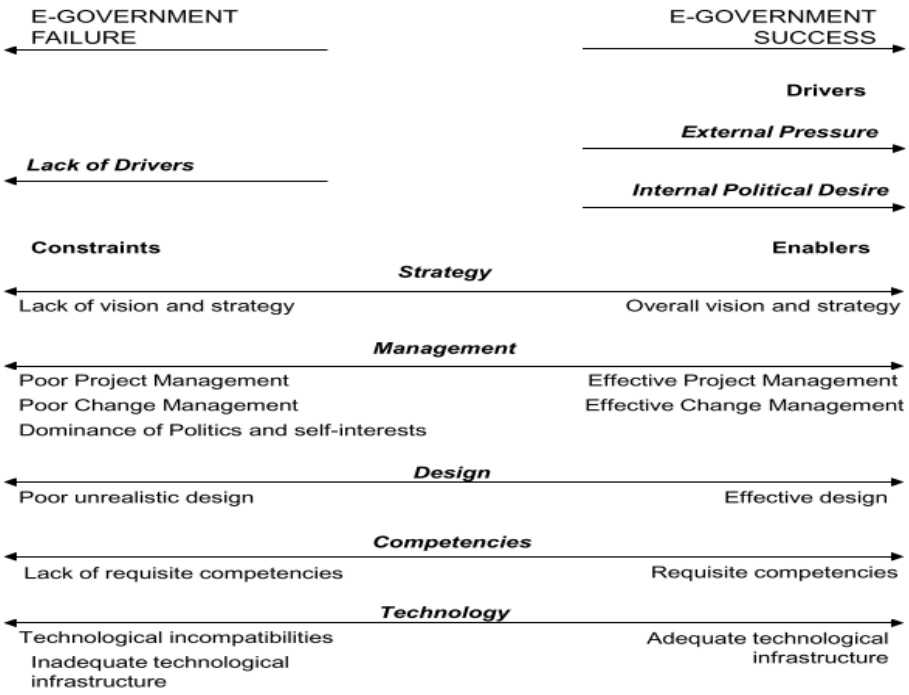


Figure 3-2: Factor Model, (Heeks, 2004)

management, politics, design, competencies and technological infrastructure illustrated in figure 3.2. In this proposal, Heeks (2004) argues that the emphasis on one side of the success/failure factors set may determine the more likely to succeed or to fail, by listing and explaining some of the main factors that help support success/ or underlie the failure of e-government in transitional countries. Left side items in figure 3.2 pointing arrows encourage failure; while the right side items pointing arrows encourage success.

3.2.2 ITPOSMO Model

In his ITOSMO (Information, Technology, Processes, Objectives and Values, Staffing and skills, Management systems and structures, Other resources) model illustrated in figure 2, (Heeks, 2003) shows the seven dimensions forming the relationships between the current reality and design proposal for new eGov projects , they are the main elements when analysis any eGov project and hence, are significant to provide an understanding of the design-reality gaps.

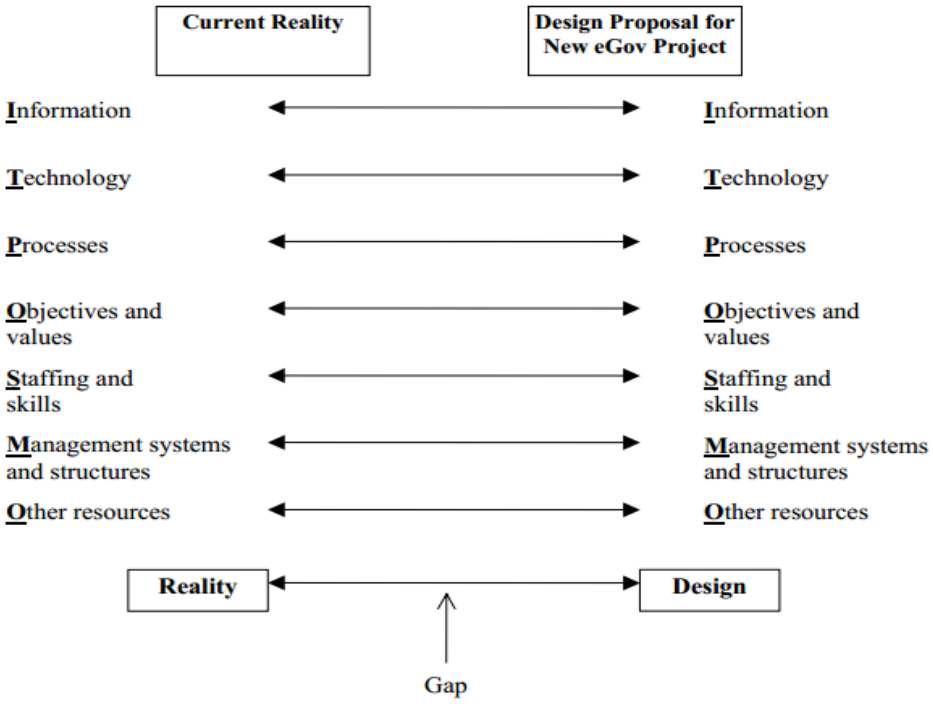


Figure 3-3: ITPOSMO Model, (Heeks, 2003)

He states that there are high rates of failure and a small rate of success of eGov projects in developing countries as following: 35% are total failures, 50% are partial failures, and only 15% are successes. He imputes the reasons for this failure to the gap between the current reality and the design of the future eGov system. Therefore, this gap gets bigger whenever the relationship between the reality and design is a mismatch, "The larger this design-reality gap, the greater the risk of e-government failure. Equally, the smaller the gap, the greater the chance of success" (Heeks, 2003). This model can be seen as a framework for the failure of eGov in developing countries (Dada, 2006).

Therefore, the design-reality gap model can be utilized as a useful guide to understanding the success or failure of eGov projects.

3.2.3 Strategic framework for eGovernment adoption

The Strategic framework by (Ebrahim, Irani, & Al Shawi, 2004) mainly incorporates three parts: 1-Stage of the growth model, 2-Technology, Organization and Environment framework (originally proposed by Tornatzky and Fleischer 1990), 3-Benefits and Barriers factors. They argue that Benefits and Barriers are essential factors that influence the adoption of eGov projects, "there is a need for another framework that can explain the significant factors such as, organisation, technology and environment to support the implementation process and analyse the requirements for each adoption stage. Figure 3.4 shows the strategic framework to e-government adoption.

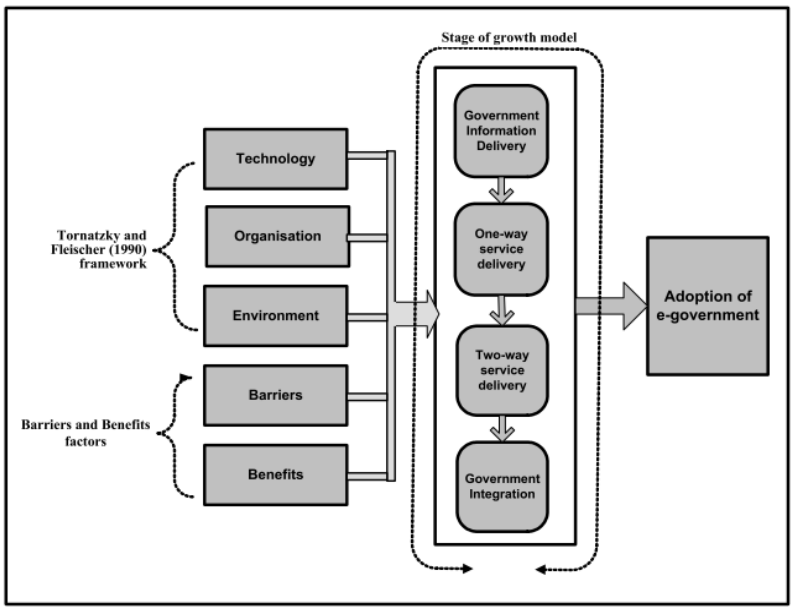


Figure 3-4: Strategic framework, (Ebrahim, Irani, & Al Shawi, 2004)

3.2.4 More enabling elements added values

Enablers motivate and encourage eService initiatives progress. eGov projects must have driving forces if they are to succeed (Heeks, 2001). Therefore, they should be well identified and recognised. Many elements have been identified from literature as driving forces for successful implementation of eGov projects. The most important elements emphasised by literature are:

Vision: planning for e-Service should begin by establishing a broad vision that flows from the large goals or concerns of the society (Chen et al., 2009).

Strategy: a good strategy needs to first assess the current condition as the first step to developing a path to the desired results (Andersen, 2009).

Leadership: the involvement of high-level leadership in the process and planning of the e-Service is essential to ensure motivation and coordination across organizations. Based on an empirical study, ALOMIRI (2015) argues that there is a huge impact of leadership style and organisational culture on the implementation of e-services.

Citizens' Demand: It is a motivation for the government to implement an e-service project when there are citizens' demand and pressure for it (Helbig et al., 2009).

Funding: The availability of sufficient funding is a significant factor for a public organisation to move towards e-service success (H. S. H. HASSAN, 2011).

3.3 REVIEW OF SIMILAR RESEARCH STUDIES

This section shed light on a number of relevant frameworks to comprehend the contributions made towards governmental electronic services. Although our proposed framework utilized by the following two modules by Heeks (2003) and (2004) to draw up the factors affecting the adoption of implementing eService in developing countries with the focus on the Syrian case, on the other

hand we have chosen the following five frameworks to capture their trends and gaps in their provision:

3.3.1 eServices framework case study of Egypt

This study developed an eService framework for the Egyptian government context. It studies enablers and barriers affecting the successful implementation of eService. The result's framework aims to draw up the factors affecting the adoption of implementing, it examines eService and provides insights and learning into how to successfully develop and implement them.

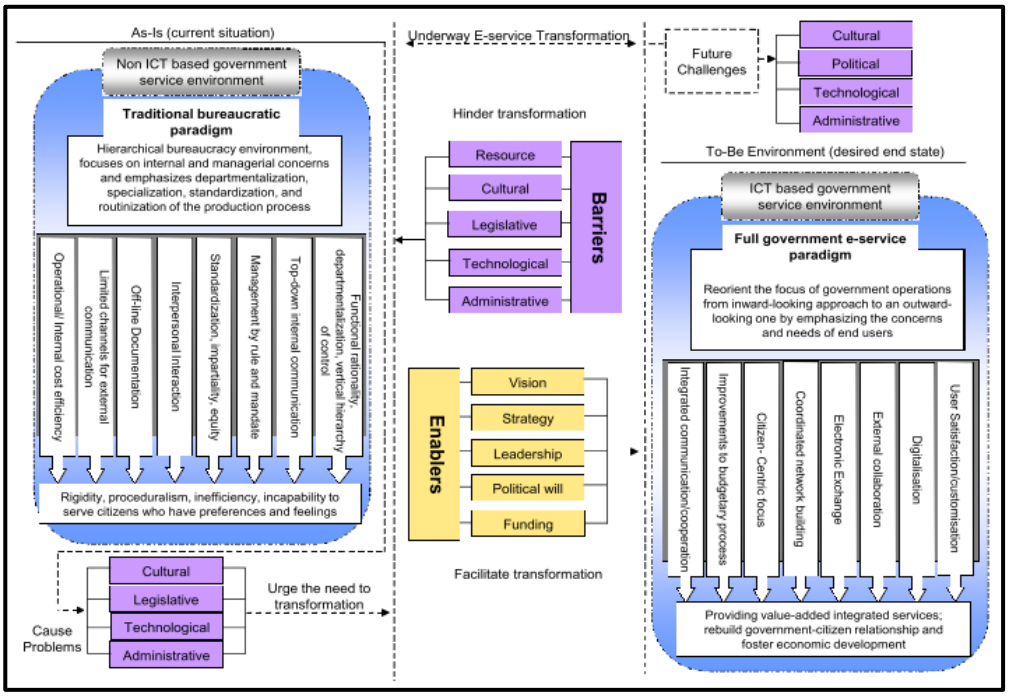


Figure 3-5: eServices framework case study of Egypt, H. S. H. HASSAN, (2011)

In her study, H. S. H. HASSAN, (2011) argues that the developed framework explains the main barriers and enablers for implementing any eService projects successfully and provides solutions to overcome such challenges. Furthermore, it informs policymakers for a realistic adoption and gives them an overview of what best strategy can be adopted. However this framework dose not capture barriers and enablers in countries facing instability which going through changes such as Syrian

case. She added that "This framework was validated using different approaches and investigated the different factors that affect the development and implementation of several e-service projects. The findings of the research have revealed that the main concerns for implementing the e-service projects were cultural concerns and the way to overcome them. In general, this group was the most challenging obstacle as it starts during the planning, and before the commencement of the projects and continues after their completion. Political support and decision enforcement are the most important among the enablers that facilitate the successful implementation of the projects."

3.3.2 Key Drivers and Barriers to eGov in Jordan Model

In her study, Khasawneh-Jalghoum (2011) stated that the main purpose of this model is to investigate the key drivers and barriers that stimulate or impede the development of the e-government initiative within the context of developing countries with the focus on Jordan. Furthermore, to recommend strategies for successful implementation of eGov. The three main components of the framework are Stage Model, Action Plan for a Successful Implementation of E-Government Projects, and Drivers and Barriers as illustrated in figure 3.6. The research investigates the stakeholders' perspectives that affect the progress of the eGov initiative in Jordan. The researcher argues that eGov initiative in Jordan is progressing very slowly. It is still in the first stages of development. From her empirical work she founds that Seven major categories were identified to support the implementation of the Jordanian eGov initiative namely: Political, Economical, Socio-Cultural, Legislative and Regulatory, Environmental, Organizational, and Administrative.

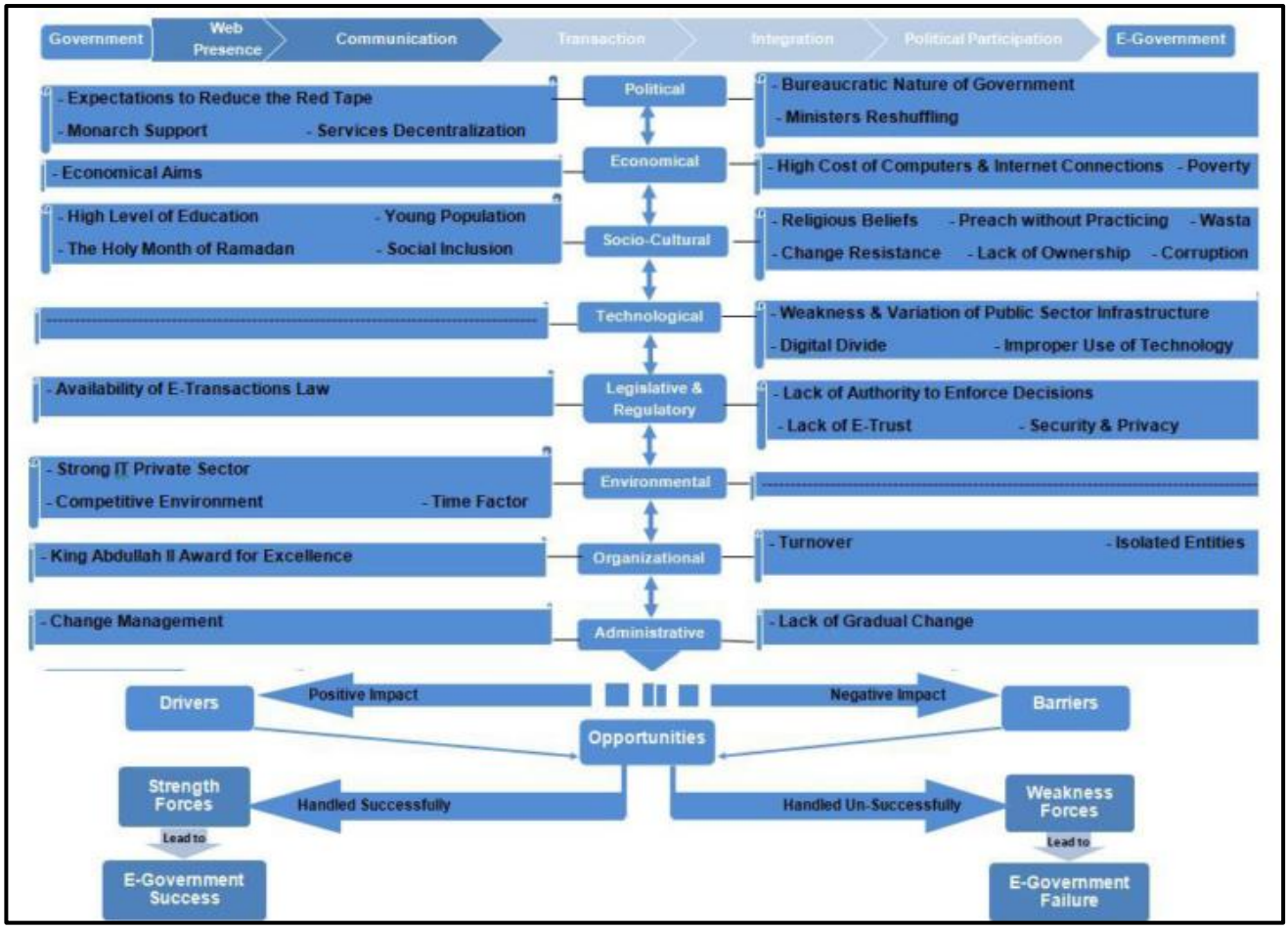


Figure 3-6: Key Drivers and Barriers Model, Khasawneh-Jalghoum (2011)

The researcher argues that "the best way to make the most out of these drivers or barriers is to look at them as opportunities that needed to be dealt with. If leaders are able to handle these opportunities properly then they are considered as strong forces that lead to e-government success, whereas if they are unable to handle them properly, they are considered as weakness forces that lead to e-government failure. Therefore, recognition of potential drivers and barriers represents a massive opportunity that should not be missed by Jordanian e-government leaders."

3.3.3 Conceptual Model for Omani e-government

This research studies the eGov implementation and related institutional adoption and diffusion factors in Omani public sector organisations (Al-Busaidy,2011; M Al-Busaidy, Weerakkody, &

Hackney, 2010). Al-Busaidy (2011) examines the institutional factors influencing the development and implementation of eGov. He developed a novel model which map the relationships between eGov implementation and the success structure and process of the organisation from the perspective of Omani government. Furthermore, in his model, he explores economic, political, social and technological pressures facing governmental efforts the various institutional pillars (coercive, normative and mimetic) that effects on the public organisation processes and structures as illustrated in figure 3.7.

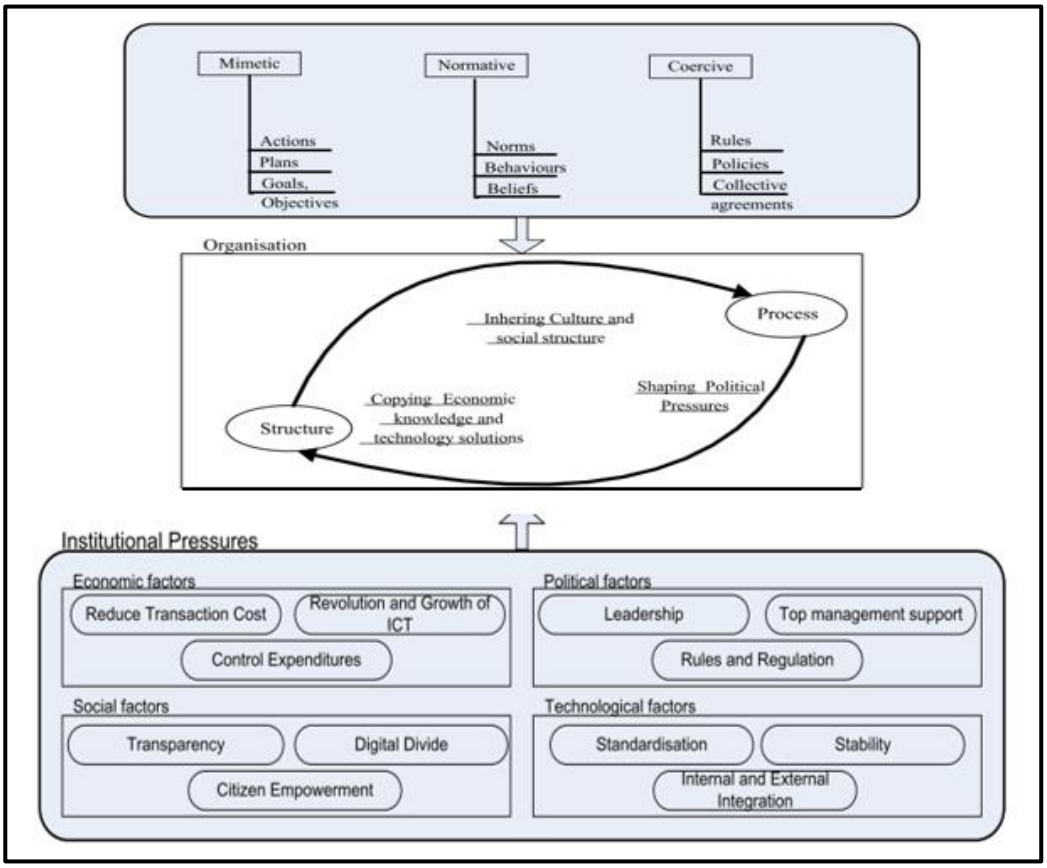


Figure 3-7: Conceptual Model for Omani e-government, (Al-Busaidy, 2011)

He argues that "Using institutional theory as a conceptual lens aims to provide a better understanding of the internal and external pressures that influence the success of e-government projects."…. "the researcher attempted to highlight some of the key factors that can enable the eGov

implementation process to succeed. The literature showed that there is a lack of prior research which explored the economic, political, social and technological factors influencing e-government conceptually. In this respect, the use of institution theory offered a theoretical lens for analysing these influences and helped to conceptualise a number of institutional factors that impact implementation in terms of the pressure they impose on public sector organisations. As a conceptual research, this study has therefore highlighted some of the key challenges that public sector organisations face when undertaking e-government implementations."

3.3.4 Obstacles and Interoperability Framework in Syria

Farzali, Kanaan, Kanaan, & Atieh (2012) designed a novel Interoperability framework to address effective Implementation of eGov in developing countries with the focus on Syria case study, this framework investigates eGov activities in Syria, where eGovernment barriers explored. It utilizes the Enterprise Integration technologies to overcome barriers of policy, economics, administrative procedures, society, and technology as illustrated in figure 3.8. It highlights the contextual environment of Syria and identifies the different factors that affect appropriate eGov in Syria. The argues that the "key factors in building e-Government rely heavily on linking the organization of the various systems and applications in different institutions to become one system and one application". Furthermore, they shed light on the difficulties and challenges in the construction of highly integrated systems in the Syrian context and suggested possibilities to overcome those barriers by building the basic link between systems and applications of various public institutions.

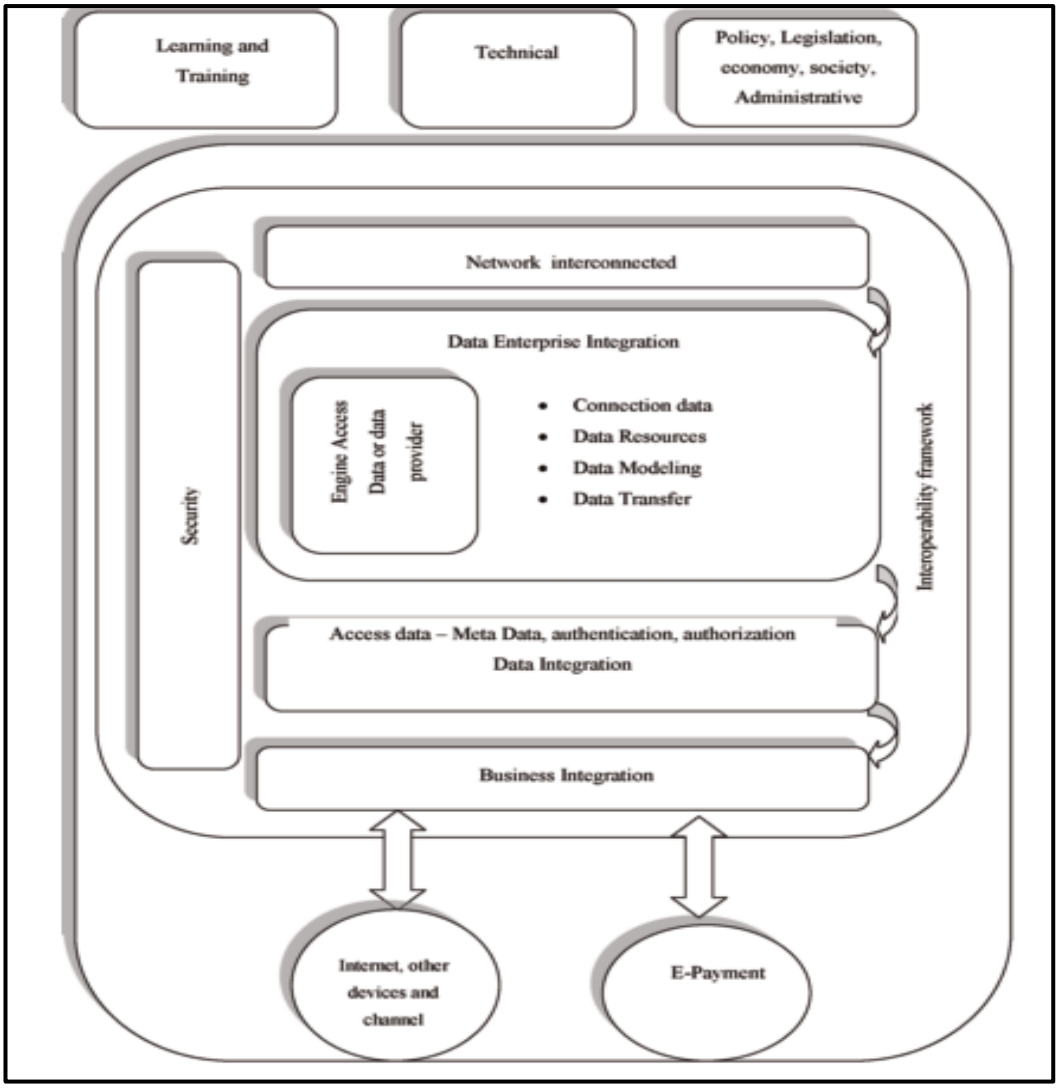


Figure 3-8: Obstacles and Interoperability Framework in Syria, (Farzali, Kanaan, Kanaan, & Atieh, 2012).

3.4 REINVENTING GOVERNMENT

Osborne & Gaebler (1992) have collected a set of good practice examples of government transformation (through hundreds of USA-centric government success stories); integrating real-life examples into ten thematic principles of 'Reinventing Government'. These offer guidance and insight into good-practice in the public-sector for decision makers involved in government strategy, change, and reform. The principles, which have been widely cited in academic works, are as follows:

1. Catalytic Government (steering rather than rowing)
2. Community Owned Government (Empowering rather than Serving)
3. Competitive Government (Injecting Competition into Service Delivery)
4. Mission-Driven Government (Transforming Rule-Driven Organizations)
5. Results-Oriented Government (Funding Outcomes, Not Inputs)
6. Customer-Driven Government (Meeting the Needs of Customer, Not the Bureaucracy)
7. Enterprising Government (Earning rather Than Spending)
8. Anticipatory Government (Prevention rather Than Cure)
9. Decentralized Government (From Hierarchy to Participation and Teamwork)
10. Market-Oriented Government (Leveraging Change through the Market)

These principles date from 1992, and therefore overlook the implications of information technology (IT) on government transformation.

To address this gap Heeks (2001a) reviewed the experiences of different governments and provided a complementary IT-aware framework for public sector management and reform, addressing challenges through:

1. increased efficiency,
2. decentralization,
3. increased accountability,
4. improved resource management, and
5. marketization.

Fukuyama (2004) highlights that governments are in constant flux: creating new institutions or transforming and reshaping existing ones; so even in stable countries, there is constant change and potential crises whilst the above principles are being applied. Unstable countries driven by necessity (such as Syria) may not be so different from stable societies that are driven by innovation in their transformation process (such as the USA and UAE).

In our work we consider middle eastern countries with differing levels of stability, including UAE (highly stable), Saudi Arabia (some instability) and Syria (unstable). We use the above principles as a theoretical lens (refer to chapters 5& 8) to comprehend the context, processes and issues of service delivery within these societies, and expose the degree to which each government's strategy has influenced the success or failure of different aspects within these implementations.

From our preliminary literature review, we combined Osborn & Gabler's principles with Heeks framework and mapped the result to examples of existing activities in societies under stress, thus Table 3.1, provides a structured insight into different aspects of Syria's eGov strategy implementation.

Table 3-1: Applying transformation methods on the Syrian eGov.

Catalytic	The interoperability framework developed by (Farzali et al., 2012) gives an example of how the Syrian government would encourage cooperation between departments and the private sector in collecting, storing and utilizing data which consequently, may provide efficiency gains in the eGov process.
Community Owned	By interviews, surveys or questionnaires to consult with stakeholders to assess the existing laws and the impacts results required. An example is public engagement and participation. (TALABY Gate team, 2012).
Competitive	Introduce telecom, public access kiosks and mobile centres competition and lift regulations on wireless and other digital technologies to accelerate their deployment as a consequence, several private company appears to complete each other in delivering internet connectivity, phone communications and smart phone & mobile services such as Syrian MTN and SyriaTel companies(they providing such services within the scope of the Syrian regulations and legislations) (SIM, 2017)

Mission-Driven	The Syrian Government in partnering with the united nation (UNDP) established an action framework at the beginning of the process of implementing the eGov initiative where each has a unique role and responsibility to implement a clear vision on its mission (Syria Arab Republic & UNDP, 2008).
Results-Oriented	Atieh, Mohammad, Khalil, & Bagdadlian (2012) Argue that "*Any e-Government project needs all government resources (IT, financial, and human) and not only a single organization resources in order to be able to harness the benefits from all resources to improve an organization work*" and to deliver a better result as whole. They argue through a primary research that for a better result which brings to bring high productivity and lower costs, it is necessary to eliminate many restricted rules and barriers.
Customer-Driven	Usually government service derived by bureaucracy often fail to meet customers need and demands. From the Syrian context, new needs and demands arose after a substantial amount of people been displaced within Syria or to neighbouring countries which placed those countries, including Syria, under a great challenge to fairly and equally deliver their needs and demands for certain services. Such a new demand for services are the need for low or free cost of internet connection and distance learning (Human Rights Watch, 2016).
Enterprising	Syrian government started to save cost on budgets, especially after the war has drained the country's national resources and impacted the economy. there is a need to find a substitute method to earn money that would otherwise need to be raised from citizens, where those citizens have also been affected

	financially. However, the involvement of the Syrian government in business partnerships with some national private companies & banks as well as moving toward digital in the government transactions are examples of ways government saving and raising money (MOCT, 2009).
Anticipatory	Anticipatory governments seek to prevent problems rather than delivering services to correct them. In the information age, the computerized system to share data and standardized transaction can improve the efficiency of transaction and delivering services and prevent future managerial problems. The system integration framework found by Farzali et al., (2012) in Syrian context is an example of preventing future problems.
Decentralized	Decentralized governments mean that transfer decision-making authority to those individuals who are in the best position to develop effective and innovative solutions to problems. These individuals are usually at the bottom of the organizational hierarchy. In the information age, more effective decision making can be created by computerized applications at decentralized locations.
Market Oriented	This principle means that government steer decisions and activities through a set of innovation methods in restructuring the marketplace instead of attempting to directly control them such as providing information to consumers, catalysing private sector suppliers, creating market institutions to fill gaps in the market, sharing risk and changing investment policy. In the information age, information system can form market relations and a new channel for public service. in Syria, the eGov initiative in its new strategy placing laws on digitalizing some goods registration and transitions, properties, vehicles are examples (Syria Arab Republic & UNDP, 2008)

3.5 INSTITUTIONAL THEORY

Al-Busaidy (2011) argues that "*it is evident that many studies have applied institutional theory to explore how formal structured organisations such as government departments are institutionalised by economic, political or social contexts in terms of meeting the society requirements (e.g. values and beliefs)*".

From the institutional theory point of view, different institutions which have developed in a different situation are similar in structure and behaviours. Institutional theory based on three elements namely: Coercive, Normative and Mimetic. Where the Regulative Institutions (Coercive) are the set of rules, agreements policies, and procedures where every member's behaviours with the institutions are influenced according to the rules of the institutional structure (Kondra & Hurst, 2009). Normative is legitimizing the normal social behaviour by imposing constraints on social actions and a consequence it operates as a system (Scott, 2001; Scott, 2008; Scott, 2004). And finally, Cultural-Cognitive (Mimetic) is the idea of having a duplicate copy of organisations in the same business domain when they share same goals, objectives, challenges, conditions, customers, suppliers... etc.

Where the institutions are a "*social structures that have attained a high degree of resilience. [They] are composed of cultural-cognitive, normative, and regulative elements that, together with associated activities and resources, provide stability and meaning to social life. Institutions are transmitted by various types of carriers, including symbolic systems, relational systems, routines, and artefacts. Institutions operate at different levels of jurisdiction, from the world system to localized interpersonal relationships. Institutions by definition connote stability but are subject to change processes, both incremental and discontinuous*" (Scott, 2001).

Based on the above highlights, we were motivated to adopt the Institutional Theory as well as it encourages the idea of "best practice" among organisations as long they share a set of operation similarities (Teo, Wei, & Benbasat, 2003). Therefore, we will examine the eService related changes

(barriers of the successful adoption of eService) in unstable environment through the influence of the main key pressures found by the institutional theory (Political, Social, Economic and Technical) that derived from the institutional theory's main pillars: regulative, normative and cultural-cognitive respectively that expected to hinder the adoption. And the result will determine whether the Institutional theory is an ideal theory to be adopted as a theoretical lens in chapter 8.

However, the theory is used, in this research, primarily as a frame for classifying the internal and external institutional influences on eService implementation (Moaman Al-Busaidy, 2011). Furthermore, it has been encouraged by the barriers classification found in chapter 2 that divided barriers into four themes namely: Political & Organizational, Technology & Infrastructure, Social & Human and Economical & Financial that are mapped well and exactly match the main elements of the institutional theory which makes the adoption of this theory an ideal strategy for our research. Therefore, we will address and examine the aforementioned identified challenges in chapter 2 and chapter 3 under the four key pressures (economic, technical, politic, and social) in order to better comprehend the eGov service delivery aspects in unstable society.

The institutional theory was adopted as a theoretical lens to have a deeper perspective at the found barriers to eService adoption in unstable environments. Al-Busaidy (2011) argues that "it is evident that many studies have applied institutional theory to explore how formally structured organisations such as government departments are institutionalised by economic, political or social contexts in terms of meeting the society requirements (e.g. values and beliefs)".

The eService related changes (factors affecting the implementation) in the given environment, will be examined, through the influence of the main key pressures found by the institutional theory (Economic, Political, Technical and Social) that have been derived from the institutional theory's main pillars: cultural-cognitive, normative, and regulative; that expected to hinder the eGov implementation.

Scott (2001) defines institutions as "social structures that have attained a high degree of resilience. They are composed of cultural-cognitive, normative, and regulative elements that, together with associated activities and resources, provide stability and meaning to social life". Where the Regulative Institutions (Coercive) are the sets of rules, agreements policies, and procedures where every member's behaviours with the institutions are influenced according to the rules of the institutional structure(Kondra & Hurst, 2009). Normative Institutions legitimize the normal social behaviour by imposing constraints on social actions and a consequence it operates as a system(Scott, 2001; Scott, 2008; Scott, 2004). On the other hand, Cultural-Cognitive (Mimetic) is the idea of having duplicate copies of an organisation in the same business domain when they share same goals, objectives, challenges, conditions, customers, suppliers...etc. The theory encourages the idea of "best practice" among organisations as long they share a set of operation similarities (Teo et al., 2003). However, this theory is used primarily as a frame for classifying the internal and external institutional influences on eService implementation Al-Busaidy (2011). Therefore, we address the aforementioned identified challenges as four key pressures - Political, Social, Economic and Technological (Scott, 2001); Al-Busaidy, 2011) in order to better comprehend the aspects of eGov service delivery in an unstable society. These four pressures encompass the main obstacles facing eService implementation.

3.6 INITIAL INSTABILITY FRAMEWORK

Montagna (2005) argues that the importance of conducting and designing a suitable framework prior to implementation stage allows for organising and integrating various elements of a particular, problem in a simple and consistent way and hence, assuring of the attainment of the desired outcomes. Additionally, the importance of this study comes from the lack of adopting and implementing eServices in countries with instability status, therefore we propose a framework to tackle the challenges facing its adoption. The initial instability framework stems from the literature

review that focused on factors affecting the development of eService in countries during conflict such as Syria which summarises the factors that either facilitate or impede the eService initiatives. As well as the Instability framework on prior literature investigation, it makes use of the relevant previous frameworks, studied in section 3.1 & 3.2, to facilitate a better understanding of the eService process and, also, grasp the gaps in their implementations. This research is aiming to introduce a model which contributes to overcome the eService barriers and enable drivers in the adoption. Figure 3.9 presents the proposed eService instability conceptual framework. The framework, based on reviewing the literature, captures factors which would contribute towards the successful adoption of the eService during instability in which we will design a comparative case studies among different level of instabilities in order to capture the impact of strategies on implementation of the activities and then isolate those best practices in order to be repeated in the high level instability and next we will conduct a mixed method (such as surveys and interviews from different case study within the high level of instability) to capture from users and experts those factors and then those elements will be analysed and looked at through the lens of the institutional theory main pressures (political, economic, social, technology) as shown in figure 3.9 . The elements, forming the framework, will be revised and updated in chapter 8, based on the found evidence from our primary studies in chapters 5,6 &7. In adopting our framework, the following points need to be recognized which are listed in table 3.2:

- Gaps in eService adoptions in countries with high level of geopolitical instability.
- Lack of showing the factors that contribute to the successful adoption of eService initiative in countries during conflicts.
- Lack of showing a clear relationship between barriers and drivers to overcome those barriers.
- The missing framework that suggests technology-related strategies that may assist in the effective adoption in unstable societies.

- The lack of a general model that any nation with unstable status could adopt it.
- There is an absence of frameworks for different challenges that are faced when attempting to implement e-service projects include unstable places
- Also, there is an absence of frameworks outlining the different enablers that facilitate such implementation
- The study of the need for a framework to classify both barriers and enablers into different groups
- There are very few studies that have been conducted using in-depth case studies for the purpose of investigating the factors affecting eService projects implementation in stress countries
- There are no qualitative studies that examined the factors affecting the eService development and implementation in the Syrian government context or in countries with instabilities context.
- The lack of understanding activities during instability through theocratical lenses.
- The lack of understanding activities in cross levels of instability.

Table 3-2: Reviewed frameworks and gaps found.

Framework	Reference	Contribution	Gap
Strategic framework for eGov adoption	(Ebrahim et al., 2004)	Benefits and Barriers factors- developing countries.	Lack of evidence of eService implementation in countries with instability. Lack of showing the impact of enablers on overcoming barriers.
eServices framework case study of Egypt	(H. HASSAN, 2011)	Factors include barriers and enablers within the Egyptian context.	Lack of evidence of eService implementation in countries with instability.
Key Drivers and Barriers to E-	(Khasawneh-Jalghou	Barriers & enablers / Jordanian context.	Lack of evidence of eService implementation in countries with instability.

Government Initiative in Jordan	m, 2011)		
Conceptual Model for e-government implementation from the perspective of Institutional Theory literature	(Moaman Al-Busaidy, 2011)	Barriers and enablers/ Omani public sector organisations.	Lack of showing organization going through changes in a stress situation.
Obstacles and Interoperability Framework in Syria	((Farzali et al., 2012)	Barriers enablers/ Syrian context	Lack of evidence of eService implementation in countries with instability

From the above discussions and finding (chapters 2&3) our proposed conceptual framework can be extracted and build. Figure 3.9 presents the proposed eService instability conceptual framework. The framework captures main factors that contribute toward successful implementation of the eService in countries with stress, such as Syria.

As a result of the literature review in chapters 2&3, we can summarize that the findings are presented in a model shown in Figure 3.9. The proposed framework shows the components that will be revised and updated according to the primary research and findings in chapters 5,6&7.

The Proposed framework consist of the following components: Enablers which will be discussed through the lens of reinventing government principles; Barriers which will be discussed through the lens of institutional theory and the output component which is the final stage of implementing the eGov initiative and could be define as the collection and successfully incorporating and cooperating the rest of the components with each other.

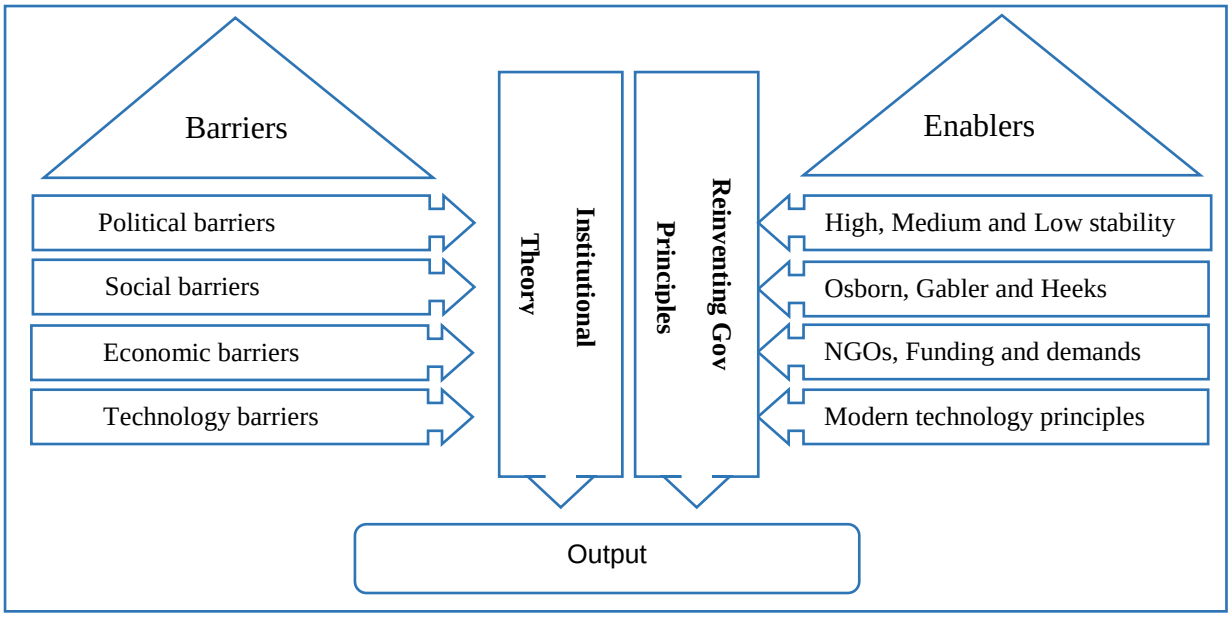


Figure 3-9: initial Instability framework.

3.6.1.1 Enablers

For the literature review, we extracted elements that may contribute as drivers and enablers towards the adoption of the eServices. The initial elements that considered as enablers are:

- The good practices of different eServices in a different level of instability which can be used as lessons to be learning from.
- The ten principles of reinventing government by (Osborne & Gaebler, 1992) will be used as good principles to follow in an effective strategy to provide services in the public sector
- The extended reinventing government principles by Heeks (2001), also as good principles to follow in providing services in the information age.
- The modern technology principles which found recently that engage people in drafting legislation or standardised systems amongst the government agencies or easy access to sharing data.

3.6.1.2 Barriers

We found that the barriers side of the framework gathered all elements which affect negatively on adopting and implementing the eService, and will be classified under four categories (Institutional Theory main pressures) namely:

- Political: political rules and regulations facilitated the eGov transformation and therefore contribute to wider adoption by in conducting vision and strategies that may lead to a successful implementation of delivery systems.
- Economic: Economic pressure has strong roles in shaping and directing IT related systems and hence has a huge impact on public service organisations.
- Social: the social pressures elicited by whether the eService could reach all people equally and the associated issues of their locations, gender, age, economic background or their educational background.
- Technology: The fast development of technologies and its penetration into the most aspects of the modern life has placed new pressures on governments for adopting new technologies.

3.6.1.3 Output

This part of the framework is the collections of the new finding and rules, legislation, standards, suggestions and recommendations that policymakers to be aware of. This part of the framework is the summary of what has been found from the literature review of both barriers and enablers. Collectively, findings from chapters 5,6 and 7 will update this part of the framework (see chapter 8). However, it will be discussed through the lens of the Institutional theory and the reinventing government principles.

3.7 CHAPTER SUMMARY

From conducting desk research literature review we were able to identify factors likely to impact the success of eGov projects in countries under stress such as Syria. In building this initial conceptual framework (Syrian eService Conceptual Framework illustrated in figure 3.9), in which to revolve our analysis of eGov in Syria and highlighted the extra challenges & opportunities of achieving eService adoption in the context of geopolitical instability. Our future work will populate and extend our conceptual framework with the aim of providing a reference point for future Syrian government strategy. However, the framework builds on prior literature in the area of eService development in government under stress and makes use of similar frameworks to facilitate a better understanding of the nature of the eService development process, in particular, to identify barriers and success factors. We adopted the Osborn and Gaebler's work, 'reinventing government', and work of Heeks in the 'information age' which identifies a set of principles of government strategy best practices. This is used to examine eGov examples in the case of Syria and works as an analytical tool to comprehend the driving factors in the process of adopting the eService in the geopolitical instability along with previous work covering barriers and enablers to eGov activities within countries that have unstable status that looked through lens of the Institutional Theory to be tested. The resulting derived conceptual framework provides a base to understand eGov activity for nations going through geopolitical uncertainty.

Next chapter will discuss the methods, designs and approaches needed to be adopted in order to carry out to answer the research question and realize its aim and objectives.

4 CHAPTER 4

METHODOLOGY

4.1 OVERVIEW

This chapter describes the research methodology used to realize the research aim and objectives and providing the rationales in selecting a suitable research strategy, which was followed in this research. We started in Section (4.2) by discussing the different philosophical approaches and paradigms and the justification of selecting – which what we believed – a suitable paradigm that our research belongs to. In section (4.3) Further down this chapter, we discussed the research approach and a justification for selecting a mixed method as a suitable research approach, we distinguished between qualitative and quantitative research and results and explains the benefits and limitations of the mixed method research. Section (4.4) justification for using inductive-deductive research reasoning in different stages of our research. Section (4.5) Ethic related issues and approval. Section (4.6) explains the choice of methods and techniques selected as the most appropriate strategy in designing the research includes collecting and analysing the data through different - methods considered to be essential for any researcher (Eisenhardt, 1989) - such as disk top data collection, surveys, interviews, case studies…etc. Section (4.7) shows the development of the research and the different phases that it has passed over the period of the PhD course. The chapter concludes with a summary in section (4.8). Figure 4.1. outlines the different parts of this chapter. It is worth mentioning here that this research encountered difficulties in researching the topic in the context, that has limited the options available and called for innovation, particularly, in conducting the field work which raised further challenges (refer to limitation section in chapter 9).

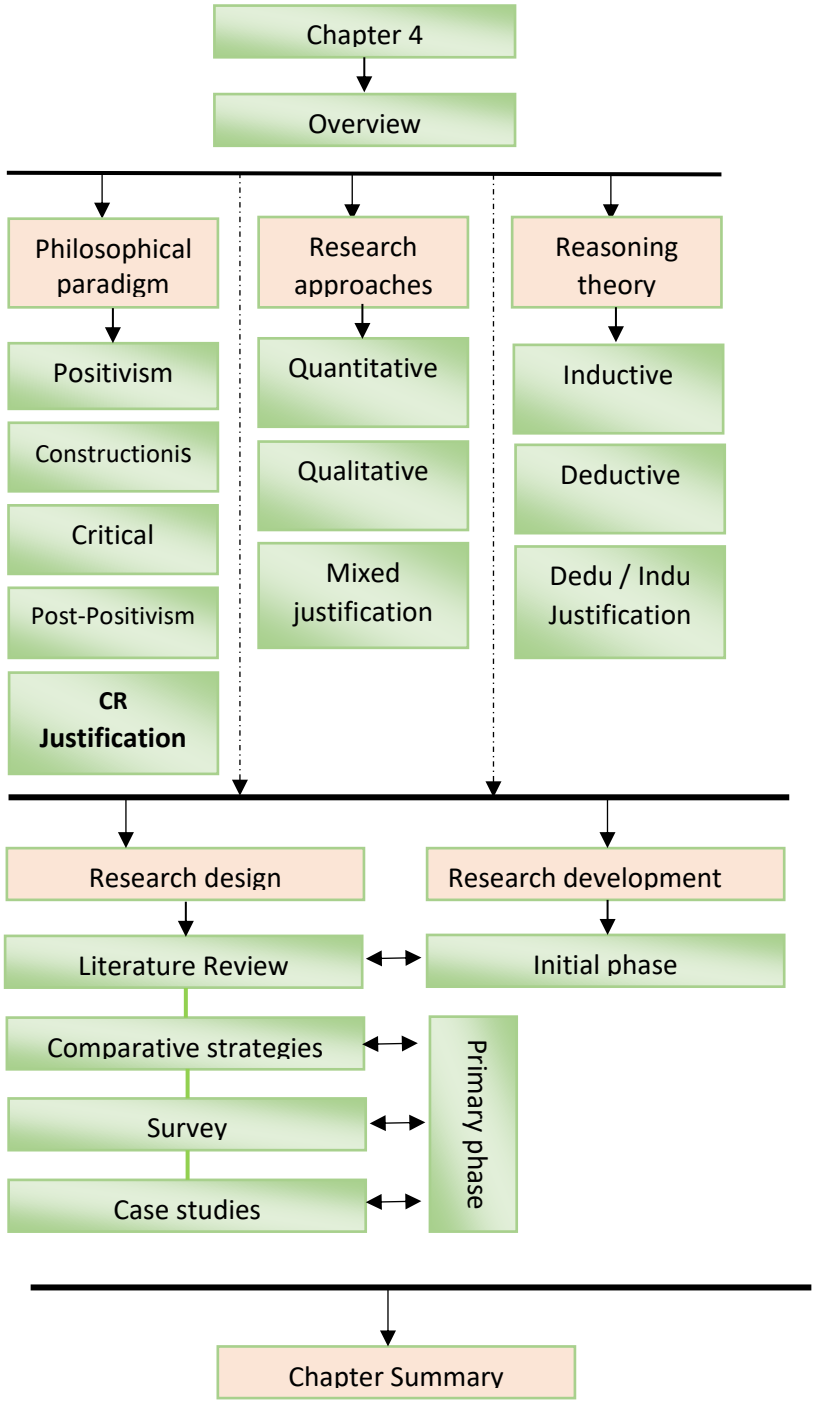


Figure 4-1: Outline of the methodology chapter

4.2 RESEARCH PHILOSOPHY AND PARADIGM

The philosophical or theoretical framework of a scientific discipline can be characterised through their ontology, epistemology and methodology. Where Ontology is the nature of reality in terms of 'how things are' and 'how things really work', therefore, there are different ways of constructing reality (Denzin & Lincoln, 1998). Epistemology is the assumption of knowledge embedded in a theoretical perspective (e.g. objectivism, subjectivism) (Crotty, 1998), it is the idea of what and how can we know reality or what is the different forms of knowledge of that reality. Methodology - is the practice of how we come to know that reality; the tools we use to know that reality, in another word: How do we go about finding Knowledge out and what procedure can we use to acquire knowledge (Guba, 2000) therefore, methodology is a strategy of action that links research phases to achieve the desirable outcome .

Philosophical paradigm is a set of shared assumptions or ways of thinking about some aspects of the world. Different philosophical paradigms have different views about assumptions that we make about the nature of the world or reality (ontology) and the set of assumptions about the best ways we can acquire knowledge about it (epistemology) (Oates, 2006). Furthermore, According to (Kuhn, 1962) paradigm is "the set of common beliefs and agreements shared between scientists about how problems should be understood and addressed". The main philosophic paradigms are: Positivism, Constructionism(interpretivism), Critical and post-positivism (Robson, 2002). Figure 4.2 shows an overview of detailed major philosophic paradigm, which has been collected by (Patel, 2015). We will discuss each paradigm individually followed by our justification of the research paradigm which our research belongs to:

4.2.1 Positivism

Philosophical theory stating that certain knowledge is based on natural phenomena and their properties and relations, furthermore, positivists believe that there is a single reality or truth (Hudson & Ozanne, 1988). They assume that reality is objective which can be described by measurable properties, hence, reality can be measured and known in which can be scientifically verified or which is capable of logical or mathematical proof. Therefore, they are more likely to use quantitative methods to measure this reality. Researchers call this paradigm 'the scientific method' and considered to be the oldest paradigm (Oates, 2006). Furthermore, further assumptions made by (Easterby-Smith, Thorpe, & Lowe, 2002; Weber, 2004) indicate that positivist may use laboratory, field experiments and surveys as the preferred research methods; researchers use deductive theory to accept or reject defined hypothesis, and the result may consider being valid if was in a generic form and can be replicated by different researchers.

4.2.2 Social constructionism

Constructivist believe that there is no single reality or truth, in such, humans make meaning in relation to the interaction between their experiences and their ideas and therefore realities needs to be interpreted through sharing experiences with others such as language, consciousness and shared meanings (Easterby-Smith et al., 2002). and therefore, they are more likely to use qualitative methods to get those multiple realities. According to Irani, Ezingeard, Grieve, & Race (1999) the knowledge that researchers, with interpretive views, might gain mainly through observation and personal experience with subjects in empirical studies. Furthermore, (Walsham, 1995; Kaplan & Maxwell, 1994) state that interpretive research method is a subjective by observing how people make sense of a situation as it emerges and relies on inductive theory in guiding the data. Interpretive may use qualitative interview, observation and case study as their preferred research method.

Paradigm	Ontology *What is reality?*	Epistemology *How can I know reality?*	Theoretical Perspective *Which approach do you use to know something?*	Methodology *How do you go about finding out?*	Method *What techniques do you use to find out?*
Positivism	There is a single reality or truth (more realist).	Reality can be measured and hence the focus is on reliable and valid tools to obtain that.	Positivism Post-positivism	Experimental research Survey research	Usually quantitative, could include: Sampling Measurement and scaling Statistical analysis Questionnaire Focus group Interview
Constructivist / Interpretive	There is no single reality or truth. Reality is created by individuals in groups (less realist).	Therefore, reality needs to be interpreted. It is used to discover the underlying meaning of events and activities.	Interpretivism (reality needs to be interpreted) • Phenomenology • Symbolic interactionism • Hermeneutics Critical Inquiry Feminism	Ethnography Grounded Theory Phenomenological research Heuristic inquiry Action Research Discourse Analysis Femenist Standpoint research etc	Usually qualitative, could include: Qualitative interview Observation Participant Non participant Case study Life history Narrative Theme identification etc
Pragmatism	Reality is constantly renegotiated, debated, interpreted in light of its usefulness in new unpredictable situations.	The best method is one that solves problems. Finding out is the means, change is the underlying aim.	Deweyan pragmatism *Research through design*	Mixed methods Design-based research Action research	Combination of any of the above and more, such as data mining expert review, usability testing, physical prototype
Subjectivism	Reality is what we perceive to be real	All knowledge is purely a matter of perspective.	Postmodernism Structuralism Post-structralism	Discourse theory Archaeology Genealogy Deconstruction etc.	Autoethnography Semiotics Literary analysis Pastiche Intertextuality etc.
Critical	Realities are socially constructed entities that are under constant internal influence.	Reality and knowledge is both socially constructed and influenced by power relations from within society	Marxism Queer theory feminism	critical discourse analysis, critical ethnography action research ideology critique	Ideological review Civil actions open-ended interviews, focus groups, open-ended questionnaires, open-ended observations, and journals.

Figure 4-2: overview of detailed paradigm, by (Patel, 2015)

4.2.3 Critical

Klein & Myers (1999) believe that reality socially constructed entities. and researchers may gain realities about the world by focusing on the human ability to improve their conditions which constrained by various forms of social, cultural, and political domination as well as natural laws and resource limitations. In such, the reality and knowledge are both socially constructed and influenced by power relation from within society. They added that realities are historically constructed – that is, produced and reproduced by people. The social critique is the salient characteristic of the critical researcher in which they bringing to light the restrictive conditions of the status quo (Kihlstrom & Klein, 1994). They may employ Interviews, focus group, open-ended questionnaire and observations as their preferred research method.

4.2.4 Post-positivism

According to Lincoln & Guba (2000), post-positivist methods attempt to transcend the limitations of positivism. Although post-positivists believe that the research and the researcher are not independent and he/she may have an influence on theories, hypotheses and values of what been observed, they still consider objectivity (Reichardt & Rallis, 1994). Furthermore, they believe that -same as positivist- reality does exist "but consider that it can be known only imperfectly and probabilistically"(Robson, 2002).

4.2.5 Critical Realism

Hall, (2013) states that critical realism recognizes "*the complexity of social phenomena by enabling a role for values and interpretive meaning while at the same time accepting the explanation as a legitimate goal of social research"*. However, Critical realism has the ability to unification multiple paradigms in just a single view and found at the cross-point position amongst post-positivism, positivism and constructionism paradigms. Critical realists believe that there is a reality independent of our thinking about it that science can study. Furthermore, they also believe that all observation

is fallible and all theory is revisable. According to Trochim, (2006), critical realism is a common form of post-positivism. Therefore, it emphasizes the importance of multiple measures and observations and the need to use triangulation across these multiple sources to have a better view of the reality.

4.2.6 Justification for selecting Social Constructionism Paradigm

Our study passes several stages, starting from the literature review and collecting secondary data to collecting primary data (based on an open-ended questionnaire and case studies' interviews). This way of mixing methods of collecting and analysing the data motivated us in defining social constructionism as the most suitable paradigm for such research.

As we need to adopt a single paradigm to be the most suitable that can be adopted by mixed method researchers, Hall (2013) states that "*researchers adopt a single paradigm that encompasses both qualitative and quantitative research methods.. does not limit the range of topics to be researched, nor the methods that can legitimately be used to conduct research and can accommodate the mixing of qualitative and quantitative methods in use*".

Therefore, social constructionism the single paradigm to be identified for the research, In which people sharing their experiences via the medium of language, we are assuming it is a good method to understand eGov phenomenon that they make sense of it (Easterby-Smith et al., 2002).

Moreover, the research has the subjectivity essence since the author is interested in understanding factors contributing to eService adoption by interpreting perceptions and human factors (H. S. H. HASSAN, 2011). On the other hand, the researcher observes eGov key elements by conducting a large open-ended questionnaire survey as a way of building knowledge about the underlying relations of the key factors affecting the eService adoptions in the giving environment. Few points underlings our justification:

- The research aims to understand barriers and enablers to eService provision system in a high level of geopolitical instability context by interpreting human factors that related to aspects of technologies through their perceptions that make the research an interpretive research in nature.
- Capturing the complexity of the important role of technologies in supporting the information flows and general integration of activity within the refugee communities and between these communities and the other stakeholder groups (hosting communities, NGS, local/national government bodies), requires extracting the meaning of the interaction between their experiences and their ideas, and interpreted through sharing experiences with others.
- We want to explore the rich context and how technology allows for empowerment and emancipation of the displaced people This will also include the role of (mostly, but not exclusively mobile, social media and the important of different eService channels) technology in enabling empowerment. This comes out clearly when examining access to resources and information sharing.
- Activities related to refugees and displaced people are very complex, demanding and immersive environment for researchers so we hope to provide some guidance and discussion points for other researchers.
- Here we are trying to articulate the rich multi-layered context and the influences over time of the various stakeholders.

4.3 RESEARCH APPROACH

Researchers are using qualitative and quantitative or mixed methods to collect and analyse data and to conduct a variety of social and human inquiries (Myers & Avison, 2002; Myers, 1997). While quantitative research methods were developed in a simple numeric data forms to support a deductive

reasoning of a study with general purpose for theory testing prediction, establishing facts, building a hypothesis test by, for example, using a large sample, often anonymous to participants, using tests and formal tools, instruments and devices, using techniques such as survey methods, laboratory experiments, formal methods and numerical tests. On the other hand, qualitative research methods were developed in complex rich data forms to support an inductive reasoning of a study with general purpose for developing deep understanding, building a model, illustrating real-life actions by interacting with participants, collects data by face-to-face interview from participants and observation in, for example, action research, case study research and ethnography research (Myers, 1997; Creswell, 2006; Robson, 2002; Al-Busaidy, 2011; Jait, 2012;M Al-Busaidy, Weerakkody, & Hackney, 2010)

4.3.1 Justification for selecting Mixed Method

According to Creswell (2006), mixed method "involves collecting analysing and mixing quantitative and qualitative approaches at many phases in the research process, from the initial philosophical assumptions to the drawing of conclusions.". He added that "by mixing the data, the researcher provides a better understanding of the problem than if either dataset has been used alone". And hence, it overcomes the weaknesses of separately applying them to one study. We apply the connected model of the mixed method as shown in figure 4.3.

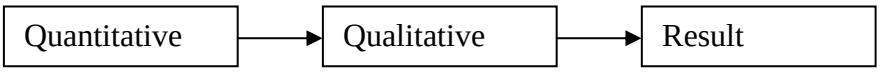


Figure 4-3: mixed method used model

We start collecting and analysing the primary data by employing the quantitative method. Next, we build our second data collection and analyses phase, which involves qualitative data collection method, based on the previous method and as a result of analysing the second phase we achieve

the needed result for this study. By adopting the connected mixed method model, the results from one method can help develop and inform the other method (Greene, Caracelli, & Graham, 1989). The way of mixing the research data started by conducting a large survey of Syrian refugees across in Turkey and Syria itself. Where we have been involved in developing a novel method to capture input from groups of displaced people based on an online survey. We applied this to Syrian refugees based in Turkey and Jordan as well as people within Syria itself. The results were very promising with 1634 partially completed responses received and 415 fully completed responses. The results indicate possible areas of good practice in the use of technology to support and engage refugees. It is this survey that has prompted the need to conduct follow-on fieldwork since the responses indicate really interesting examples of supporting and integrating activity which we would like, by conducting the following case studies, to follow up with field work to try and capture this good practice.

4.4 DEDUCTIVE / INDUCTIVE REASONING

"There are two general approaches to reasoning which may result in the acquisition of new knowledge include inductive and deductive. Inductive is a theory building process, starting with observations of specific instances, and seeking to establish generalization about the phenomenon under investigation. Deductive is a theory testing process which commences with an established theory of generalization and seeks to see if the theory applies to specific instances" (Hyde, 2000).

This research uses both deductive and inductive approaches. The deductive approach can be seen in the initial conceptual framework which was developed based on the previously existing frameworks and then applied to later case studies. Where the different frameworks were used, as theory start point, to shed light on building our initial conceptual framework that works as the theory testing process. Then the key factors variables which forming this framework were tested through conducting the research Survey. The inductive side of our research starts from conducting the case

studies that combines several data collection tools including interviews, field notes and documentary data, hence, we followed the steps taken from (Yin, 2006) in building theories from case study research.

4.5 ETHICS

This research has gone through Ethical Review for approval at the Faculty of Technology at the University of Portsmouth. The Ethics Committee has issued their Ethical Opinion as a 'Favourable Ethical Opinion' on the 14 June 2016 with Ethics Committee reference: AA1. As a summary of the discussion at the meeting of the Committee indicates that this is a very interesting and topical study. Where the researcher has a plan for the participant safety and anonymity can be safeguarded, and that the detailed methodology is robust. Therefore, a favourable opinion can be given.

4.6 RESEARCH DESIGN

The research method is associated with different kinds of research executions and the subsequent analysis of the data collected which known as the techniques and procedures that used within the research design. The following phases reflect the procedures used in our research.

4.6.1 Phase 1 – Literature Review

Full details found and discussed in chapter 2 section 2.2. as we mentioned we conducted a systematic review of the investigation for this phase. The need for a robust search method is driven by the number of published eGov articles and gone through a process cycle of research, select and collect. In this process, we have used a range of techniques to synthesise evidence. We started by searching different databases and academic papers, then selected relevant results. This process formed a loop as relevance feedback offered us an opportunity to improve our search strategy. Any suitable papers found were added to a database for later analysis.

Our literature review investigation found 347 papers that were analysed based on their Abstract and Introduction sections. 106 papers were deemed not relevant and excluded. 53 additional articles were identified using the snowball method (i.e. retrieving and assessing cited works from articles that have been identified as relevant). Finally, 32 articles were excluded as they did not meet our search criterion, which is based on the eGov challenges facing developing countries in the Middle East. This left us with 262 papers to form our synthesis of the evidence by constructed a tabular analysis of the studies.

4.6.2 Phase 2 - Comparative Case Studies

Full detail of this phase found and discussed in chapter 5, in the section methodology. In this phase, we compare between three cases namely: eGov strategy of UAE, eGov strategy of Saudi Arabia and eGov strategy of Syria. These cases are different from their levels of geopolitical instabilities. The comparison process among cases was conducted in order to distinguish implemented strategies. The qualitative analysis results allowed us to understand similarities and differences of the eGov strategies in the three undertaking cases and the leading motivations and strategic planning that is not explicit in the secondary data.

We estimated that the comparative case studies fits well the nature of this phase of the study. Yin (2014) stats that multiple case study is a variant that includes two or more observations of the same phenomenon.

We process the comparative study to identify, analyse and explain similarities and differences across examples of eGov initiatives that are on a different level of instability. By conducting comparative case studies we gain a greater awareness and a deeper understanding of eService provision in different countries under a different level of stress.

Data were collected through detailed documentation obtained from the official site of each case, web portals, TV-related programs and notes from social media observations. We also had to rely

on the United Nations surveys and the internet searches, libraries, official reports, surveys and other related databases.

4.6.3 Phase 3 - Quantitative Study- Survey

Full details of the methodology of this phase found and discussed in chapter 6, in the methodology section. We conducted a survey based questionnaire to answer part of the research question and to achieve its potential. The survey focuses on the effective and efficient factors that the use of eServices would meet the Syrian citizen requirements. The survey aims to cover as much eService related information from Syrian people (inside and outside Syria) refugees and/or displaced people as possible through primary data collection. Tow type of surveys was conducted including paper-based and online base questionnaire in order to gain an insight of the availability, effectiveness, efficiency and affordability of eServices that people in an unstable environment may use and comprehend the barriers that those people may face for adopting this technology. And two samples of the survey were designed and distributed as one to reach the Local Syrian Citizens who are living inside Syria (hereafter LSC-Sample). The second sample is to reach the Syrian refugees outside Syria (hereafter RSC-Sample).

The survey was distributed to students, employee, professionals and ordinary people at some of the government departments such as the Immigration and Passports Department, Ministry of Higher Education, Damascus University and the City University (student accommodations). The survey was distributed, also, in the Town Centre (shopping centre with some shops, banks, restaurants and children playgrounds) and Shelter centres in different places in the city. Each response has been given a unique id to avoid replications. During this time 1634 responses were received in total, but the total responses that were completed by the participants were only 415, the rest were excluded. We used SPSS (version-22) Statistics software package for the process of the data analysed.

I started the primary data collection stage by conducting a piloting survey in the UK. A total of 15 respondents were received. The piloting survey took place during the summer of 2016. The survey was conducted amongst Syrian refugees in the UK where I distributed the questionnaire amongst

those people who I conducted from my network. I managed a trip to London and Manchester in the UK.

The piloting survey questions were formulated and designed to fill the gap emerged from the previous studies. This process was conducted based on an interview with the former national director of the project for the modernization of eService and eGov portal (a department within the ministry of communication and technology in Syria). I had to travel to Istanbul in Turkey in order to have interviewed him. A following up interview with the same participant to refine the current and design new questions based on the piloting responses.

During my trip to Turkey, I have also distributed a paper-based survey in which the responses were added to the RSC- Sample to be analyzed in a later stage. Also, during a trip to France and Germany (family visit), I managed to meet several Syrian refugee people whom I, also, surveyed.

I conducted an open-end questionnaire in order to cover as much eService related information from Syrian people as possible. Where two samples of the survey were designed and distributed as follows, the first sample is to reach the Local Syrian Citizens who are living in Syria (LSC-Sample). The second sample is to reach the Syrian refugees outside Syria (RSC-Sample). The Survey started on 20 April 2016 and was completed and translated from Arabic into English by end of August 2016. The responses' comments which was written in Arabic have been translated into English by the researcher before the analyzing the data. The result of the analysis was structured and grouped into main points to reflect the respondent point of views on each point which listed and discussed in turn.

4.6.4 Phase 4 - Qualitative study – Case studies & Interviews

Full details of the methodology of this phase found and discussed in chapter 7, in the methodology section. In this phase, we used case study interviews as the main source of data as we have assumed to be the most appropriate method to achieve the potential of this stage. In addition, desk research and literature review have been performed to aid data collection and the analysis of the undertaken case studies. We conducted comparative case studies amongst three different sectors – in which they provide some eService to people in countries under pressure (war, political pressures, social pressures, economic pressures). They were assumed to provide eService to beneficiaries, for example, to displaced and refugee people.

We conducted a Field-study and several Skype-based semi-structured interviews with different stakeholders and experts from The Immigration and Passports department based in Syria, the Ministry of Education based in Syria and the Community Centres for Syrian Refugees based in Istanbul (CCSRI) (to build on existing links with a humanitarian organization – UNHCR).

The interviews' questions were designed around a set of important issues such as the past, present and future of the eService provided, accessible services by vulnerable people and main challenges facing the implementation in the given situation.

The second primary data collection was based on three different case studies, in which we have interviewed people who were involved, somehow in the Syrian eGov development or have experienced of using it. Prior to those interviews, I have conducted an initial interview, (to design a suitable set of question which took place in Istanbul/ Turkey) again with the former national director of the project for the modernization of eService and eGov portal (a department within the ministry of communication and technology in Syria), in which a set of questions were designed and formulated to fill the gaps that emerged from the previous survey. The process took place between October and December 2016. Although I have conducted field-study and several Skype-based semi-structured interviews with different stakeholders and experts from The Immigration and Passports department based in Syria, the Ministry of Education based in Syria, the Community Centres for Syrian Refugees based in Istanbul and to build on existing links with a humanitarian organization, the emphasise here will be on the on the I field-study which took place in Turkey.

The interviews expose and highlight issues that affect eService development and delivery to citizens of unstable societies. The number of participants from the Turkey base case study is 11 people, some of them have an executive role in decision making in the Syrian eGov. Some of the participants were chosen due to their involvement in the development of their country's eGov,

others were chosen because of their roles in providing services to citizens and refugees as their voices count in enhancing the services' delivery process and the way it has been handled.

4.7 RESEARCH DEVELOPMENT

The research design and development phases consist of two parts as shown in figures 4.4 and 4.5 as follows:

4.7.1 Initial Part

This stage has been accomplished before the university major review has taken place, figure 4.4 shows all activities were involved during this phase.

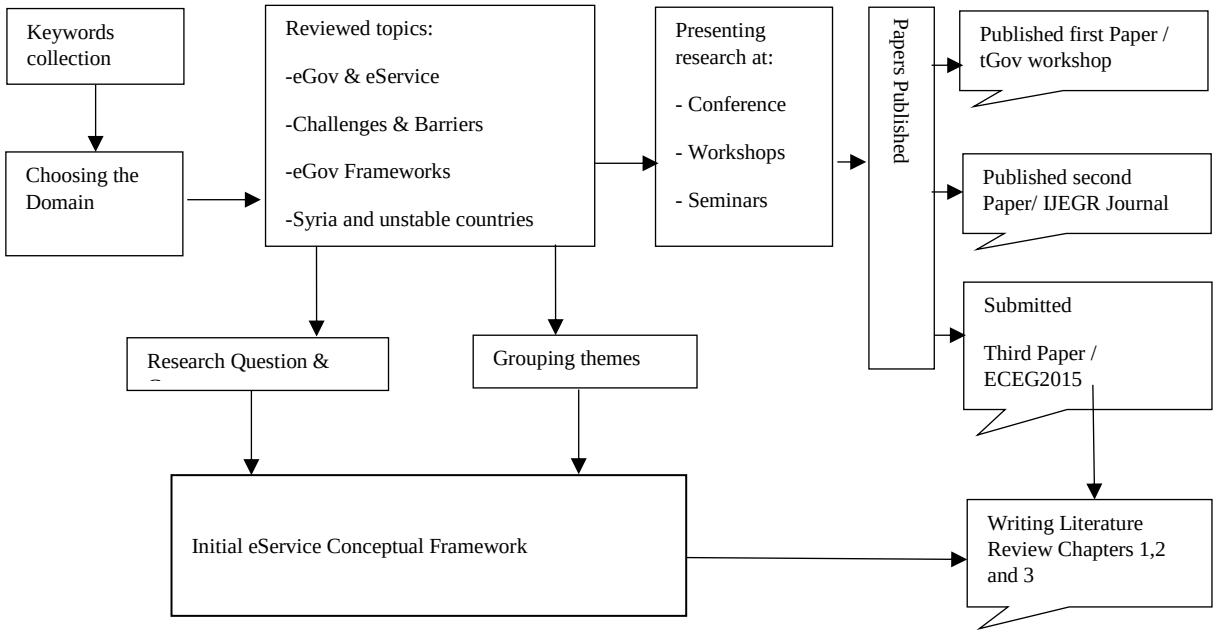


Figure 4-4: activities involved during initial review phase

The activities of this stage started by obtaining a keyword collection in order to choose a domain. The topics reviewed from the domain evolve around eService, eGovernment, eGov barriers, eGov enablers, eGov framework, countries in instability, this process allows for grouping themes and by

attending conference, workshops and seminars, a total of 2 Papers were published and one Paper submitted for ECEG2015 conference as well as the Literature Review chapters were in process and finally we managed to build an initial conceptual framework as we have defined the research question and gap.

4.7.2 Primary Part

The second phase (the Primary Phase) involves planning, collecting data, analyse the finding, building the final framework and writing up thesis chapters as shown in figure 4.5, we will look at each one in turn.

The methods employed, by this research, is mixed methods approach that utilized from both qualitative and quantitative data collection. Conducting structured and semi-structured interviews,

The research benefits from the strength of both approaches (Qualitative and Quantitative).

Research cycle starts by planning the Investigation of the emerging themes, that involves planning the collecting, recording, processing and analysing the data. This level is for initial data management and generating code. The initial conceptual framework forms the first source of data to be planned and to be later updated into the second conceptual framework after looped through the first iteration of the research cycle. The next level is collecting data which divided into three stages as follows:

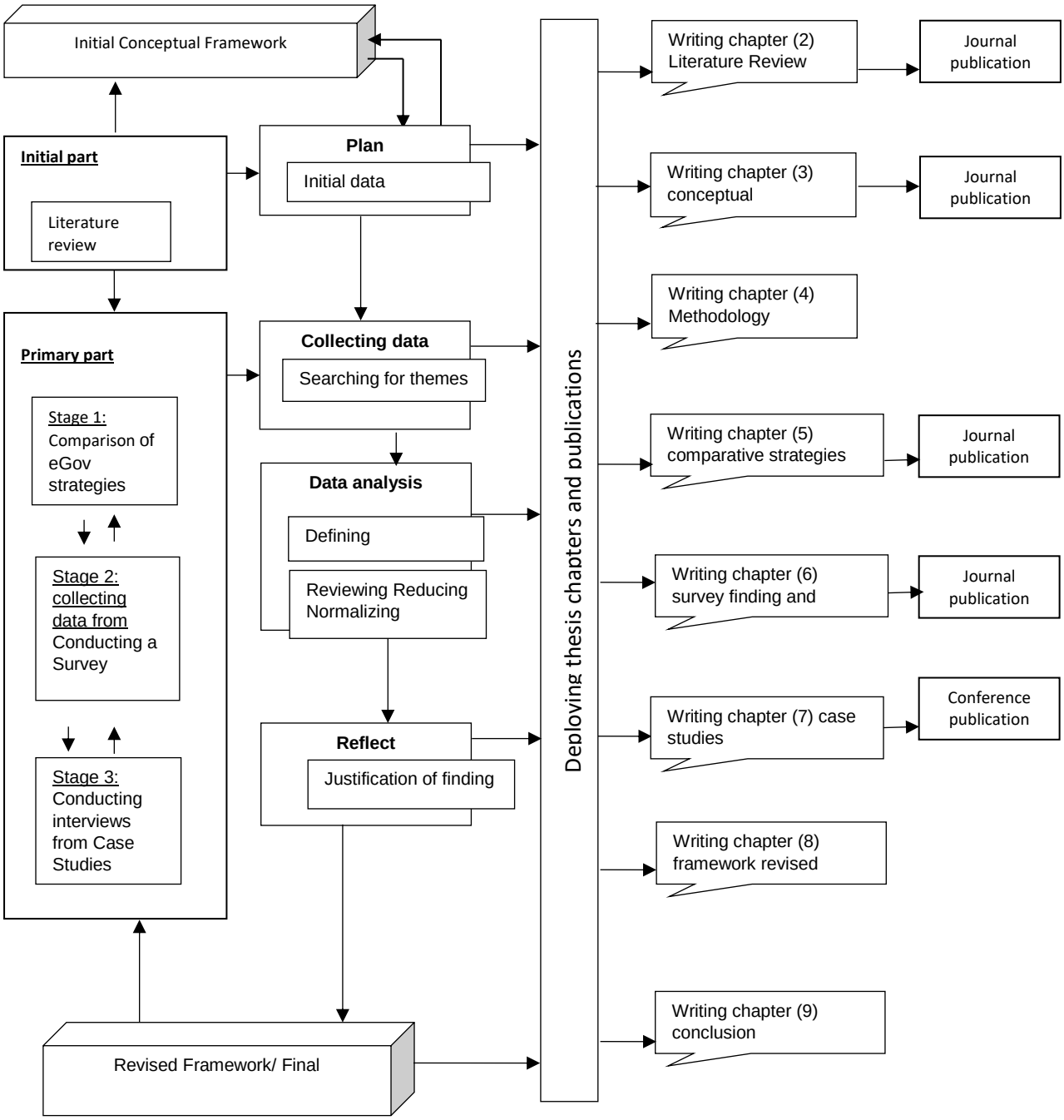


Figure 4-5: Research Design.

4.7.2.1 Stage 1 (Comparative Strategies)

At this stage, we employing Desk Research method to gathering eService information for several countries with different Instability index. Then we employ a comparison amongst a given problem for each country. So this stage takes three cases and one problem to be tested against each case. Our chosen cases were from both ends of the countries instability index line and from the middle as well, this would give us some evidence on how to push the very end unstable country towered the stable ones on the scaling line by spotting barriers and providing a strategy to overcome them. Up to this stage, the reflecting data will give us an indication on the different eService between developed and developing countries and with countries less stable.

4.7.2.2 Stage 2 (Survey)

The stage explores challenges faced by eService delivery to refugee and displaced people in unstable societies. The result of this stage reports on a study of Syrian refugees and displaced people using a survey exploring the use of eServices for citizens inside and outside of Syria.

Identifying these challenges allow the researcher to create a new plan and to design appropriate questions for further primary research to fill the gaps in knowledge. The survey was conducted to study the opinions, attitudes, and beliefs of the undertaking sample groups. This allows the researcher to study and describe large populations fairly quickly at a relatively low cost. (SWEISI, 2010b)

4.7.2.3 Stage 3 (Case study)

This stage shed lights on three case studies of eService in unstable countries to investigate and examine the eService delivery in more depth. We will look at the case of providing travel document to Syrian citizen and how the Syrian government handle the demand on issuing this document. And we will look at the higher education registration process and service delivery and, finally, we will

look at the eServices delivery and the issues related to adopting by the Syrian refugees within the host communities. At this stage we conducting semi-structured interviews. The interview involves policymakers, experts, and academic people and ordinary eService users. Our conducting interviews will take place in different location and countries as the Syrian war makes it possible and dangerous for the researcher to travel to inside Syria, we will visit the refugee camps in Jordan, Lebanon and Turkey and some other interviews will take place online by skype connection. The next level is analysing data, where data collected organized and analysed as a start to mean something by normalizing and reducing the data and get rid of the duplication and the unwanted data, at this stage we start to define and name the themes.

Reflect level is for testing, validating and synthesizing themes and provides justification of the research findings. Then the conceptual framework revised and updated to include the learning gained through the research cycle which forms the basis for a new research cycle.

Figure 4.5 shows the research cycle of our study. We have conducted our initial conceptual framework, CF1 in the previous phase (the initial phase), as illustrated in figure 4.4, where we expressed the current understanding and guides the first research cycle at the end of this cycle the conceptual framework is revised and updated.

4.8 CHAPTER SUMMARY

In this chapter, we explained and justified the research methodology which has been adopted to help in defining the eGov phenomenon theoretically and practically and to ensure that the research design is appropriate to provide the answer to the research question and to realize its objectives. We started by reviewing the philosophical paradigm. We distinguished the different types of paradigms such as positivist, social constructionism, post-positivism and critical and critical realism paradigm. We have then justified the adoption of the social constructionism paradigm as the best-suited paradigm which our research belongs to. A range of research design techniques have been adopted in this

study where the data collection and analyse in this research employs the strength of both qualitative and quantitative as one mixed method approach. The use of mixed method research, in this study, helped the researcher to conduct, on one hand, a questionnaire-based survey which was conducted to study the opinions, attitudes, and beliefs of the undertaking sample groups to explore challenges faced by eService delivery to refugee and displaced people in unstable societies. On the other hand, to the researcher to extract themes by examining interviews taking from the undertaking case studies which is to be considered the qualitative part of the mixed method approach these formed the factors contributing to the successful adoption of eServices in unstable countries assumed to contribute to the successful adoption of the eService in unstable societies. Furthermore, the chapter explained the different stages which have as this study passed which illustrated in figures 4.4 and 4.5.

Next chapter (chapter 5), we will conduct qualitative comparative case studies amongst three eGov strategies from a different level of instability as the first stage of collecting our primary data.

5 CHAPTER 5

E-GOVERNMENT STRATEGY ACROSS DIFFERENT LEVELS OF INSTABILITY

5.1 OVERVIEW

The implementation of eGov initiatives require robust strategic planning to succeed. The success of an eGov initiative can be full, partial or the project may result in failure (Heek, 2003). The gap between the eGov strategy and its implementation determines the level of achieving the objective of the initiative's strategy. In such, the smaller the gap means that the planned activities -followed the eGov strategy- have been implemented and adopted.

In this chapter, we outline our study into the strategies adopted by three countries namely: United Arab Emirates (Low level), Saudi Arabia (Medium level) and Syria (High level), in order to identify and compare implementation activities at different instability levels.

The three countries have differing levels of instability, scaling from low to high respectively (Institute for Economics and Peace, 2014), explained in detail in section 2. We have analyzed these different implementation & adoption approaches in order to discover the most important aspects of successful policy making and thus highlight potential areas of oversight in the implementation process within unstable societies. (Detailed discussion in Chapter 8).

Consequently, the lessons-learned - by adopting best practice from different contexts - enhances the process of activity development in an unstable environment. This study explores the different eGov strategies and the priority of the initiatives to be implemented in each case. Although the three cases studied are different in their levels of instability, they have geographical, cultural and demographic similarities that make them ideal for this study.

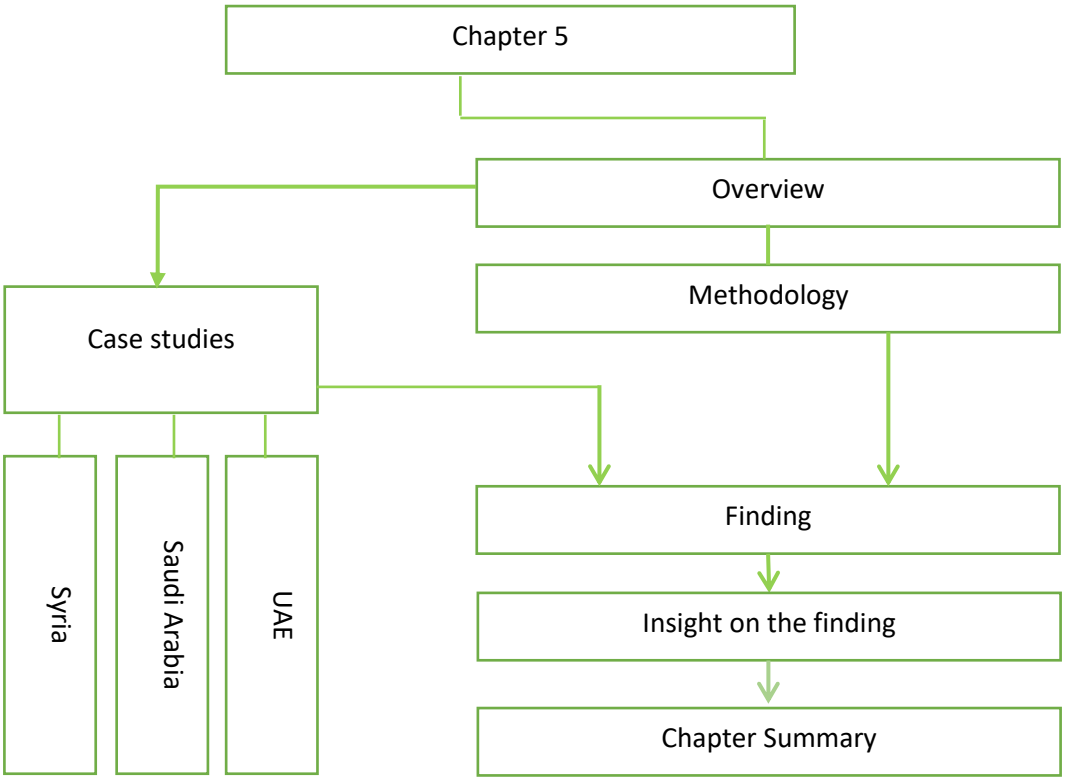


Figure 5-1: Chapter 5 outline

In this phase of our research we adopted qualitative method for the data collection and analyse. We searched for government reports and documents, related online publications, governments web portals and United Nations' reports, surveys and statistics.

The learned lessons on implementing activities in countries with different level of instability enriches our knowledge in this area and assists policy makers in adopting the most suitable approaches, in order to deliver eServices (services provided by governments electronically) to displaced people and refugees in unstable societies.

The rest of this chapter is organized as follows and illustrated in figure 5.1. In section 5.1 instability classification amongst the three cases discussed. and in section 5.2 methodology used in this part of our study. Section 5.3 research finding from cases follows in section 5.4. insight on the findings. 5.5-chapter summary.

5.2 INSTABILITY CLASSIFICATION

Geopolitical instability factors are associated with some developing countries. These factors can lead to increasing challenges for establishing suitable mechanisms for eGov implementation. Hence, this may result in increasing the social, political, economic and technological pressures (International Telecommunication Union, 2015).

Classifying countries based on their level of instability allows policy makers to be aware of the potential barriers, and hence, select, develop and conduct suitable strategies. It is important however to be aware that the stability of a country or society may change over time. For example, the Institute for Economics and Peace, (2014) state that "*World peace has deteriorated, falling gradually every year for the past seven years. This trend has been driven predominately by deteriorations in internal peace indicators, especially those relating to safety and security, although external indicators have also slightly deteriorated*".

5.2.1 Global Peace Index (GPI)

In a report published the following year, the Institute for Economics and Peace (2015) ranked 162 countries according to their level of peace by measuring the elements of security in society, the extent of the conflict, and the degree of militarisation as the base for measuring nation's instabilities. The report shows that the levels of peace have fallen by 5% since 2008.

Based on this Global Peace Index we classified countries depending on their level of instability into three categories: High, Medium and Low. Each category has a set of countries that share a common level of instability, see figure 1.

In our study we have selected three countries that have geographical, cultural and demographic similarities, but which differ in their instability levels. UAE is classified as having *low* instability; Saudi Arabia is classified as *medium* instability and Syria is classified as *high*.

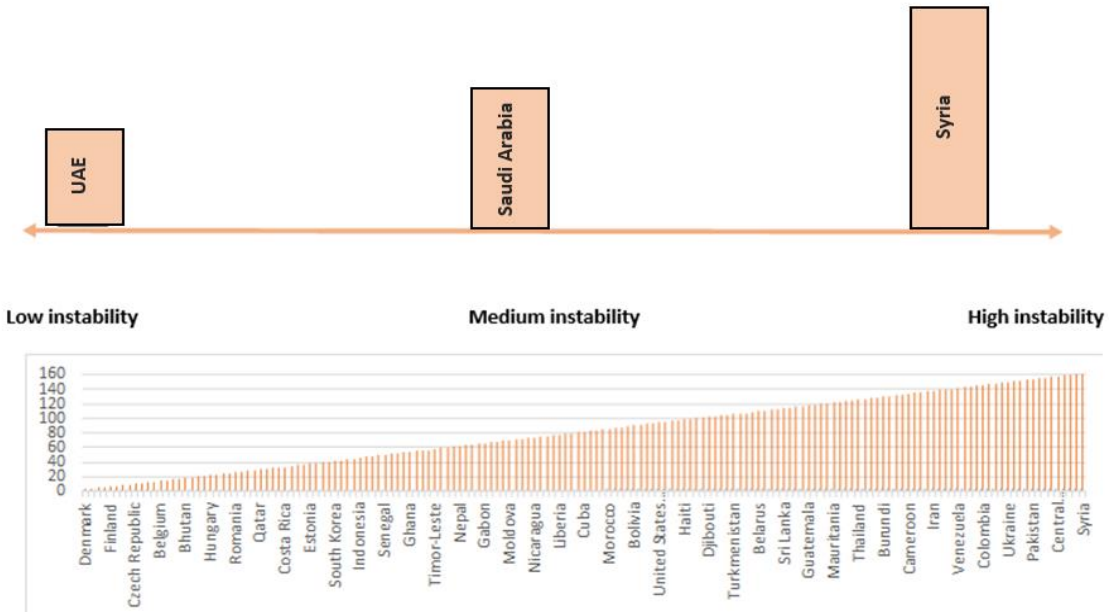


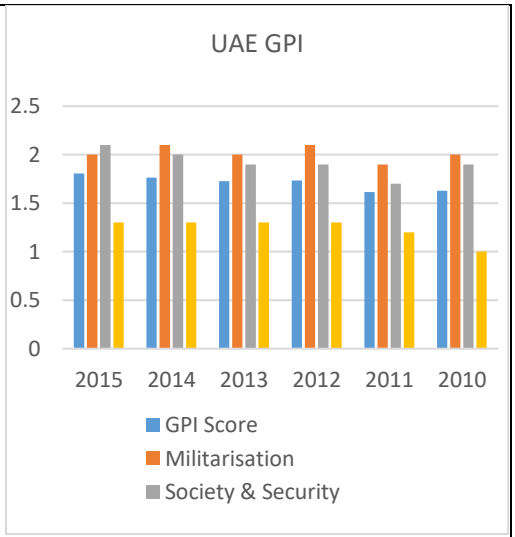
Figure 5-2: levels of Instability for the chosen countries, (Institute for Economics and Peace, 2014).

5.2.2 United Arab Emirates (UAE)

The UAE has appeared on the lower level of instability on the GPI scale (i.e. more stable).

Table 5-1: United Arab Emirates Global Peace Index, (Institute for Economics and Peace, 2014).

UAE					
Year	GPI Score	Country Rank	Combined Major Factors 1-5 (L to H)		
			Militarisation	Society & Security	Domestic & Int. Conflict
2015	1.805	49	2	2.1	1.3
2014	1.762	44	2.1	2	1.3
2013	1.727	37	2	1.9	1.3
2012	1.735	38	2.1	1.9	1.3
2011	1.615	29	1.9	1.7	1.2
2010	1.628	28	2	1.9	1



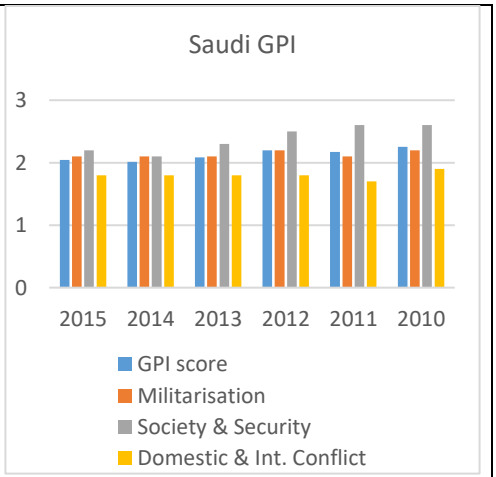
The Arab Spring which erupted in many Arabic countries in 2011 did not affect the UAE, with levels of internal peace (including violent crime, homicide and terrorist activity) remaining relatively constant across this period. (Institute for Economics and Peace, 2014).

5.2.3 Saudi Arabia

The GPI for Saudi Arabia has improved leading to the global rank changing from 121 in 2010 to 95 in the year 2015. Saudi Arabia therefore appears more towards the middle of the table indicating that the country has become more peaceful, despite being located in a hostile geographical location. This reflects improvements in societal safety and security, and reductions in the level of crime and violent demonstrations (as shown in Table 5.2).

Table 5-2: Saudi Arabia Global Peace Index, (Institute for Economics and Peace, 2014).

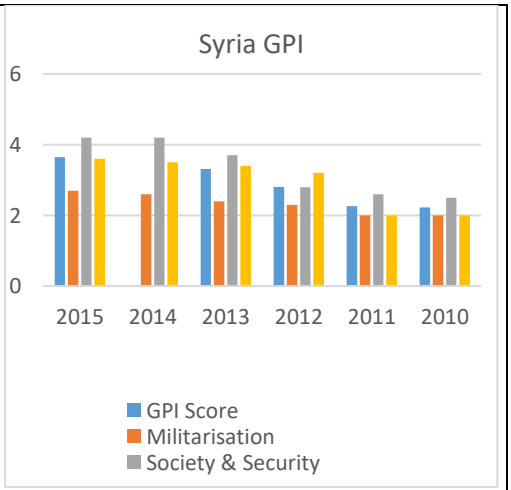
Saudi Arabia					
Year	GPI score	Country Rank	Combined Major Factors 1-5 (L to H)		
			Militarisation	Society & Security	Domestic & Int. Conflict
2015	2.042	95	2.1	2.2	1.8
2014	2.015	87	2.1	2.1	1.8
2013	2.084	94	2.1	2.3	1.8
2012	2.196	110	2.2	2.5	1.8
2011	2.17	105	2.1	2.6	1.7
2010	2.255	121	2.2	2.6	1.9



5.2.4 Syria

Table 5-3: Syrian Global Peace Index elements, (Institute for Economics and Peace, 2014)..

Syria					
Year	GPI Score	Country Rank	Combined Major Factors 1-5 (L to H)		
			M	S & S	D & Int. C
2015	3.645	162	2.7	4.2	3.6
2014	3.584	162	2.6	4.2	3.5
2013	3.313	160	2.4	3.7	3.4
2012	2.806	152	2.3	2.8	3.2
2011	2.263	118	2	2.6	2
2010	2.223	115	2	2.5	2



Syria scored bottom on the scale having "*swapped places with previously bottom-ranked Afghanistan*"; it is therefore the least peaceful country in the world.

5.3 METHODOLOGY

This phase of our research conducting three case studies to identify and explain the: a) eGov strategy for each case and. b) the emergent initiatives of the objectives of each strategy. We undertake three case studies in a different level of instability, namely: UAE, Saudi Arabia and Syria. By conducting comparative case studies, we gain a deeper understanding of eService provision in a different context.

This report uses document analysis study, employing qualitative analysis method, initiated by collecting secondary data, published via the undertaking case studied. However, Initial data for this study were collected through detailed documentation obtained from the official site of the cases, web portals, TV-related programs. three separate cases were prepared, studied and analysed. Hence, offering rich descriptions of the real world of the factors that resulted in adopting a specific strategy. We follow (Elo & Kynga,2008) approach in collecting and analysing the data. They point out that "Inductive content analysis is used in cases where there are no previous studies dealing with the phenomenon or when it is fragmented". Furthermore, Chinn & Kramer (1999) argue that in the inductive approach a general statement may emerge as a consequence of the observations of particular instances that are combined into a generic phenomenon. Furthermore, secondary data collection method was used due to the nature and the huge amount of data associated with each case. However, this way saves us a significant amount of time, especially, we had to rely on the United Nations surveys and governments published documents which make it essential as it can adequately capture the past change and developments. Furthermore, for a validity and reliability reasons, there is no need for re-examining the secondary data as it already a pre-established degree of validity.

The qualitative analysis results, allowed us to understand each leading factor for success or failure of each eGov strategies from the three case studies.

Furthermore, we estimated that the comparative case studies fit well the nature of our research. Yin (2014) states that multiple case study is a variant that includes two or more observations of the same phenomenon and the advantage is giving a deeper understanding of that phenomenon.

Although each country has its own characteristics and follows a certain way in implementing its eGov initiative, we chose those cases regardless of the varieties of factors that contribute to the successful adoption and the implementation of eGov for each one. Our decision was made upon the fact that those countries are sharing commonalities amongst them. For example, they share socio-economic, geographical similarities and demographically, anthropologically and culturally in common and share the same language. on the other hand, each of which has a different level of instability.

5.4 CASE STUDIES AND FINDING

5.4.1 CASE STUDY OF EGOV STRATEGY OF THE UNITED ARAB EMIRATES

The UAE (a federal monarchy) is considered to have one of the most advanced ICT infrastructures due to high investment and digital adoption within its government (Al-Khouri, 2012). The UAE's Federal eGovernment Strategy (UAE, 2012) is to "*enhance the competitiveness of the UAE by adopting world-class practices in all areas of eGovernment*". To achieve this the UAE has developed its own initiatives based on approaches and solutions derived from other leading eGovernment programs.

The United Nations (2014) reports that the UAE's eGovernment Development Index (EGDI) ranked 32nd globally; within the top 10 countries in Western Asia, and within the Gulf Cooperation Council (GCC) countries the UAE is only outranked by Bahrain. Table 5 shows UAE's EGDI between

2010 and 2016. This result is facilitated by the clear vision and mission of the UAE eGovernment, as well as the consequences of the high GDP, the high literacy rate, the small population and the keen desire by the Policy Maker to invest in and develop their online national portals.

Table United Nations (2014, 2012, 2010, 2008) EGDI ranking/ UAE.

	2008	2010	2012	2014	2016
EGDI	0.6301	0.5349	0.7344	0.7136	0.7515
Rank	32	49	28	32	29
Rank Change		-17	+21	-4	0

The first eService delivered at federal level was an electronic fee collection system (*eDirham*), launched in 2001. In 2004, *Etisalat*, the primary telecom company in UAE, established the infrastructure for eGovernment, paving the way for the eGovernment portal launch in 2005.

Several ministerial and Federal decrees have been issued to enhance the eGovernment transformation. In 2006, a ministerial decree transferred the eGovernment program from the Ministry of Finance to the Ministry of Governmental Sector Development. In 2011 a federal decree assigned the eGovernment program to the General Authority for Regulating the Telecommunications Sector. In 2012 UAE announced a revised eGovernment Transformation Strategic Framework to further enhance eGovernment provision, with the aim of moving all public services online through a two-year action plan (Government of UAE, 2012). This framework comprises numerous strategic initiatives that resulted from analysing the current development approach through three primary dimensions namely: Environment, Readiness and Usage.

Policy makers of the UAE suggest this three dimensional framework (which reflects global best practices) is essential in identifying gaps between the current situation and the targeted vision, and propose initiatives to bridge these gaps.

The UAE Federal Government mission is therefore *to deliver innovative eGovernment that enhances the competitiveness of the UAE, and provides world-class multi-channel services based on the expectations of customers, coherently and efficiently; utilising advanced digital infrastructure and highly qualified people within a smart framework of governance(*(Government of UAE, 2012)*)*

5.4.1.1 Dimension One: Environment

The Environment Dimension covers infrastructure and regulatory policy factors that may affect the growth of ICT, and focuses on ICT regulations, ICT user adoption rates, broadband availability, work patterns across government agencies, leadership and political will.

Key findings show that citizens are faster to adopt ICT than businesses, so awareness promotion is necessary if the government aims to increase digital service provision and use among businesses. The study also shows that very high levels of smartphone use suggest this is an important channel for eService provision. Furthermore, enhanced wired and wireless broadband services as well as the development of cloud-computing services have proved advantageous for UAE, helping to achieve an advanced stage of eGovernment development.

In addition, the Laws and legislations that concerned the ICT sector were revised and updated to be more efficient. The political leaders have adopted cooperative attitudes and promoted a culture of knowledge-sharing and experience-exchange in order to enhance work patterns across government agencies. These eGovernment initiatives were identified in the Government Strategy 2011-2013 and illustrate the progress made towards the UAE Vision 2021 for Federal eGovernment.

5.4.1.2 Dimension Two: Readiness

The Readiness Dimension exposes technical, governance, operational and human readiness aspects were necessary to meet the UAE's eGov vision. The technical readiness aspect encompasses the development and implementation of common interoperability frameworks and data models, enabling data-sharing between the UAE's federal agencies. Government agencies developed policies for IT adoption (governance) and monitored the progress of each IT project to assess operational readiness. IT experts were embedded within the agencies to facilitate the technical monitoring process. Finally, the readiness of human resources was considered, with the staff undertaking training from various agencies to improve IT skills and knowledge.

5.4.1.3 Dimension Three: Usage

Providing eServices to citizens through different channels. In particular, the focus was on: the availability and the quality of government services provided, possible channels of eServices and customer experience.

The improvement was made after a significant study which indicates many negative impacts on the level of service delivery such as replication of service development projects and initiatives and failure to use the Emirates ID card on a large scale, the absence of a comprehensive governance framework and failure to use shared applications. The study suggests that the focus should be on the most impactful services to customers in order to prevent replication, to enhance cooperation among government agencies, to provide eServices through multiple electronic channels and expanding the electronic channels to include social networking sites and service kiosks, to improve the eGovernment portals, hence, this will attract more users, and finally to design the services in accordance with the needs of each user.

Based on the result of studying the UAE eGov current situation and identifying the gaps between the current situation and the targeted vision which led to proposed a set of 38 initiatives to bridge

the gaps. These initiatives conducted from five strategic objectives that are distributed to the above-mentioned dimensions. The strategic objective for the Environment dimension is to enhance the electronic maturity level of some government agencies. The strategic objective for the Readiness dimension is to promote governance by creating structures and supporting operational consolidation; and providing them with world-class human skills, to design and construct infrastructure and shared applications to increase cooperation among government agencies and reduce the cost of IT projects and to enhance the UAE's competitiveness in eGovernment. Finally, the strategic objective for the Usage dimension is to improve the level of electronic transformation of government services in the country. "*This strategy was drafted with the objective to build a world-class federal eGovernment that will contribute to upgrading the competitiveness of the United Arab Emirates and help make the UAE one of the best countries in the world according to the UAE Vision 2021*"(Government of UAE, 2012).

5.4.2 CASE STUDY OF EGOV STRATEGY OF SAUDI ARABIA

The government of the Kingdom of Saudi Arabia has an early experience of implementing a national eService in 1998 which was the "SADAD" program. SADAD was the national e-payment gateway. In such, when the government issues particular bills than citizen may interact with the SADAD program to pay their bills digitally. The program was successful and still functioning with some enhancement. Another example of a successful eService implementation was the Smart Cards initiative by the Ministry of Interior which issues the national ID cards with an electronic chip for storing personal information in a central database. Both eServices were delivered before assigning the eGovernment program to YESSER.

The government adopted "YESSER" as the national e-Government program. YESSER Program starts functioning where most activities took place in and after 2005 under the supervision of

Ministry of Communication & Information Technology and the participation of Ministry of Finance.

The main role of the YESSER program is to implement the Saudi Arabia's e-government initiative and to be responsible for implementing the infrastructure of all related projects, to define the common standards, legislation and guidelines, the communication and training of management and staff and the implementation of eService and all related projects in the hope of moving towered modernization and transformation of government administration and to enhance service delivery to all stakeholders.

At the beginning, the focus was more on large cities such as Medina, Riyadh, and Mecca. So far the e-government program YESSER has developed a National eGov Strategy and (first and second) Action Plan covering the periods of 2006 to 2010 and 2012 to 2016. The Kingdom of Saudi Arabia (2012) stated the vision of the eGovernment Strategy of the second action plan as "Enabling everyone to use effective government services, in a secure integrated and easy way, through multiple electronic channels". The result was fast and an excellent progress has been made. This locates the Saudi in an advance place relative to other countries in the United Nations e-government assessment. The Saudi portal, built by YESSER, is a world-class-all-in-one eGov service provider channel, offers 24 hours a day services. The United Nations (United Nations, 2014a),(United Nations, 2012),(United Nations, 2010) surveys indicating the progress in the eGov EGDI and the ranking for the Kingdom of the Saudi Arabia as the table 5.5. shows below:

Table 5-4: United Nations (2014, 2012, 2010, 2008) EGDI ranking changes for Saudi Arabia.

	2008	2010	2012	2014	2016
EGDI	0.4935	0.5142	0.6658	0.6900	0.6822
Rank	70	58	41	36	44
Rank Change	-----	+12	+17	+5	-8

The current situation of the successful implementation of eServices indicates that 2125 services are available and 50% of them are full transactional. The work of the e-government program has been recognised internationally and some have won an international award such as the Government Service Bus (GSB) and the e-transformation.

The mission of the KSA eGovernment Strategy has been established as: "*To build a sustainable e-government workforce, to improve government efficiency, to improve the experience of the public in their interactions with government and to develop a culture of collaboration and innovation*."

The above missions are supported by a set of strategic objectives that form the Strategic Framework which comprises a set of strategic initiatives - resulted from analysing the current development approach. However, policymakers of the KSA eGovernment suggested that it is essential to identify the gap between the current development and the targeted vision which contributes to proposing a set of initiatives to bridge this gap, these initiatives are grouped into six work streams.

5.4.2.1 Human Capital, Communications and Change Management

The focus on how:

1. To build a communications plan amongst the government employees and leaders
2. To build a communication program for all agencies to be up to date with the eGovernment experiences.
3. To establish human resources by identifying the experienced eGov professionals and increase the roles of women in the eServices management to cover the shortage of human resources in the public sector,
4. To provide a training centre for staff and leaders on project management and ICT technical skills and to expand the current YESSER Centre of Excellence for Research and Development (CERD).

5. To create an annual awards program to appreciate agencies on their successful eGov implementations.
6. To implement a collaboration and cooperative attitude environment to share and re-use experience and knowledge amongst government institutions and agencies.
7. To run a learning and training workshops to develop the skills of leaders in government agencies which result in support of the achievement of the Vision of the eGovernment where YESSER will be responsible for providing material and support.

5.4.2.2 eServices

The study shows there is need to implement and develop eService roadmap by each government agency and to be published to show all available eServices, on the other hand, the implementation should be based on eService priority, private sector plays crucial roles to provide high-quality e-government services, the need for develop and implement a world-class portal which includes accessibility and best practice guidelines, hence, all government agencies should upgrade to its standards, conducting public awareness is necessary at this stage which could be done by implementing a communications program for the public and for the employee, develop and implement multiple channels for eServices delivery such as SMS, Mobile or kiosks

5.4.2.3 National Shared Applications

The key found, in this stream, is the need for developing a National Shared Applications framework with a standardized templates, defined methodology and commitment by all agencies to use the application also coordinate and evaluate applications such as eRecruitment, government employees application, national address record system, eID system, geographic information system and unified university registration application, however, this could be achieved by providing access to government agencies database that are running those applications .

5.4.2.4 Infrastructure

Most importantly for this stream is to develop an international standard for all eService operational, connecting data to the Government Service Bus (GSB) which allows the government agencies to communicate effectively, also the implementation of message gateway system using SMS and email for communication and for eService delivery are essential, to develop guidance and accessibility guidelines standards, develop a cloud computing strategy, develop an open source strategy, implement a secure network connectivity, government central database, design and build an m-government portal and provide digital signature based on e-identity.

5.4.2.5 eParticipation

the key found here is to develop a social media communication with public and business and to open the gate for sharing the public views throw this method, also this tool may be used as a central eParticipation by eGov agencies to grasp the importance from blogs and feedback.

5.4.2.6 Institutional Framework

The study under this stream suggests building an eService framework strategy which allows for wider facilitation of access and supports the existing framework for public-private partnership, furthermore, the framework must include a better use of the shared infrastructure and national shared applications which in turn required a constant technical oversight.

The Saudi Arabia eGov strategy (after identifying the gaps between the current situation and the targeted vision) propose a set of 46 initiatives grouped into six streams to bridge this gap. The timeline for implementing those initiatives spans over five years 2012-2016 where some activities being implemented in parallel and some in sequence according to the importance and priority.

5.4.3 CASE STUDY OF EGOV STRATEGY OF SYRIA

Before the start of the Syrian conflict, the heavy load of the government administration was the main motivation for the Syrian government to implement eGov initiative which was due to the increase of the demand by citizens for more and better services as well as the government limited resources, the sought for economic and social development, the facing of international economic challenges, the need for increasing the role and size of the civil society organizations and the need for adoption of technologies on a wider scale(Suleiman et al., 2008).

In 2002, eGov initiative first activities was started where a joint project between the Ministry of Communication and Technology (MOCT) and the United Nation of Development Program (UNDP) was launched to increase the penetration rates for landline, mobile phone, and laptop to 30%, and for internet to 20%, as part of the ICT Strategy in Syria which both parties agreed upon. The Syrian government stated the vision of the eGov Strategy to "Providing distinguished services to the beneficiaries (citizens and business) by increasing effectiveness, productivity and transparency of government work; and providing integrated e-services accessible by multiple channels; while maintaining the protection of the beneficiaries' personal data"(Suleiman et al., 2009). The activities and strategic initiatives of the eGov were implemented based on analysing the Strengths, weaknesses, opportunities, and Threats (SWOT) of the current situation in order to create a suitable orientations for the eGov in the areas of political, organizational, human, financial and infrastructure(Suleiman et al., 2009). The stages of delivering the vision into reality goes through three stages: stage 1, during this stage the eGov activities focus on providing citizen with information on eServices by media or through publication, implement the legislative and technical frameworks, implement a central portal where all ministries complete their eService and link them to the national portal, providing citizens with basic banking eService, providing citizen with basic and important services and to develop an environment to enable different channels for providing eServices, the duration of this stage is one year from 2009 to 2010 while the duration of Stage 2 is

two years from 2011 to 2013 and during this stage the efforts concentrated on providing interactive eServices, implement horizontal interoperability framework among all ministries, implement a national central shared infrastructure, working on competing for digital divide among the Syrian citizens and increase the number of channels for eService provisions. Stage 3 takes six years for implementation from 2014 to 2020 and during this stage, a fully transactional eService provision should be completed, a complete reform on the government organisational level where integrated institutional structures replace the structure of government services, provide more eServices to meet all citizens' needs. The table 5.6 below indicates the percentage of the expected delivery of eServices for each stage.

However, In order to go ahead with the implementation of the first and second phases, Government of Syria issued its first e-Gov Strategy in October 2009 which has been adopted for five years plan 2011-2015, the attention focus on the following components: the national data records (registries), key government services and high priority services, shared services and shared components and e-community of interests programmes.

Table Percentage of delivering eServices for each stage (suleiman et al., 2009)

Delivery for each stage	2010	2013	2020
Services available at the stage of publishing electronically	70%	100%	-
Basic services provided electronically	30%	80%	100%
Rate of using the available e-services	10%	30%	50%
Access to government services through new additional channels	5%	30%	70%
E-government supplies	0%	30%	60%

The project will be based on joint cooperation among Ministry of communication and technology (MoCT), State planning commission (SPC) and united nation development programme (UNDP).

The title of this project is Enhancing institutional capacity for eGov implementation which "aims at supporting the Syrian government efforts to ensure successful implementation of the eGov strategy." (Syria Arab Republic & UNDP, 2008). However, The main objectives of the UNDP involvements in the above project is to support government agencies in developing their IT strategies in compliance with the national eGov initiative, to provide consulting and technical support to promote the development and usage of shared services among government agencies, to promote best eGov practices, to participate in defining the eService prioritization, to develop and operate a complete monitoring and evaluation system and to develop and implement a communication plan. The result of adopting the above strategy has been stated in the United Nations (2014, 2012,2010) Surveys where the progress in the eGov EGDI and the ranking for the eGov of Syria shown in Table 5.7 below:

Table 5-5: United Nations (2014, 2012, 2010, 2008) EGDI ranking changes for Syria.

	2008	2010	2012	2014	2016
EGDI	0.3614	0.3705	0.3705	0.3134	0.3404
Rank	119	133	128	135	137
Rank Change	-------	-14	+ 5	- 7	-2

On the other hand, the civil war in Syria had a huge impact on implementing the eGov project smoothly, especially, at the beginning of the conflict 2011, this becomes even worst when few parts of the country become out of the government control in 2012. The Syrian conflict has affected all aspects of life and de-stabilized the country's infrastructure. Today, Syrian citizens may face difficulty and danger when travelling to and visiting government sites to use offline government services. This demand for services by Syrian citizens, therefore, presents a major challenge for the Syrian government. Services provided by the Syrian eGov are therefore an attractive option for

mitigating these difficulties and dangersHowever, the strategy of the Syrian eGov did not go according to plan and had to be postponed several times according to an announcement by the Ministry of communication and technology. However, since the war started few eGov activities been developed and some eServices has been implemented. The TALABY gate is such example of eService which allows citizens to register their complaints through this gate and to receive replies, suggestions or guidance through multiple channels(TALABY Gate team, 2012).

5.5 Insight on Case Studies and Findings

In addressing the aim of the current study, we had a choice of two options: either studying a single eService activity amongst different countries within the same stability level and then making a comparison with the same activity in countries in different stability levels; or, studying in-depth the activities running in a country with high instability, and comparing these to the successful ones in countries exhibiting low and medium levels of instability.

According to institutional theory, a successful activity in a stable country should also be successful in another stable country (Scott, 2001). Scott argues that different institutions which have developed in different situations that exhibit similar structures and behaviours will produce similar outcomes; therefore, we chose the second option: we studied the successful eGov strategies and activities in low and medium instability countries before comparing these with those in the highly unstable Syria.

The salient theme throughout all the case studies was the delivery of services through different channels. eGov portals, that unify many government services and information sources, are one such channel. The integrated information-provision and interaction facilities of such websites gives citizens a unified interface to all the available digital services of their government. The success of any eGov implementation (as measured against other countries) is dependent upon the quantity and

the quality of the eServices provided through the eGov portal. Quality, incidentally, may include factors such as navigability and accessibility.

The UAE strategy for its eGov portal focused on the creation of a scalable and reliable infrastructure that could facilitate further development and enhancement. They prioritised the connection of all government agencies and ministries through shared data and a shared data-centres, enabling common application software (comprising 2570 multilingual eServices) as well as intermediary operations that ease integration and thus provide better and more holistic eService delivery. Similarly, the Saudi case shows that its eGov strategy aimed to *de*centralise the activities, with it's portal (eDash-board) which provided 2125 multilingual services that link and integrate distinct government agencies and ministries. Services include verifying the identity of citizens and providing an authentication "single-sign-on" service. Neither the UAE or Saudi portals feature eServices related to displaced or refugee people.

Comparing the Syrian eGov portal to UAE and Saudi shows that it is still primitive in its development, publishing mainly static information rather than interactive services (of which there are 1121 multilingual services). Additionally each of the Syrian ministries has its own portal for eService delivery, increasing the likelihood of service and interface inconsistencies and actively encouraging isolated islands of information.

The United Nations (2012) stated that, "*The United Arab Emirates is among few countries that come close to a pure one-stop-shop portal with information, services and participation services integrated on one site*", the result shows that the United Arab Emirates in 12th place and Saudi Arabia in 18th place among the frontrunners. The strategic plan of the UAE eGov has therefore been fulfilled by its eGov implementation and activities (Al-Khouri, 2012).

The channels available to UAE and Saudi citizens are diverse, and include online and offline options. traffic fines and utility bills for example may be settled through ATMs, kiosks, bank cash

depositing machines and public payment machines (which are located in shopping centres and other public places).

Since the launch of its "mGovernment" Initiative, UAE Government entities have introduced applications for smartphones, tablet computers and smart TV. The UAE continue to test new channels for service delivery including: Drones, which could be used for delivering Emirates ID cards, driving licences and other permits; Humanoid Robots, which could be used to both direct customers to different services in big trade centres *and* to act as surrogate shop assistants, processing payments by credit card (UAE eGovernment, 2016).

Mobile phone applications are also under extensive development, however the successful adoption of mobile government apps remains limited (United Nations, 2014a). In developed countries where the mobile market is close to saturation, some governments have driven a policy direction that prioritises mobile eGov services; for example, in June 2013 UAE changed the name of its eGov initiative to "Mobile Government" or "mGov", indicating its focus on delivering services to the public through their mobile phones (Government of UAE, 2013). The Saudi "mGovernment" platform (MA'AK) has also been launched by the YESSER (the national e-Government program) but is still at an early stage.

The digital divide may be a critical factor in the use and adoption of online services. The UAE vision, which desires delivery of services to all citizens, exploits mobile channels in an attempt to overcome this potentially divisive problem (United Nations, 2014a). The Saudi government is also increasing mobile eService channels in an effort to ensure broad adoption and minimise the digital divide, this includes the creation of infrastructure services such as the TARASOL Government Service Bus (GSB), a central SMS system affording secure communication between government agencies, ministries, and users.

The Saudi Government is promoting eParticipation through an its Open Data Initiative, which provides citizens with access to documents and reports from ministries and government agencies; as well as gathering public opinion through surveys, consultations and blogs. Such input is considered important for informing future legislation.

Table 5-6 : The gap between strategy and implementation in a different level of instability.

	UAE	Saudi Arabia	Syria
Multichannel service delivery	H	H	L
eParticipation	H	M	L
Public Awareness	H	M	L
Open Government Data	H	H	L
WEB2.0	H	H	L
BROADBAND	H	H	L
Leadership	H	M	L
Digital Divide	L	M	H
mGovernment	H	M	L
NGOs	L	M	H
Open Data	H	H	L
Cloud computing	H	H	L
Digital Certification	H	H	L
Smart ID Cards	H	H	L

Similarly the UAE government started consulting more with citizens in a bid to boost transparency and allow citizens to be more involved in the public policy-making by providing an e-consultation program. United Nations (2012) stated that, the United Arab Emirates and the Republic of Korea

are the only two countries that score 100 percent on whether the government takes citizen's views into decision-making (Al-Khouri ,2012).

The Saudi government have further promoted digital literacy skills and Human Capital Development, and hope to empower their citizens, by establishing training centres throughout the country, as well as developing online training materials and establishing eTraining caravans to encourage those in remote and rural areas into digital adoption.

The biometrics-backed ID service provided by the Emirates ID Authority is recognized as one of the world's best biometric programs. Al-Khouri (2012) has observed rapid steps taken by the UAE in integrating its identity management infrastructure and its smart card capabilities in various public sector systems, and notes increasing motivation in the UAE's public sector to rely on the new identity card when providing services. Table 5.6: lists our findings that describe the gaps between strategy and implementation where there are different levels of instability.

5.6 CHAPTER SUMMARY

The study aims to gain an understanding of the eGov strategies and implementation amongst countries with different level of instability. They highlighted the most appropriate procedures and methods to be carried out as a way forward to fill the current situation gap towards adopting eGov successfully in their context. The study contributes to understanding the successful activities based eGov strategy in a different level of instability that highlights the different approaches, undertaken by policymakers, in different environments in order to narrow the gap between design strategy and eService delivery in the studied context namely: UAE, Syria and Saudi Arabia. From conducting the strategy's components for each case, we able to identify the implemented activities that follow the strategic plan for each case in the undertaking environment. We also explore the different components of our methodology which we followed.

From the above study, the finding shows that activities in the Low-Level Instability successfully implemented and was tailed to the strategic plans which were initially decided for. Also, the gap

between strategy and implementation was very narrow and this gap gets wider as we move toward the High-Level Instability.

The following chapter (Chapter 6) discusses the empirical data collection and finding from surveying two samples questionnaires that have been selected from Syria and Turkey that represent High and low-Level Instability respectively.

The successfully adopted activities based on eGov strategies in one example (UAE, Saudi Arabia, Syria) of the three-different level of instability groups (Low, Medium, High) were studied and follows in chapters 6&7 will be in-depth, primary research on the running activities in the high level of instability. The focus will be on the Syrian refugees and displaced people who utilizing the Syrian eServices running by the Syrian eGov as well as eServices in the host countries.

Analyse of the above findings, based on the comparison amongst the above three cases, will be carried out in chapter 8. That shows the different approaches for strategies adoptions in the high level of instability, and thus informs policy makers in highly unstable societies of the important aspects to consider and to highlight potential gaps during the implementation process. Consequently, the lessons learned by adopting best practice from different contexts enhances the process of activity development in an unstable environment

6 CHAPTER 6

FINDINGS FROM THE SURVEY

6.1 OVERVIEW

In chapter 5, we argue that the successful adoption of eService in a different level of instability are the result of establishing a clear strategy of eService for the giving context. The study in chapter 5 contributes to understanding the successful activities based eGov strategy in different levels of instability. Furthermore, highlights the different approaches undertaken by policymakers in different environments in order to narrow the gap between design strategy and eService delivery. But the study of chapter 5 as well as previous studies (including the literature review in chapters 2&3) fails to highlight the full set of the unique factors of the high level of instability for eService adoption. Hence, the study in this chapter and in chapter 7 attempt to bridge this gap. However, to understand the successful adoption of eGov services at the High level of instability it is necessary to know the opinions, attitudes, and beliefs of a sample group of people who are living in unstable societies. Therefore, this chapter seeks to highlight the obstacles that may affect the use of eService in unstable societies.

The study findings explore challenges faced by eService delivery to refugee and displaced people which are often characteristic of unstable societies. This chapter reports on a study of Syrian refugees and displaced people using a survey exploring the use of eServices for citizens inside and outside of Syria. The results indicate six themes influencing the effective support for eServices for such groups of people, namely: Importance of eServices, Connectivity, Awareness, eService Availability, Financial constraints, and Digital literacy.

In order to achieve the aim of our research, the chapter structured as follows and illustrated in figure 6.1: Section 6.1 discusses the research methodologies used to conduct the survey and to achieve the

research potentials, including data collection, data analyse and respondent's profile. In section 6.2 empirical results discussed, follows in section 6.3, chapter summary.

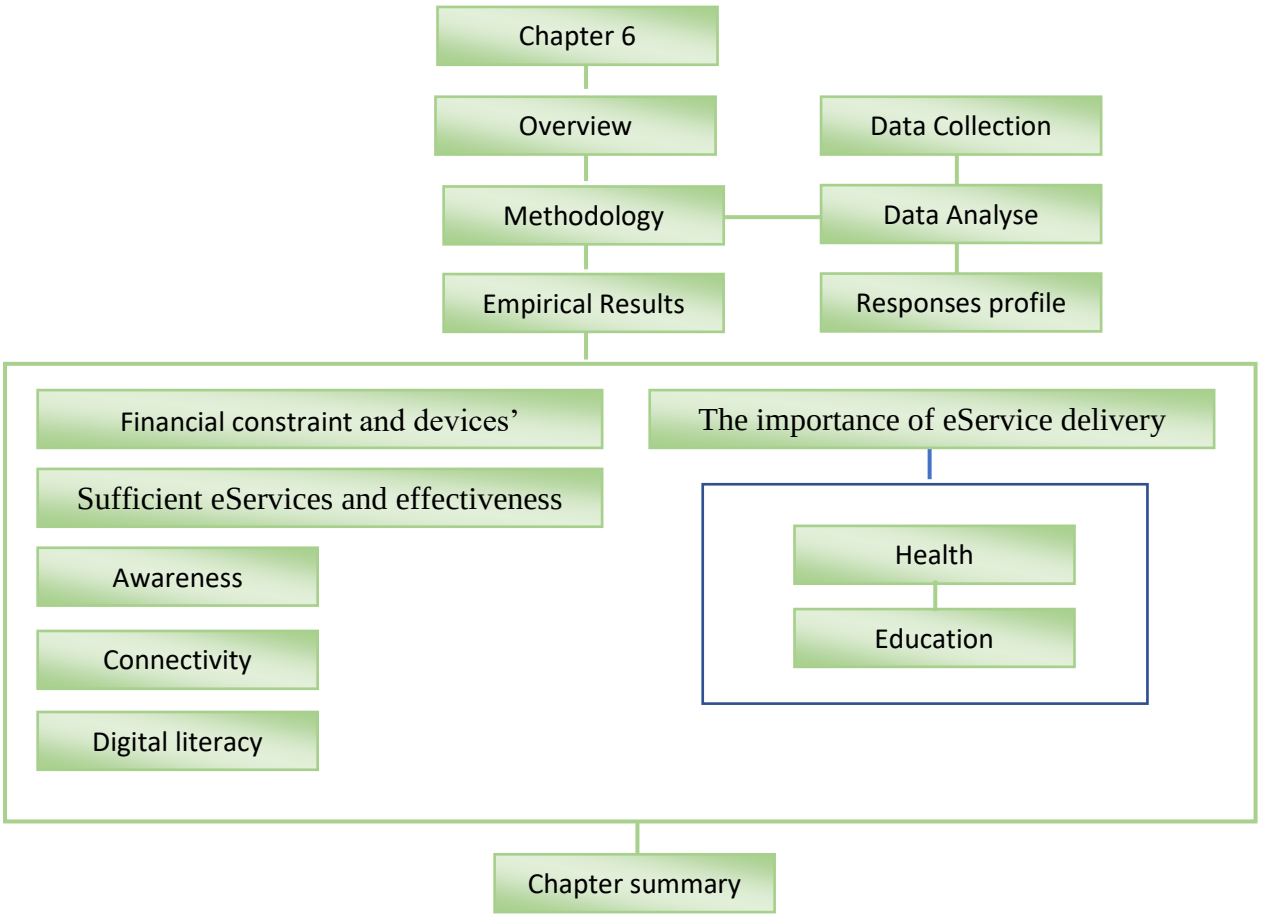


Figure 6-1: Chapter 6- finding from survey Outline.

6.2 RESEARCH METHODOLOGY

One of the most important instruments for data collection is the Questionnaire-based survey as suggested by Neuman (2006), he also states that this method has been used for recording answers to a predetermined order questions from chosen participants which sought to answer a particular research question. Heeks & Bailur, (2007b) state that eGov research should increase the use of quantitative analysis with a strict collection. Furthermore, conducting a survey makes it possible to collect data from a large sample of participants (Choudrie & Dwivedi, 2006; Saunders, Lewis, &

Thornhill, 2002) and more importantly is one of the few practical and safe methods to access relevant people in these displaced communities (safe but not easy). Thus, the survey is an appropriate and a suitable approach for this study.

6.2.1 Why survey

To understand the successful adoption of eGov services at the High level of instability it is necessary to find a suitable method and to be safe at the same time. We decided that survey is one suitable method allows us to know the opinions, attitudes, and beliefs of a sample group of people who are living in unstable societies. The survey focuses on the effective and efficient factors that the use of eServices would meet the Syrian citizen requirements. Therefore, we conducted an open-end questionnaire in order to cover as much eService related information from Syrian people (inside and outside Syria) refugees and/or displaced people as possible. It will be the second primary data collection (first primary data collection is the finding from chapter 5) which will be discussed through theoretical lenses in chapter 8. We conducted both paper-based and virtual questionnaire, in order to, gain an insight of the availability, effectiveness, efficiency and affordability of eServices that people in an unstable environment may use and comprehend the barriers that those people may face in adopting this technology. Furthermore, to test the attitude of the participants towards the current eService under the current circumstances in Syria, the problems they facing in using this technology and their evaluations for further improvements. Another reason for choosing this method due to the insufficient data was published on the aforementioned topic. Furthermore, the study was approved by ethics review committees at the University of Portsmouth.

6.2.2 Data Collection

Two samples of the survey were designed and distributed as follows, the first sample is to reach the Local Syrian Citizens who are living inside Syria (LSC-Sample). The second sample is to reach the Syrian refugees outside Syria (RSC-Sample). These samples give the opportunity to represent the

majority of the Syrian people, hence, a clear picture of the majority about the topic would be revealed. Furthermore, we have conducted the investigation for the second sample in different countries due to the large volume of the Syrian population which has fled to neighbouring countries such as Turkey, Lebanon, Jordan, Egypt and UK. This is especially important where we could capture the attitudes from different groups, especially, the people who have experienced the use of electronic sources other than the one provided by the Syrian government. Therefore, the findings would give us an insight of different factors playing roles in the effectiveness of eService which meet the Syrian citizens' requirements during the political pressures (UNHCR, 2013; UNHCR Syria, 2015; UNHCR, 2014; Information Management Unit, 2016). But, due to the Syrian situation on the ground (visiting Syria is companied with varieties of dangers) we decided to choose the virtual survey method by sending it by email to a few friends who are still living in Damascus (two of them are members of staff at Damascus university; four employees at the Syrian government). They have (at their end) distributed the samples on our behalf. The survey was distributed to students, employee, professionals and ordinary people at some of the government departments such as the Immigration and Passports Department, Ministry of Higher Education, Damascus University and the City University (student accommodations). The survey was distributed, also, in the Town Centre (shopping centre with some shops, banks, restaurants and children playgrounds) and Shelter centres in different places in the city. Damascus is considering a safe place compared to many Syrian cities, hence, it accommodates a large segment of the society, after they have been affected by the war in their hometowns, thus, wide categories of the population would be found in Damascus, as a consequence of the search for safe places. The Survey took longer than the time assigned to it, to be completed, due to a considerable challenge of getting access to displaced people. The Survey started on 20 April 2016 and was completed and translated from Arabic into English by end of August 2016. The people who worked on our behalf faced many difficulties, on the ground, including their availability and the willingness of the participants to take part in the survey. Each

response has been given a unique id to avoid replications. During this time 1634 responses were received in total, but the total responses that were completed by the participants were only 415, the rest were excluded. Therefore, our dataset contains 415 entries for subsequent analysis and investigation.

6.2.3 Data analysis

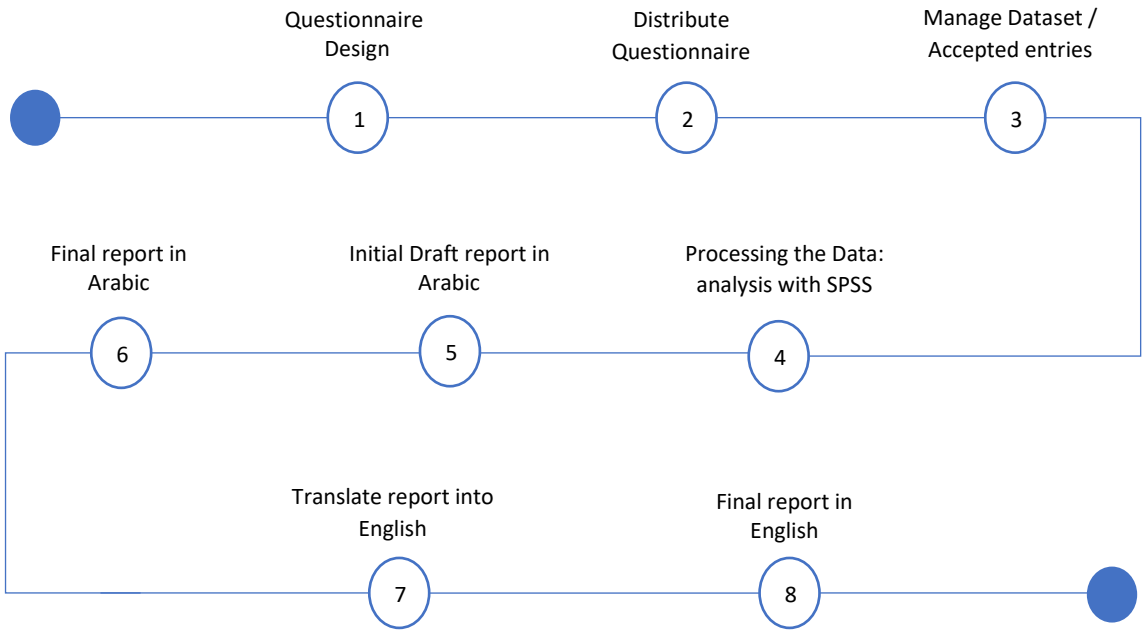


Figure 6-2: Stages of the survey.

For the analysis phase, we used SPSS (version-22) Statistics software package. Figure 6.2, illustrates the different phases of the survey.

The result of the analysis was structured and grouped into main points to reflect the respondent point of views on each point which listed and discussed in turn. For example, measuring the response of the Level of Awareness ranging from “not at all aware”, “Slightly aware”, “Somewhat aware”, “Moderately aware”, “Extremely aware”. On the other hand, to output the result of the aforementioned test, we used the descriptive statistics to provide a simple summary of the undertaken samples, we also used the frequency distribution to summarise the individual values or ranges of values for the variables and finally, we used a simple graphics as well to aid the data

analysis. To ensure clarity and anticipate as many as possible responses, the questionnaire was written in Arabic and then translated into English

6.2.4 What questions, why

The questions for this survey were utilized previous studies such as (Jait, 2012; SWEISI, 2010) with some amendments to suit our research. A set of questions were designed for this questionnaire where some used closed-ended questions and some other used open-ended questions to give the participants the chance to express their opinions in more detail.

The questions designed in two dimensions: the first one considers six variables (emerged as a result of our critical literature review in chapters 2&3) namely: Importance of eServices, Connectivity, Awareness, eService Availability, Financial constraints and Digital literacy. The second dimension is concerned with the four institutional theory pressures which were introduced in chapter 3, namely: Politic, economic, social and technology where the discussion under each pressure highlights the influence of the above variables (first dimension), based on its definition, on the eService adoption (discussion in detail in chapter 8).

Furthermore, the above variables were derived from key themes recognized from the literature review study (Alsaeed & Adams, 2015) that are forming the main challenges faced eServices in the unstable countries such as political, socio-economic, technological, organisational, human infrastructure and financial challenges. However, the above variables were tested on different scales as well as Likert scale which uses five points for measuring responses (Ogonek et al., 2016). Furthermore, to produce a clearer and more concise findings we designed and categorized the questions under the following main category: Education and Health during instabilities, Connectivity, Awareness, Sufficient online services and Digital literacy. Which means that the repeated and the unnecessary data will be rejected. Thus, it facilitated and determined the suitable data for further focus.

We have realized, after the analyse stage took place, that more questions needed to be addressed, thus, we have recovered those questions in the qualitative phase of our primary research (during the interviews of the conducted case studies)

6.2.5 Respondent's profile

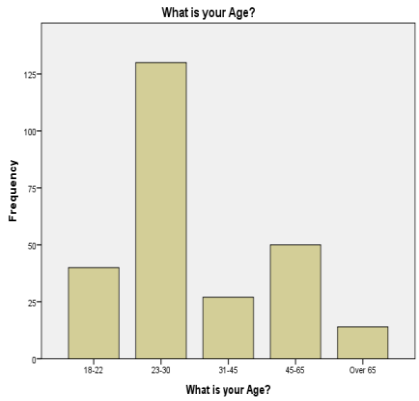
Out of the 415 completed questionnaires, about 64% of the responses came from Syria and the rest came from different countries that are hosting Syrian refugees such as Turkey, Jordan, Lebanon, Egypt and UK(paper-based used for this population as it was easy to access and no danger associated).

The majority of the respondents of the LSC-Sample which is about (69%) were males and about (50%) of their age group range between 23-30, (51%) had a university graduate qualification, (56%) were employed and (64%) considered their computer literacy to be medium. On the other hand, the majority of the respondents of the RSC-Sample which is about (65%) were males, (49%) age group range between 31-45, (40%) had a High School qualification, (86%) were unemployed and (51%) considered their computer literacy to be high. Figure 6.3, represent the size and the distribution of the gender among the samples.

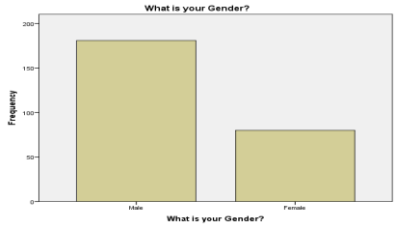
Out of the 261 responses from the LSC sample it shows that half of the responses age between 23-30 years old, the highest group comes second the group age between 18-22 years old with 15.3% out of the responses, the genders of the responses divided into 69.3% male and 30.7 female, more than half reported as a university graduates 51.0 % and 29.1% have a high school degree and the rest have a postgraduate and below high school degrees. The computer literacy revels that 63.6 % have a medium computer skills 13.0% low and the rest are highly skilled using computers and out of the 55.9% of the responses reported as employed.as shown in table 6.1.

Table 6-1: LSC-Sample demographic responses

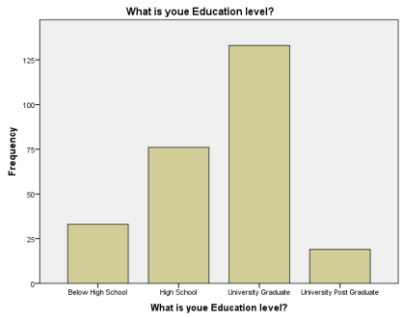
LSC-Sample demographic responses		
Age?		
Age group	Frequency	Percent
18-22	40	15.3%
23-30	130	49.8%
31-45	27	10.3%
45-65	50	19.2%
Over 65	14	5.4%
Total	261	100.0%



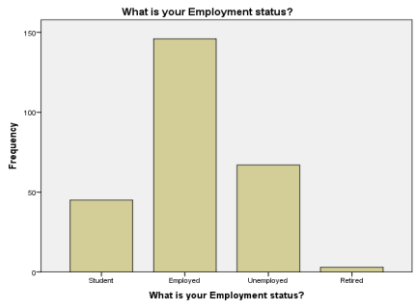
Gender?		
Male	181	69.3%
Female	80	30.7%
Total	261	100.0%



Education Level?		
Below High School	33	12.6%
High School	76	29.1%
University Graduate	133	51.0%
University Post Graduate	19	7.3%
Total	261	100.0%



Employment Status?		
Student	45	17.2%
Employed	146	55.9%
Unemployed	67	25.7%
Retired	3	1.1%
Total	261	100.0%



Computer Literacy?		
Low	34	13.0%
Medium	166	63.6%
High	61	23.4%
Total	261	100.0%

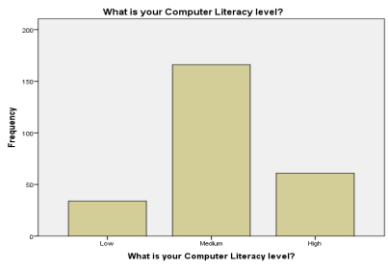
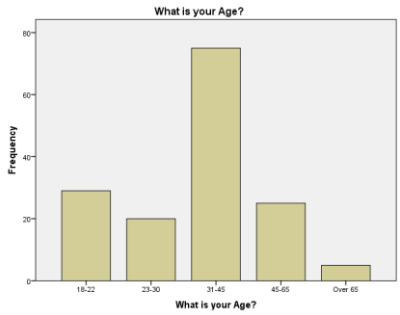
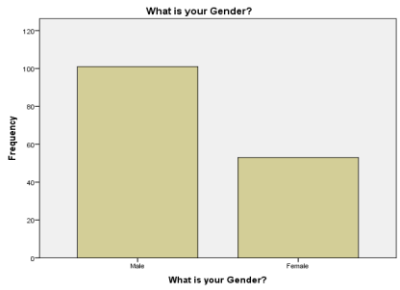
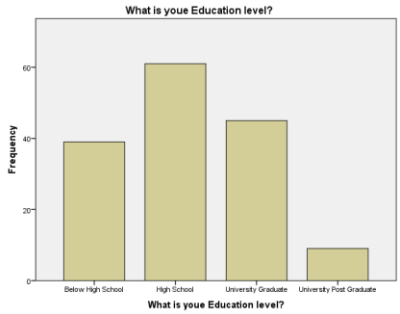
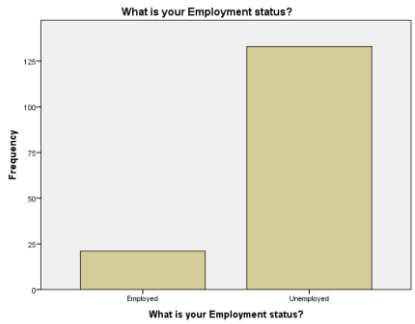
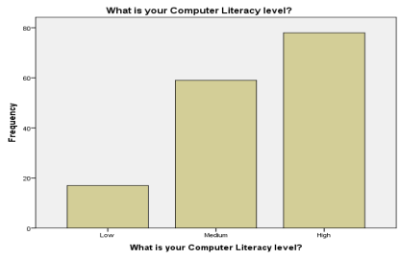


Table 6-2: RSC-Sample demographic responses

RSC-Sample demographic responses			
Age?			
Variables	Frequency	Percent	
18-22	29	18.8%	
23-30	20	13.0%	
31-45	75	48.7%	
45-65	25	16.2%	
Over 65	5	3.2%	
Total	154	100.0%	
Gender?			
Male	101	65.6%	
Female	53	34.4%	
Total	154	100.0%	
Education Level?			
Below High School	39	25.3%	
High School	61	39.6%	
University Graduate	45	29.2%	
University Post Graduate	9	5.8%	
Total	154	100.0%	
Employment Status?			
Student	0	0%	
Employed	21	13.6%	
Unemployed	133	86.4%	
Retired	0	0%	
Total	154	100.0%	
Computer Literacy?			
Low	17	11.0%	
Medium	59	38.3%	
High	78	50.6%	
Total	154	100.0%	

Out of the 154 responses from the RSC sample, it shows that 48.7% of the response's age between 31-45 years old, the highest group comes second the group age between 18-22 years old with 18.8%

out of the responses, the genders of the responses divided into 65.6% male and 34.4 female. The high school education reported first with 39.6%, 29.2% university graduates and the rest between postgraduate and below high school. The computer literacy revels that 50.6 % have high computer skills and 38.3% are medium skilled using computers and out of the 86.4% of the responses reported as unemployed as shown in table 6.2.

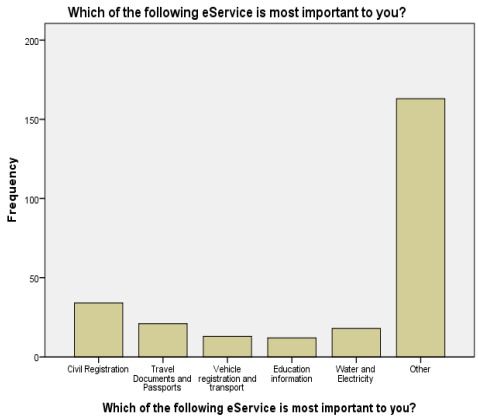
6.3 FINDING FROM SURVEY

From the participants' responses and by looking at their comment we can highlight the following enablers and barriers contribute to successfully adopt the eServices delivery in the given environments:

6.3.1 The importance of eService in Education and Health during instabilities

Table 6-3: eService priority – LSC Sample

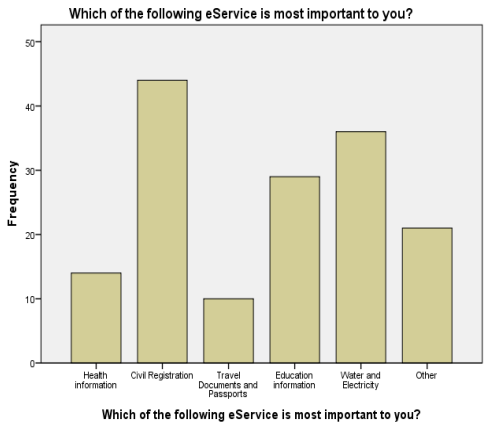
LSC-Sample Which of the following eService is most important to you?		
Variables	Frequency	Percent
Civil Registration	34	13.0%
Travel Documents and Passports	21	8.0%
Vehicle registration and transport	13	5.0%
Education information	12	4.6%
Water and Electricity	18	6.9%
Other	163	62.5%
Total	261	100.0



When participants of the LSC-Sample and RSC-Sample were asked about the most important eService(s), the results as revealed shown in table 6.3 and Table 6.4. The emerged themes out of the respondents' comments are highlighted and further discussed next.

Table 6-4: eService priority – RSC Sample

RSC-Sample Which of the following eService is most important to you?		
Variables	Frequency	Percent
Health information	14	9.1%
Civil Registration	44	28.6%
Travel Documents and Passports	10	6.5%
Education information	29	18.8%
Water and Electricity	36	23.4%
Other	21	13.6%
Total	154	100.0%



6.3.1.1 Education

The education sector in Syria is in a critical situation where students experience difficulties in accessing education with different aspects of needs. A report by (Information Management Unit, 2016) shows that 44% of the Syrian schools have stopped functioning due to a security reason where a huge amount of bombardment on schools' buildings found in the areas of conflict. Which led some respondents to stress that the lack of funding, using the school as a shelter and shortage of teachers have an impact on the education process as well. When the participants were asked about the most important eServices, the majority commented that education is very important, especially, for their children's future. Their comments revealed that a huge number of students have been dropped out of schools, due to lack of transportation in some areas as well as the burdens in purchasing books, stationery and other school materials and the lack of special equipment for the high number of disabled children. The Office for the Coordination of Humanitarian Affairs (2016) reported that "Children are withdrawn from school to be breadwinners, exposing them to exploitation, child labour, and recruitment into armed groups and early marriage" and "After five years into the crisis, 5.7 million children and adolescents in and out of school" . eService in such environment would facilitate the continuation of students education and eliminate many of the aforementioned barriers via online learning. By having a connection to the internet, this would bridge education divides and widen access to quality education for all. Furthermore, a faster broadband connection would

maximize the opportunity for e-learners. In addition, the student can access from anywhere and at any time to education martial.

6.3.1.2 Health

People in an unstable country i.e. Syria could benefit greatly from a remote consultation that eService provides, with this technology, they also can gain access to a vital health information and healthcare services. In Syria, Over 11 million people are in need of health assistance (Information Management Unit, 2016), where the limited numbers of hospitals and health centres are unable to provide such services, especially with the war is still going and many of the health locations have been bombarded. Using mobile communication technology to access or to obtain health information even through a simple text message could work as powerful tools to improve health (United Nations, 2014a). Furthermore, social media may play roles to disseminate information about health treatments or physicians, medical information and advice. Some respondents from the LSC-Sample stress the importance of having alternative solutions for having to go to a distant location to get treatment. The lack of simple knowledge of some symptoms causes many deaths, where they were depending on local doctors who have either fled the country, detained or died as a consequence of the war.

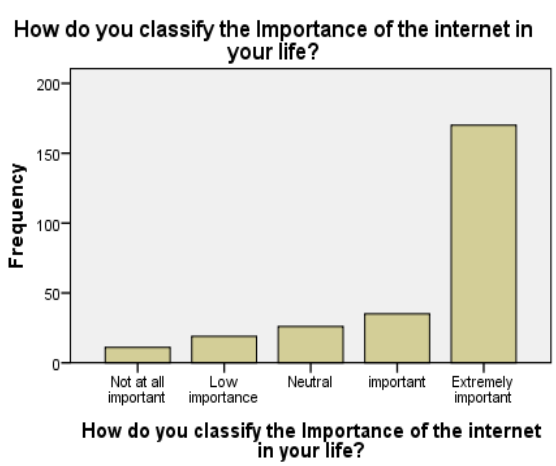
6.3.2 Connectivity considered as an important issue in unstable society.

When we asked the participant about their opinion of the importance of connecting to the internet, the results revealed that 65% of the respondents from LSC-Sample felt that connecting to the internet is “Extremely Important”. Furthermore, some comments from the participants show the attitude of how important to be connected, “the internet is a lifesaver” as stated by one of the responses. Furthermore, “Under the current situation in Syria, the internet plays crucial roles in term of security and protection”. On the other hand the result from the second sample (RSC-Sample) revealed that 55% of the respondents also “Extremely Important”, “it is heartbreaking not

to be able to be in contact with the loved one inside Syria, it is also important to be able to download some important documents through the internet coming from Syria, as the host country demanding for" as suggested by one of the participants. Connecting people who are living in unstable society play crucial roles in improving humanitarian services, such as Safety and security. From the RSC-Sample few responses revealed that they rely on the UNHCR published information related security and safety as shown in tables 6.5 and 6.6.

Table 6-5: importance of connectivity from LSC sample

LSC-Sample: How do you classify the Importance of the internet in your life?		
Variables	Frequency	Percent
Not at all important	11	4.2%
Low importance	19	7.3%
Neutral	26	10.0%
important	35	13.4%
Extremely important	170	65.1%
Total	261	100.0%



Furthermore, it gives the chances for refugees and displaced people to be self-reliance. Some people highlighted through their comments about their online Jobs, where the work opportunity is restricted for refugees in some host countries such as Jordan.

People surveyed from the LSC-Sample 20.3% using 3G mobile broadband technology, 23.8% using the 2G cellular network on a basic phone, 16.1% Internet delivered via a phone line, 14.2% Satellite broadband Technology and 25.7% have no internet access at all. On the other-hand people surveyed from RSC-Sample indicate that they using 3G mobile broadband technology with the rate of 79.2% and the rest have no internet access at all as shown in tables 6.7 and 6.8.

Table 6-6: importance of connectivity from RSC sample

RSC-Sample: How do you classify the Importance of the internet in your life?		
Variables	Frequency	Percent
Not at all important	5	3.2%
Low importance	6	3.9%
Neutral	20	13.0%
Important	38	24.7%
Extremely important	85	55.2%
Total	154	100.0%

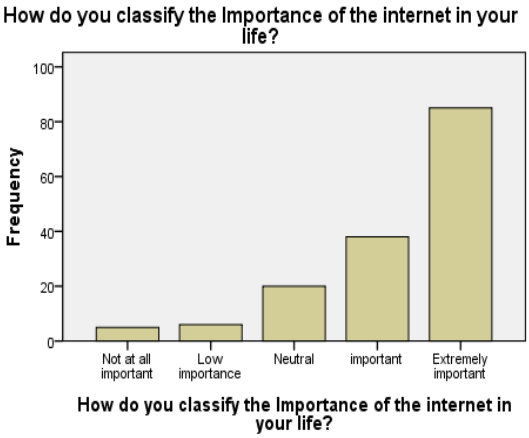


Table 6-7: Internet access type LSC sample

LSC-Sample What type of access to the internet do you have?		
Variables	Frequency	Percent
I use 3G mobile broadband technology	53	20.3%
2G cellular network on a basic phone	62	23.8%
Internet delivered via a phone line	42	16.1%
Satellite broadband Technology	37	14.2%
I have no internet access at all	67	25.7%
Total	261	100.0%

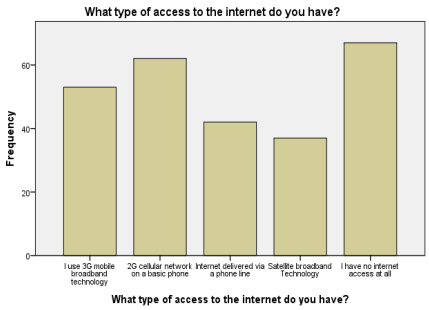
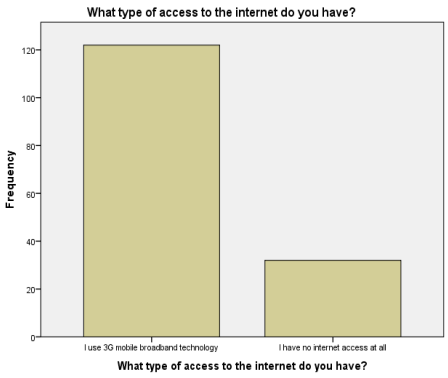


Table 6-8: Internet access type RSC sample

RSC-Sample What type of access to the internet do you have?		
Variables	Frequency	Percent
I use 3G mobile broadband technology	122	79.2
I have no internet access at all	32	20.8
Total	154	100.0



6.3.3 People Awareness of the innovation.

The awareness and usage among the population of the LSC-Sample are relatively low. According to the surveyed responses, 45.2 percent of the citizens were not at all aware of eServices, 10.3 slightly aware but not using them where 17.6 percent were moderately aware and 9.2 reported using the services and they are extremely aware. This indicates that half of the surveyed populations have not experienced the benefit of this technology, otherwise, a huge impact would reflect on the successfulness of the implementation. See figure 6.4.

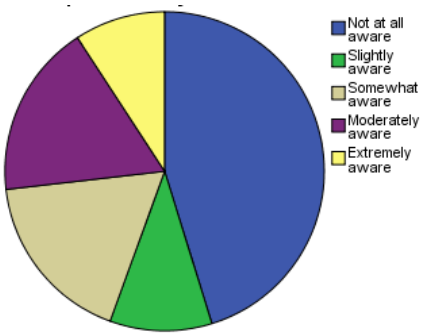


Figure 6-3: Awareness from LSC-Sample

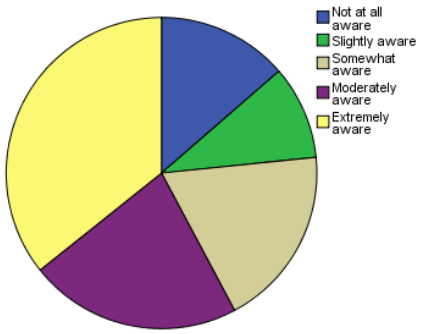


Figure 6-4: Awareness from RSC-Sample

On the other hand, awareness and usage are much higher among the population from the RSC-Sample. The result reflected that the majority of 35.7 percent of the responses are "Extremely aware", 22.1 percent moderately aware, 18.8 percent somewhat aware and 13.6 percent are not at all aware. This result indicates that a significant eServices implementation in place in the host countries and different strategy for delivering online services compared with the Syrian eGov strategy approach. See figure 6.5. By raising the awareness of the benefits of eServices through

social media, for example, this allows for more people to adopt this technology and greater rewards and benefit for all stockholder, as a result this resulted in maximizing the eGov capability and benefits.

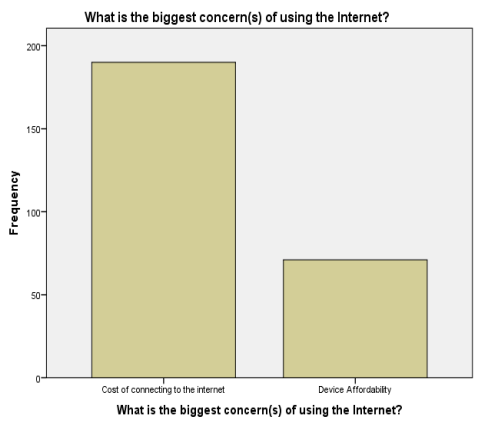
6.3.4 Financial constraints and devices' affordability.

The biggest concerns of displaced people and refugees are the cost of connecting to the internet or the affordability to buy a device due to rules and regulations put by some host countries on the right to work for those people, their displacement that requires unpredictable expenses and their movements that also required extra funding.

Furthermore, the frequent rising of the prices under the situation of the war inside Syria puts even further encumbrances on the citizens which prevent people from using the internet freely and without worrying about their bills. The following question was asked people from both samples: What is the biggest concern(s) of using the eService and the internet? The responses from LSC-Sample revealed that the Cost of connecting to the internet is our most concerns by 72.8 percent, they also were concern about the cost of Device Affordability by 27.2 percent as shown in table 6.9.

Table 6-9: Financial constraints LSC Sample

LSC-Sample What is the biggest concern(s) of using the Internet?		
Variables	Frequency	Percent
Cost of connecting to the internet	190	72.8
Device Affordability	71	27.2
Total	261	100.0

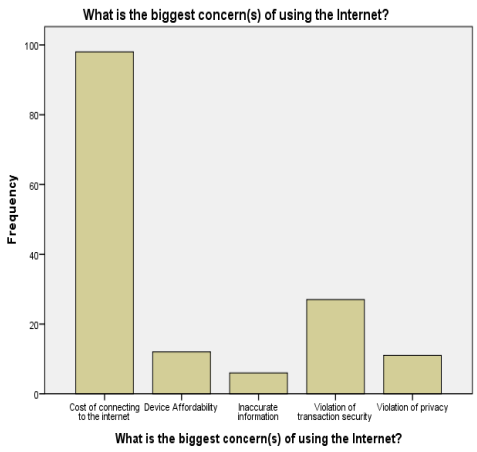


Responses from the RSC-Sample Sample (Table 6.10) show that Cost of connecting to the internet also was a huge issue with a majority of 63.6 percent, Device Affordability just 7.8 percent concern,

people from this sample were worried about Violation of transaction security with rate of 17.5% due to the unfamiliarity of the host country languages, the emerging comments indicate that there are people exploiting them by using their data for their own benefit.

Table 6-10: Financial constraints RSC Sample

RSC-Sample What is the biggest concern(s) of using the Internet?		
Variables	Frequency	Percent
Cost of connecting to the internet	98	63.6
Device Affordability	12	7.8
Inaccurate information	6	3.9
Violation of transaction security	27	17.5
Violation of privacy	11	7.1
Total	154	100.0



However, the financial constraint of using the internet is less painful when you divide the bill amongst the users, as stated by few comments.

6.3.5 Sufficient online services and effective functionality

The availability of eServices that the Syrian eGov provided seen as little by 28.4 percent of the respondents from the LSC-Sample, where there is no any indication of this issue from the RSC-Sample (an indication of eServices availability in host countries)(see table 6.15 & 6.16). As the result of the survey shows that only 37.2 percent answered “YES” to whether the population of the LSC-Sample have ever visited any of the government websites and 62.8 percent answered “NO”, this indicates that no many eGov institutions have implemented eServices or started to communicate with their citizen electronically, table 6.11 indicating those results.

Table 6-11: Frequently visiting the Government websites – LSC Sample

LSC-Sample Have you ever visited any of the government websites?		
Variables	Frequency	Percent
Yes	97	37.2
No	164	62.8
Total	261	100.0

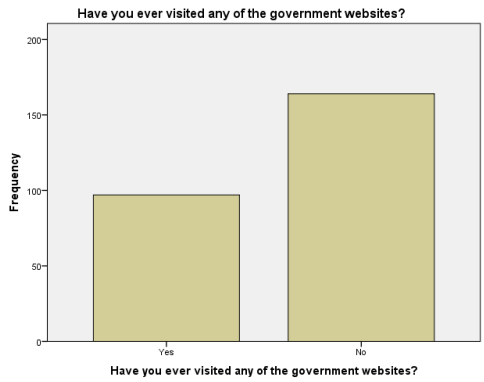
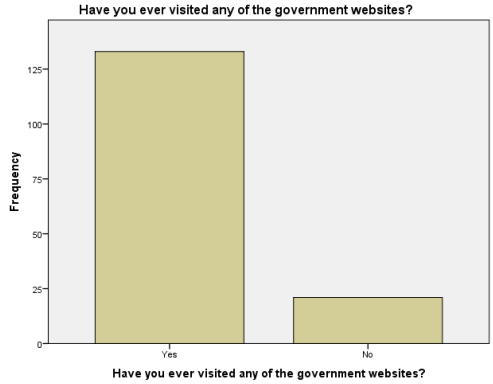


Table 6-12: Frequently visiting the Government websites - RSC sample

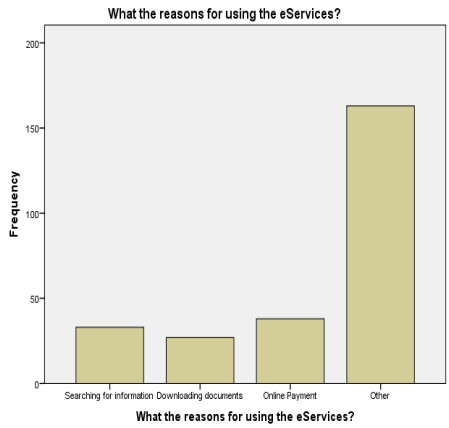
RSC-Sample Have you ever visited any of the government websites?		
Variables	Frequency	Percent
Yes	133	86.4
No	21	13.6
Total	154	100.0



As some comments from this Sample responses suggested that establishing kind of partnership and collaboration between the governmental sectors would make different in the eService delivery, especially, the duplicate and the redundancy of the Civil Registration, where the result shows that 13.0 percent from LSC-Sample seen this service is important but require a collaboration with different government arms to be fully effective, this also true for the RSC-Sample even more important to the people who are living outside Syria where the result revealed that 28.6 percent are cared for such eServices due to the demands by the most host countries for the refugees civil documentation, such as mirages certificate, Birth Certificate, personal identification, family cards .etc. as some responses noted (see tables 6.3 & 6.4). The huge responses with the rate of 86.4 percent from the RSC-Sample that answered “YES” to whether they have ever visited any of the government websites (see table 6.12).

Table 6-13: Attractive eServices – LSC Sample

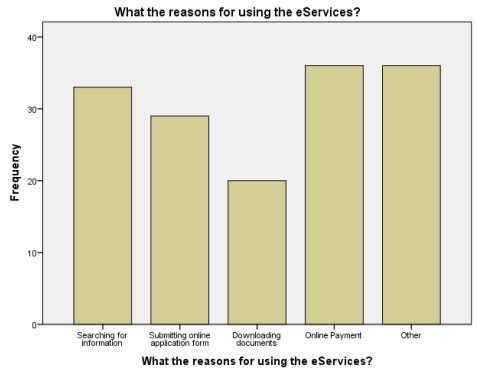
LSC-Sample What the reasons for using the eServices?		
Variables	Frequency	Percent
Searching for information	33	12.6
Downloading documents	27	10.3
Online Payment	38	14.6
Other	163	62.5
Total	261	100.0



This indicates that the implementation of eServices in those countries have reached an advanced stage compared to the Syrian one, furthermore, also indicate that the people are aware of the different type of eServices and have adequate digital literacy to deal with modern technology

Table 6-14: Attractive eServices – RSC Sample.

RSC-Sample What the reasons for using the eServices?		
Variables	Frequency	Percent
Searching for information	33	21.4
Submitting online application form	29	18.8
Downloading documents	20	13.0
Online Payment	36	23.4
Other	36	23.4
Total	154	100.0



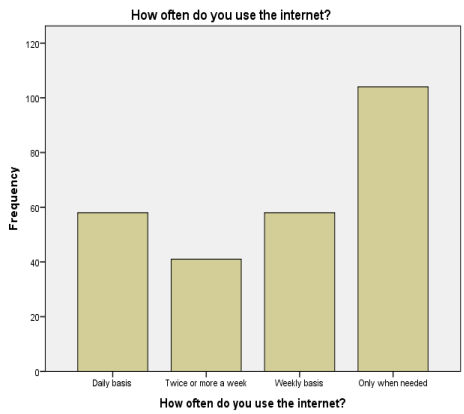
The following tables (table 6.13 &6.14) show the most eServices that attract users and the most used eServices from both samples, for example, the 23.4% online payment from the RSC sample against the 14.6 from the LSC sample indicate the advanced eServices in the countries hosting refugees compared with the one running in Syria

6.3.6 Digital literacy

Digital Literacy is considered as one of the major factors that contribute to eService adoption. We first asked the population from the tow samples on the amount of time in using the computer or other devices for surfing the internet

Table 6-15: Using the internet- LSC Sample

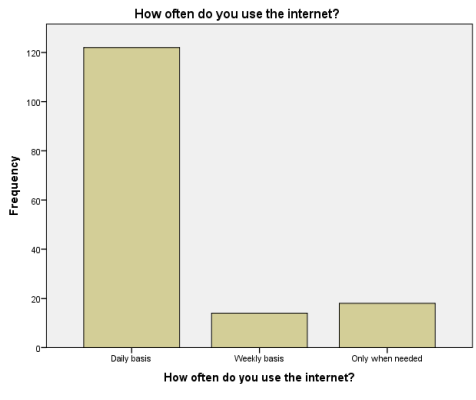
LSC-Sample How often do you use the internet?		
Variables	Frequency	Percent
Daily Basis	58	22.2
Twice or more a week	41	15.7
Weekly basis	58	22.2
Only when needed	104	39.8
Total	261	100.0



The survey reveals that 39.8% of the responses from the LSC sample using it when it needed and 22.2% on a daily basis, where 79.2% on daily basis from the RSC sample see tables 6.15& table 6.16.

Table 6-16: Using the internet- RSC Sample

RSC-Sample How often do you use the internet?		
Variables	Frequency	Percent
Daily Basis	122	79.2
Weekly basis	14	9.1
Only when needed	18	11.7
Total	154	100.0



With regards to digital literacy in helping with eServices, the results revealed that 12.3 percent of the LSC-Sample don't know how to use the eService and 10.4 of the RSC-Sample also have the problem of using the system as shown in tables 6.17 and 6.18.

Table 6-17: Attitudes towards using eGov services - LSC Sample

LSC-Sample Reasons for not using Government's websites?		
Variables	Frequency	Percent
I have a negative attitude against them and don't trust the electronic transactions	7	2.7
I prefer the traditional way of providing the service	36	13.8
I don't know how to use the e-service	32	12.3
I believe I don't need them	14	5.4
eService Not available.	74	28.4
Other	98	37.5
Total	261	100.0

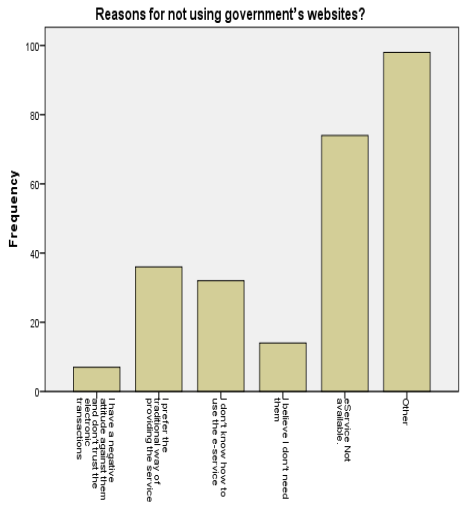
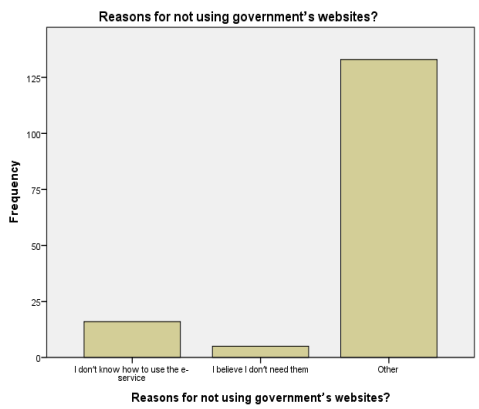


Table 6-18: Attitudes towards using eGov services - RSC Sample

RSC-Sample Reasons for not using Government's websites?		
Variables	Frequency	Percent
I don't know how to use the e-service	16	10.4
I believe I don't need them	5	3.2
Other	133	86.4
Total	154	100.0



The result indicates that there is a portion of the population required digital literacy in order for them to be able to start communicating with the government electronically. The level of literacy is varied among different social groups, youngster for example, whose find playing computer games

very pleasurable time for them, it increases their digital literate indirectly, also different people from different background such as rich people who could afford the technology equipment and who be able to afford to attend training sessions might have a better knowledge of computer skills, moreover, refugees who are living in cities would have more computer-literate than those who are living in camps or in small primitive villages. Furthermore, for many Syrian people who have fled the country to countries with different language than Arabic, they found it a huge barrier to use the eService, especially, since most of the computers and mobiles languages have been written in English and or in the host country language, this creates a new barrier for the people to use the internet.

Table 6-19: Devices used – LSC Sample

LSC-Sample What type of device(s) you use to get connected?		
Variables	Frequency	Percent
I have my own PC	42	16.1
I use libraries to have access	27	10.3
I use Internet Cafes	40	15.3
I use mobile phones	152	58.2
Total	261	100.0

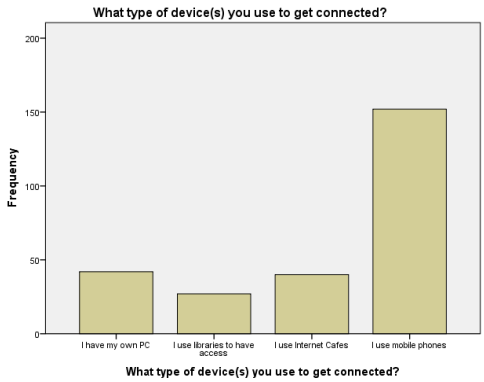
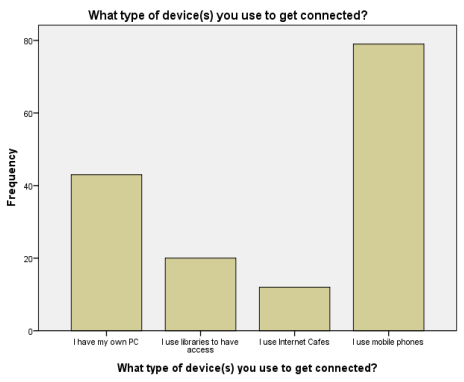


Table 6.20, show the type of devices both samples most using regularly.

Table 6-20: Devices used – RSC Sample

RSC-Sample What type of device(s) you use to get connected?		
Variables	Frequency	Percent
I have my own PC	43	27.9
I use libraries to have access	20	13.0
I use Internet Cafes	12	7.8
I use mobile phones	79	51.3
Total	154	100.0



Also the way of connecting to the internet to use the eServices whether, from home PC, Mobile phones, local library or internet café shop may play a huge role in elevating the standard of the digital literacy among the populations of the samples. The population of the LSC sample using mobile phones to get access to information with 58.2% also more than half of the RSC sample population using mobile communication with the rate of 51.3% as shown in tables 6.19 & 6.20.

6.4 CHAPTER SUMMARY

The finding reveals the main obstacles (from the refugees and displaced Syrian people's opinions, beliefs and attitudes) to successfully adopt eService in unstable societies which would allow people to experience its benefits. This is a very challenging domain, notably, for security issues, political instability and access to relevant affected citizens which limits what method can be applied. We have examined two samples of the Syrian populations (inside and outside Syria). The novelty of this research is reflected in a quantitative survey that the result of analysing the associated data describe the current state of implemented eService in the Syria eGov, its benefit and the challenges facing displaced people and refugees (inside and outside Syria) in using the eService system through their interaction with the government, electronically. The aim of the current research was to examine elements have emerged from the literature review that thought to have an impact on the successfulness of eService delivery which people in unstable societies may face. Through conducting a questionnaire-based survey and based on the finding, we can conclude that the most common elements that will affect the success of the adoption of eService delivery system for Syrian people, who are considered refugees and displaced people, are: The importance of eServices, Connectivity, Awareness, eService Availability, Financial constraints and Digital literacy. Hence, these elements will be discussed, thoroughly, in chapter 8. Where we will adopt the institutional theory as a theoretical lens to have a deeper perspective on the above challenges.

However, in this study, we developed a novel method to capture input from groups of displaced people based on paper-based and virtual- based survey. We applied this to Syrian refugees based in Turkey and Jordan ..etc. as well as people within Syria itself. The results were very promising with 1634 partially completed responses received and 415 fully completed responses. The results indicate possible areas of good practice in the use of technology to support and engage refugees. It is this survey that has prompted the need to conduct follow on fieldwork since the responses indicate really interesting examples of supporting and integrating activity, by conducting the following case studies, to follow up with field work to try and capture this good practice (the follow-up work presented in chapter 7). The potential for capturing good practice in supporting displaced and refugee people that best integrates with local communities is huge, in the Syria, across the EU and the Middle East. To meet our potential we are looking, in chapter 7, through comparison of three different case studies, at how technology can support Governments in supporting refugees.

7 CHAPTER 7

CASE STUDIES AND FINDINGS

7.1 OVERVIEW

This study aims to understand the full set of best practice in supporting refugees and displaced people within a positive capability approach that would help towards answering the research questions and realizing its objectives. This study builds on our previous study (chapters 6, 2&3) into Syrian refugees and displaced people in Jordan, Turkey and across EU and within Syria itself, to capture examples of good practice in supporting the provision of social welfare, education, health services and encouraging self-reliance and integration. Our previous work, in chapter 6, identified some really interesting result, namely that there seemed to be some examples of good practice in the provision of these services and in encouraging self-reliance and integration.

The survey results show improved awareness of and access to online government services and expose the need to conduct follow-on field work to investigate possible areas of good practice in the use of technology to help governments support and engage refugees. Hence, the study in chapter 7, will capture and understand this good practice in its context, which will help inform the support of displaced people more widely.

Implementing eService activities within unstable environments requires more attention, to increase its availability, affordability and accessibility in an efficient and an effective way. The findings of this study shed light on elements that contribute to successful implementation of eService initiatives in unstable environments. The study utilises a qualitative research approach through adopting three case studies of eService activities from Syria (the source of the displaced people) and Turkey (the host country for Syrian refugees), n the attempt to highlight the factors contributing to successfully adopting eService by displaced and refugees people.

In order to achieve the aim of the current study, the chapter structured as follows and illustrated in figure 7.1. Section 7.1 discusses the research methodologies used to collect the data from case studies. In section 7.2 Case Studies discussed, follows in section 7.3 the qualitative findings from each case study presented, and in Section 7.4 summary.

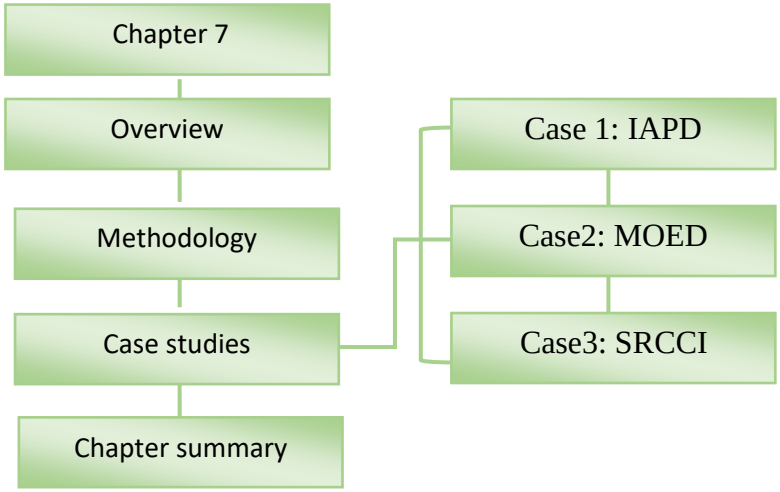


Figure 7-1: Chapter 7- Case Studies Outline.

7.2 METHODOLOGY

We adopted comparison case studies from three different sectors, thought to provide some sort of eService to people in countries under pressure (war, political pressures, social pressures, economic pressures). They were assumed to provide eService to beneficiaries, for example, to displaced and refugee people. Case study method allows for the linking of theoretical concepts which emerged from the literature review and the empirical data that was collected from the field study (Yin, 2006). It usually used for a better understanding and explanation of real-life events and complex phenomena (Remenyi, Williams, Money, & Swartz, 1998; Yin, 2006). Hence, we consider the case study approach as a suitable method for our research as it gives us an insightful understanding of the eServices provided in societies with different levels of instability. The differences and similarities among the undertaken case studies emerge from the process of comparing and

contrasting the finding from each case (Yin, 2003). The emerging and formulated new theories, based on the data observed and collected from decision-makers, allow for a better understanding of the running of eService activities in the giving environments.

The result of the cross-case comparison and the salient outcomes were listed as a set of themes which were then discussed through the lens of the Institutional Theory in chapter 8. This research has gone through Ethical Review at the Faculty of Technology at the University of Portsmouth. The Ethics Committee has issued their Ethical Opinion as a Favourable Ethical Opinion on the 14 June 2016 with Ethics Committee reference: AA1.

7.2.1 Interviews from the case studies

We used case study interviews as the main source of data. In addition, desk research and literature review have been performed to aid data collection and the analysis of the undertaken case studies. The process took place between October and December 2016. We conducted field-study and several Skype-based semi-structured interviews with different stakeholders and experts from The Immigration and Passports department based in Syria, the Ministry of Education based in Syria, the Community Centres for Syrian Refugees based in Istanbul and to build on existing links with a humanitarian organization, (See table 7.1 for more detail).

Skype interviews and hiring trusted people to work as mediation in side Syria were conducted due to the fact that the topic was challenging to investigate inside Syria, given the potential dangers and issues of access to relevant people and stakeholders as well as given the current geopolitical context which allowed for the involvement of multiple agencies and, people being distributed across countries. Thus, Skype interview and mediation were suitable approaches to be used to collect data for this phase of our research alongside with the field-study approach.

The interviews expose and highlight issues that affect eService development and delivery to citizens of unstable societies, for example, Syria.

An interview with the former National Director of the project for the modernization of eServices and eGov portal (PMEP) in the Ministry of Communications and Technology in Syria stated that "*The Syrian Civil War, which began in March 2011, has affected all aspects of life and destabilized the country's infrastructure. Today, Syrian citizens may face difficulty and danger when travelling to and visiting government sites to use offline government services. This demand for services by Syrian citizens, therefore, presents a major challenge for both the Syrian government and governments hosting Syrian refugees. eServices are therefore an attractive option for mitigating these difficulties and dangers….. in this sense, the most effective questions to be asked should be concise, clear and about the eServices challenges and possible delivery solutions."*

However, the questions for the interviews were designed and formulated to fill the gaps that emerged from the literature review and from a previous study, such as chapter 6. Thus, they were designed around a set of important issues such as the past, present and future of the eService provided, accessible services by vulnerable people and main challenges facing the implementation in the given situation.

The questions designed (as in chapter 6) in two dimensions: The first one considers elements emerged from chapters 2,3 & 6 such as (Political Situation, Citizen demand, Corruption, Poverty, Public Awareness, Digital divide, Connectivity, Social media, Mobile communications, Cloud computing, Leadership and Top Management, Legislation and regulations, Staff Training and IT Skills, Allocating Fund for implementation, Integration, NGOs, Citizen Trust and security).

The second dimension is concerned with the four institutional theory pressures which were introduced in chapter 3, namely: Politic, economic, social and technology where the discussion under each pressure highlights the influence of the above variables (first dimension), based on its definition, on the eService adoption (discussion in detail in chapter 8).

7.2.2 Interviewees' profile

The number of participants is 23 people (12 from Syria, 11 from Turkey), some of them have an executive role in decision making. Table 7.1, lists all stakeholders who were interviewed. Some of the participants were chosen due to their involvement in the development of their country's eGov, others were chosen because of their roles in providing services to citizens and refugees as their voices count in enhancing the services' delivery process and the way it has been handled. In addition, the interview with the former National Director of the project for the modernization of eServices and eGov portal (PMEP) in the Ministry of Communications and Technology in Syria has enriched the findings and reshaped our questions and identified new ones.

Table 7-1: List of interviewed participants.

Role of Participants	Institution	Country
IT director. Registration System director. Software development engineer, back office. Data entry clerk. Service provider officer.	Immigration and Passports Department (Ministry of Interior)	Syria
Middle Education Department Director. Informatics Department Director. Technical Team leader (data entry & registration). Curriculum and Guidance Director. School principal and teachers.	Ministry of Education	Syria

UNHCR employees. IOM (International Organization for Migration) employees Team Leader, NGOs registration back office. NGOs service provider agents. Project Coordinator. Turk-cell IT, director. Small Project Istanbul staff. Aldar community centre staff. Olive Tree community centre staff.	Community Centres for Syrian Refugees in Istanbul(CCSRI)	Turkey

7.2.3 Conducting Case Studies Process

- Recruitment of participations – general steps
- Identifying eligible participants.
- Adequately explaining the study to the potential participants.
- Recruiting an adequate sample based on study goals and design.
- Obtaining informed consent and maintaining ethical standards.

7.2.3.1 The Research Population

The research population and participations are adults stockholders chosen mainly because they have eService expertise and have involved in the policy making from countries with different level of instability.

7.2.3.2 Sampling Strategy

Purposive sampling was used in this research. Based on three stakeholders groups with between 3-5 of experts for each group as following: 5-7samples from first case study(immigration and passport department- Syria), 5-7 samples from the second case

study(Ministry of Education-Syria), 7-12 samples from the third case study (Syrian refugee community centre in Istanbul- Turkey) , which makes it in total between 17-26 participants in from all countries. The participants will be selected with regard having an experience on implementation of eService from countries, which have a different level of instability (very stable country, medium stable country, and unstable country) . Moreover, they need to have a practical understanding of Service delivery system.

The chosen sample will be interviewed for about 90 minutes. Writing notes and some other related technical preparation will be added on top of the dedicated time for the verbal interview.

Note: due to the current circumstances in Syria, the Syrian participants will be interviewed with a special consideration about their safety, for example conducting an interview via the internet (for the safety of both participants and researcher).

The participant will be asked, at the first glance, if he/she prefer to have the interview verbally, or if they would prefer a written questions, where they could answer them on their leisure time, furthermore, we will be very careful of adopting any methods that might jeopardize or endanger the safety of the researcher or the participants. On the other hand, no risks have been anticipated or concerned for conducting interviews outside Syria.

We have adopted the exclusion criteria to avoid any negative impact on the validity of the study, especially the one that may acquire from bias.

7.2.3.3 Recruitment Strategy – Invitations to Potential Participants

A simple strategy in recruiting participants as following:

1- Contacted some former fellow work(Syrian) who were involve in policy making of the eGov implementation and who has long experience in the field of service delivery system and

2- Maintaining a network and develop a method of communication contact with non-Syrian participants via sending and invitation letter for potential participation.

7.2.3.4 Obtaining Consent

Those invited to take part received a participant information sheet and consent form to be signed before taking part of the data collection exercise. The information sheet explain what data are to be collected, what they are to be used for and their right to withdraw from the study.

The following steps will be considered when obtaining the consent to participant:

1- The researcher will explain verbally the study to the participant, providing all pertinent information as purpose, procedures, risks, benefits and alternatives to participation, time will be given to participants to ask questions.

2- Following this verbal explanation, the researcher will provide the participant with written participants' information sheet and sufficient time will be afforded for the participant to consider whether or not to participate in the research. "Sufficient time" can range from minutes to hours, dependent on how long it reasonably takes to evaluate the procedures, risks, potential benefits, and potential alternatives.

3- After allowing time for the participant to read the participants' information sheet, the researcher will answer any additional questions the participant may have and may obtain verbal agreement to participate in the research.

4- After obtaining the verbal consent, a written consent will be obtained through signing the consent form by the participant. Participants' information sheet and consent form are attached.

5- Filled consent forms will be kept secure on a University of Portsmouth password protected computer. The identities of those involved will not be disclosed.

7.2.3.5 Participant Withdrawal

As a volunteer the participant can stop any participation in the interview at any time, or withdraw from the study at any time before, without giving a reason if he/she does not wish to. If the participant does withdraw from a study after some data have been collected, then the participant will be asked if he/she is content for the data collected thus far to be retained and included in the study. If participant prefer, the data collected can be destroyed and not included in the study. Once the research has been completed, and the data analysed, it will not be possible for participants to withdraw their data from the study.

7.2.4 Research Data Management

7.2.4.1 General

Research data and primary materials will be managed throughout the research lifecycle by addressing the issues of retention, storage and recordkeeping, ownership, security, confidentiality and re-use.

7.2.4.2 Data Collection and Analysis

The data will be collecting might include interview recordings, interview transcripts, video recordings, photographs. The researcher will video and/or Audio record the entire interviews as well as covert them into text based materials for future use then transcribe the text word for

word. The transcribed text then becomes the data that are analysed. The qualitative data collected in the interviews will be content analysed by using NVivo software.

7.2.4.3 Data Storage

This data will be kept secure on a University of Portsmouth password protected computer. The data will be used solely for the purposes of academic research and the identities of those involved will not be disclosed.

7.2.4.4 Personal Data – Confidentiality and Anonymization

We followed the legal framework for processing personal data in the UK which is set out in the Data Protection Act 1998 (DPA). The collected data in forms of hard copies will be kept secure in lockers and soft copies will be kept secure on a University of Portsmouth password protected computer, which can be accessed only by the researcher and supervisors using passwords. The researcher will obtain the participants' agreement on the level at which information could be made publicly, then the researcher will be careful while publishing any personal details or other information, which can disclose participants' name and details. Participants' privacy will be safeguarded by using code names such as interviewee A1, interviewee A2.

Participants should be fully informed about the use of their personal information and researchers must respect participants' expectations of confidence and privacy

Personal data cannot be used freely for further research if this research is not covered by the participants' original consent

Questionnaire or consent form should ensures that you are complying with the Act.

7.2.4.5 Organizational Data

Organizational data will be treated as the same as the personal data. And will be store in the same storage as the personal data, where no one other than me have access to this domain.

7.3 CASE STUDIES

We undertook three case studies in order to examine, understand and inform good practice in policy making that promotes the integration of refugees and displaced people within local communities. In this chapter, we combine findings from the literature review, disk research and the interview results from three case studies. Collectively, recording the use of eServices by both displaced people in Syria, and Syrian refugees in Turkey. Where these case studies cover different levels of eService implementation.

7.3.1 CASE 1: IMMIGRATION AND PASSPORTS DEPARTMENT (IAPD)

The Syrian Ministry of Interior (MOI) holds responsibility for the internal security of the country and its infrastructure, including departments such as Immigration and Passport Department, Traffic Department, Criminal Security Management department and Department of Civil Affairs. The MOI web portal (http://www.syriamoi.gov.sy) includes guidance on passport applications and renewals. These typically take place at the IAPD branch in Damascus, however, branches in other cities also have responsibility for issuing travel documents to Syrian citizens.

For applications made in Syria, applicants must personally submit their application in their city of residence: applications made outside the country must be submitted to the Syrian consulate in the applicant's country of residence. Passport renewal requests made outside Syria must commence at most three months prior to the expiry date.

The necessary documentation for processing a travel application varies by age and sex: All applicants must present proof of Identification (a Syrian National Identity card, an individual civil record. and/or a birth certificate). All adults must provide a non-conviction certificate from the Criminal Security Management Department. Men aged 17-42 must present evidence of Military Service Completion. Women and children (under 17) must present an approval from a close relative. Upon receipt of an application, the IAPD will request an Intelligence Review Report on the citizen, from the General Intelligence Directorate. Additionally, professionals who wish their metier to be recorded on their passport must present certificates of qualification.

This case study indicates that there is a need for implementing an electronic service to reduce administrative workload within the IAPD and throughout involved departments in the MoI.

The interviews with the case participants (IT Director, Registration System Director, Software Development Engineer - back office, Data Entry Clerk, Service Provider Officer) (see section 2) show that until now, few IAPD services have benefitted significantly from digital transformation under the Syrian Government's eGov initiative. The IAPD Director observes that the main challenge to successful eService implementation is integration & interoperability with the government's partner agencies. Furthermore, he predicts that such adoption should reduce the overwhelming paperwork redundancy problem faced by the IAPD.

Contact between citizens and the IAPD is complicated during geopolitical instability. Broadly three levels of service can be identified: traditional local service delivery; service delivery to internally displaced citizens; and, international service to Syrian refugees living abroad. For example, in its simplest form interruption to infrastructure can increase waiting time for services; however, complications increase with the amount and duration of geopolitical stress. Those wishing to apply for a passport must use their local IAPD branch, to deliver paperwork required for the application. Each visit may require travel through conflict hotspots. If the branch becomes inaccessible, or is

closed, or destroyed, the applicant must travel further, perhaps as far as the central IAPD in Damascus. As larger numbers of citizens become displaced and refugees (6.5 million internally displaced, 4,2 million refugees and 4.5 million people in need in hard to reach areas (UNHCR Syria, 2015)) as illustrated in figure1.

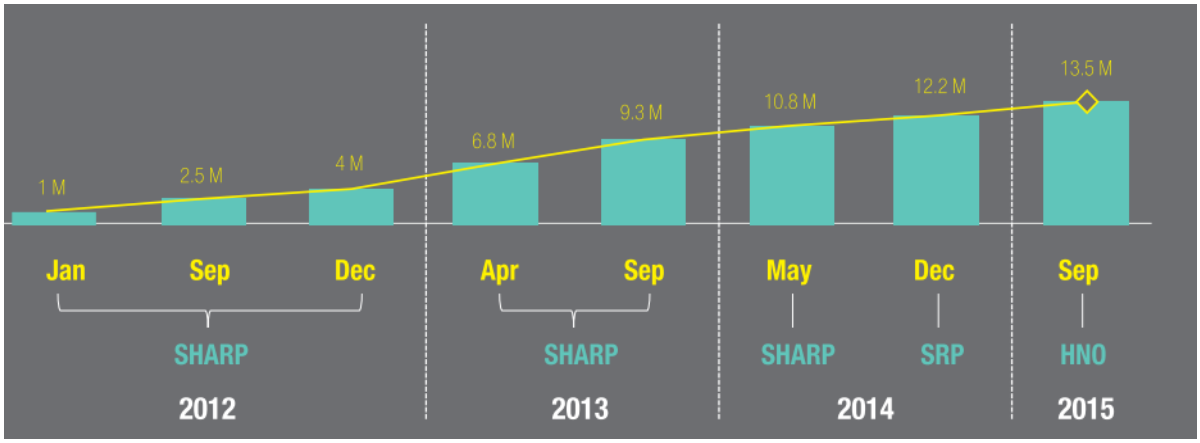


Figure 7-2: Syrian population in need of assistance (UNHCR Syria, 2015)

pressure is also migrated to the IAPD branches which remain accessible. The Syrian government maintains control in 40% of the country, including the capital Damascus. Citizens who live in (or who are displaced to) these safe zones have easier access to the IAPD and other government departments. Citizens who have sought refuge in other countries (where the primary point of contact is the Syrian Consulate) experience different barriers to government service use (UNHCR, 2014a). The IAPD Director highlighted that many of these consulates have closed due political differences between host countries and the Syrian government. Displaced citizens may, therefore, rely more than others on electronic services as their only means of government interaction.

Interviews with a Data Entry Clerk and a Service Provider Officer showed that most of the recent applications for replacement passports (due to loss or damage) and applications for children's passports came from people with a temporary home address. The task of issuing official documents to displaced people and refugees is complex and problematic. There is demand for policymakers to develop a model that fulfils the requirements of Syria's citizens; reduces the burden on the IAPD,

and establishes links with NGOs and UN agencies so they can facilitate applications among Syrian refugees living abroad. The IAPD Director showed concern at the lack of automation and integration when delivering services. He highlighted that there is some digital sharing with partner agencies, however, this is restricted by a lack of technological overlap. Legacy reporting systems that can take weeks or months may also impede the process.

When interviewed a Software Engineer back-office revealed that although an online passport application service has been partially developed, a combination of management uncertainty, fear among employees and disruption due to the geopolitical unrest had led to implementation delays and evolving functional requirements.

7.3.2 CASE 2: MINISTRY OF EDUCATION (MOED)

Syria is a poor country, but it has a strong basic education system in which there are three key stages: Primary, Middle and Secondary, spanning 6, 3 & 3 years respectively. Primary and Middle school education is compulsory. On completion of Middle school (aged 14), students attend a national examination, the result of which allows them to proceed to Secondary Education; which is divided into two educational bodies: General, which prepares students for university and Vocational which offers industrial, agricultural and craft training. The Ministry of Education (MOED) is responsible for implementing the Educational Curriculum for all stages in Syrian Schools. We conducted interviews with the Director of the MOED Admission Centre, the IT director, a General Projects Manager, a Team Leader [data entry & registration], Policies and Program agents, a school Principal and school teachers. These interviews exposed significant findings related to eServices. Instabilities caused by the civil war are having an effect on the education system and many children are unable to attend school: UNICEF's No Lost Generation strategy reported 134,713 Syrian children out of school (UNICEF, 2016) these include those whose school is no longer able to function and those who have been displaced within the country. UNICEF is supporting these

children with an interdisciplinary approach that targets affected children directly using its Curriculum B program utilising self-learning, distance-learning and accelerated learning pedagogy.

The problem also affects refugees. 207,000 Syrian child refugees in Lebanon and over 230,000 in Turkey have been given places in local public schools, however, the total number of children requiring such places may be much higher. The Director of the Middle Education Department suggests that digital delivery of education material and online administrative functions can be beneficial to Syrian children. The MOED portal (http://moed.gov.sy)already offers an "electronic bag" [sic] for download, containing textbooks and teaching materials for all three key stages; additionally, examination results for Middle and Secondary level are made available online (with secure access). Collective responses from interview participants indicate that current systems for online registration, records and results are considered reliable, but there is scope for improvement and enhancement of services and technical infrastructure if the potential benefits to both students and administrators are to be realized, however finding funding for such projects is a big challenge given the current instability.

7.3.3 CASE 3: SYRIAN REFUGEE COMMUNITY CENTRES IN ISTANBUL (SRCCI)

Between 2011 (when the Syrian conflict began) and 2015 Turkey hosted more than 2.7 million Syrian refugees, 90% of whom lived in urban & rural Turkish communities, whilst 10% were hosted in camps (UNICEF, 2016; IOM International Organisation for Migration, 2016).

Syrian Refugee Community Centres in Istanbul (SRCCI) have been established to improve the self-sufficiency and professional skills of displaced people and to improve social activities between host citizens and refugees through education.e.g. In Istanbul, several supportive organizations are collaborating (Refugee Resources Istanbul, Project Lift, Association for Solidarity with Asylum Seekers and Migrants (ASAM), Turkey Volunteers, Yusra, Small Project Istanbul, The Olive Tree

Education Community centre and YUVA. Each organization contributes in different ways, for example, YUVA has established two community centres (Nizip in Gaziantep & Kırıkhan in Hatay), two vocational training centres (Gaziantep & Konya) and one Children's & Youth Centre in Istanbul. These centres have no gender or age restriction, and incorporate formal and informal approaches to learning, via activities, training and workshops.

An UNHCR employee we interviewed observed that Syrian people are integrating with Turkish society very quickly, assisted by similarities in culture, religion and many other aspects of their lives, but despite integration refugees are still relying on the community centres (run by the Turkish government and NGOs) for food support, non-food items, winter clothing and necessities, hygiene products and services, primary health care clinics, emergency case management, and transportation assistance.

We interviewed the director of one such community centre who highlighted that despite the obvious daily aims of collecting and distributing resources and promoting integration with host communities, they are focused particularly on educating the 'lost generation' of children, helping their families make homes suitable for studying.

An IT director in Turkcell (the largest mobile telephony provider in Turkey) described how mobile technologies are playing significant roles in shaping Syrian refugees. In addition to making government eServices available they also facilitate daily living, for example, Turkcell has developed a mobile application for learning basic Turkish that also includes bilingual (Arabic and Turkish) guidance on accessing essential places such as the nearest healthcare services.

A refugee participant from the Olive tree community centre reinforced this observation on the importance of mobile communications infrastructure, stating that smartphones are the "surviving tool to the majority of us" and highlighted the importance of social media for maintaining friendships and supporting families by sharing "photos and experiences in finding locations, routes

and places, from the moment we fled Syria". Furthermore, refugees who can reach the Syrian government eServices have access to information and can also complete online forms recording births, marriages, deaths and education progress.

This is also reflected by the (UNHCR & Accenture, 2016) "In the world, we live in today, internet connectivity and smartphones can become a lifeline for refugees, provide an essential means for them to give and receive vital information, communicate with separated family members, gain access to essential services, and reconnect to the local, national and global communities around them"

A Project Coordinator described how the Turkish government provides mobile credit worth of 100 TL per month. Despite this connecting to the internet is a familiar and costly barrier faced by Syrian refugees. In the case of running out of credit, it is not uncommon to seek out free Wi-Fi in cafés, large shopping malls and other commercial sites. One of the Syria refugee community centre director during the interview commented on the importance of internet and smartphone communication "Just ask the Syrian refugees, who just arrived in Turkey, about the necessity of the internet connection and having a smart mobile phone, you will be surprised to hear that they are just as important as food and drink and sometimes even more. Syrian refugees have proven that the internet and mobile phone are not luxury items anymore, instead, they are sometimes a lifesaver. The common question amongst refugees that Where can I get Wi-Fi". Furthermore, from a technology point of view, a Software engineer at Turk-cell stated that "The smartphone technology allows Refugees to share internet connection with others via Portable WiFi hotspot or USB and Bluetooth tethering. Where you can turn your device into portable Wi-Fi hotspot or tethering devices together via a USB cable or via Bluetooth to share its internet connection with friends and other family members who run out of internet credit". A response from the Small Project Istanbul employee stated that "Refugees tend to use whatever software available which is free, easy to use and may meets their needs. For an instant, Text Engine, offered by TECHFUGEES (a social

enterprise) is a free software that offers a technological solution and utilized technical possibility to enable and to ease the communications process which meets the needs of refugees. The main beneficiaries are the refugees who just reach Turkish cities and who have a limited data and no internet connection. This solution offering offline text message services to find places, food, internet connection (internet cafe), currency conversions and translations, furthermore, can send a text message in their behaviour to the loved ones to tell them that they ok"Reflection on Case Studies and Findings as they apply to Unstable Societies

7.3.4 Political Influence and Control

Collective responses from interviewees indicated that the Syrian conflict has been shaped in many ways by digital technologies, as well as the online information provided by the Syrian government and its oppositions. They have both used digital information to influence ongoing ground battles, and as a propaganda tool, disseminating updates on the conflict to those inside and outside the country using social media such as YouTube and Facebook. At the beginning of the conflict in 2011, the Syrian government, started an intensive censorship and surveillance campaign; tracking down Syrian activists using traditional methods and also extending the campaign into the digital world. The so-called "Syrian Electronic Army" (a part of the Syrian Government's intelligence community) began to both surveil the Syrian internet, and also harass government opposition as well as neutral international parties (Noman, 2012). Additionally it was claimed that the Syrian Government had made attempts to steal or damage important information that passed between opposition groups, activists and their international allies.

In 2016 the Syrian government increased their control of internet use, announcing that "smartphone handsets not 'authorised' or 'provided' through Government channels would be deemed illegal and would be disconnected from Government-operated networks". On government controlled handsets

some internet services and social media applications are blocked or disabled, enforcing government power and legislation and regulation.

We conclude that digital technologies have a big influence on the political situation during the Syrian conflict.

7.3.5 Mobile communications

The main provider of the internet and phone services in Syria are "SyriaTel" and "MTN". These providers are licensed by the Ministry of Communication and Technology (MoCT) and the Syria Telecommunications Establishment (STE). Collective responses from participants indicated that typical Syrian families may own several smartphones but share one internet access package to last them for a whole month. Most Syrians have family members who have left the country and want to keep in contact with them..

Within Syria, access to the internet is widely available through 3G+, and mobile internet is cheaper than data services provided through landline or satellite: this makes it a better choice for people in rural areas and/or displaced people or for people who are fleeing the conflict and on their way to a safe place. The quality of the mobile connections is throughout Syria is often very poor, except in areas close to Turkey and Jordan where their networks may be available (using SIM cards carried over the border).

An interviewee indicated that "NGOs realized the importance of the smartphone and internet connection among refugees inside camps, therefore they start to give them a top up internet credit and give out chargers for people to use".

A Syrian refugee interviewed in Turkey stated that "*Most of us as refugees we consider a smartphone as the link between our old life back in Syria with the new one in Turkey, it is the most*

precious item I own. It is carrying all my memories of my life, that is the memories of my husband, my kids and my home".

7.3.6 Social media

Social media plays a significant role in the ongoing Syrian conflict. An interview with a UNHCR employee indicated that "*an example of the important role of social media for refugees is that they, on their way to Europe from Turkey, have used social media applications such as Facebook, WhatsApp, and Viber, hugely, to communicate with each other for guides and information on routes and safety of their journey, and also relied on the Global Positioning System (GPS) on their smartphones to get exact locations*". He added that "*on the other hand, some refugees become addicted to the social media application and obsessed to being connected to the internet, in some cases, they spend day and night connected to social media applications, especially if the internet connection is offered free of charge. As they feel homesick, they would like to live the moment with their left-behind family members and connected to their environment which they were uprooted from*".

Humanitarian and aid agencies, governments, partner-private companies and other organizations may positively exploit refugee-use of social media as an inexpensive communication channel and may leverage its popularity for wider service delivery.

7.3.7 NGO Roles

NGOs, agencies (humanitarian & aid) and partner-private organizations that provide emergency-level and infrastructure services are broadly recognised as significant players in improving and elevating the lives of refugees and displaced people - for example - access to electricity is required for refugees to be connected to the internet and thus gain access to information that promotes self-reliance and self-determinism whilst also encouraging personal security..

NGOs can take the lead by delivering services on behalf of (or in cooperation with) a host government. This can encourage and facilitate the adoption of global best practices by bringing international experience into areas of acute need, however, a level of integration with the host country may be needed for the service to be effective and efficient.

NGOs also help refugees to better understand their affairs (health, education, safety and financial situation) by facilitating access to government information, thus also empowering people to adapt to online service access and therefore be in closer connection with the host communities. Additionally, they help ease financial difficulties of those with limited income through the provision of credit and microfinance services, and facilitation of sustainable pricing practices.

Monitoring the presence and migration of people is also undertaken by NGOs via access to their digital services, which saves time, effort and money.

7.3.8 Recap

The case studies involved face-to-face & Skype-based interviews with experts, policymakers, humanitarian aid workers and agency employees who were all connected in some way to Syrian Immigration and Passport Department, the Syrian Ministry of Education, and Syrian Refugee Community Centres in Istanbul.

We found (in countries with high levels of instability) that the main contributory elements to successful eService adoption are:

7.3.8.1 The Political Climate

The political situation plays a significant role in catalysing change: it influences policymakers and civil servants in senior management positions, directing and shaping their decisions; for example, in the first two years of the Syrian conflict, political pressures diverted attention from

the country's ICT Strategy and Operational Plan, resulting in an effective pause in its development. Rapid political changes affect the definition and interpretation of rules and regulations that underpin digital vision and strategy, hence, we observed that political dynamism can negatively impact eService delivery.

7.3.8.2 Mobile Connectivity

We found that mobile phones (especially smartphones) are a strong channel for eService delivery, with users accessing information whenever it is needed, wherever they may be. For those in rural areas (which may include those fleeing conflict, on their way to a safe place or geographically displaced and in temporary accommodation) their smartphone may be the primary channel for access to government services. Aid agencies & countries hosting displaced people recognise how refugees with access to mobile services can more quickly become self-reliant, thus, they provide them with a basic means of communication to empower them at the start of the asylum seeking process; for example, the UK Border Agency provides arriving asylum seekers with a cell phone loaded with initial credit. The availability, quality and cost of mobile internet therefore determines the degree of eServices adoption and success.

7.3.8.3 Social Media.

Social media has many aspects that can help overcome the problems inherent in unstable societies: from the mass-communication opportunities of knowledge sharing, independent journalism, skills marketplaces and education to more highly targeted one-to-one services for example, consulting a healthcare professional for basic or even life-saving medical care. Social media facilitates the continued existence of communities despite geographic dispersion, and encourages the formation of common-interest groups (for example the Facebook group " كراجات المشنططين" (literally: Station of Displaced People). We have observed that social media is critical in solutions to the largest issues as well as addressing acute personal needs.

7.3.8.4 NGOs.

NGOs register the arrival of refugees in camps, in order to facilitate their access to both offline and online services, thus encouraging eService adoption. Monitoring and analysis of this data affords an efficient overview of the refugee welfare (including education, health, safety & financial matters) which can lead to improved communication with refugees, and in turn catalyse self-reliance.

7.4 CHAPTER SUMMARY

eGov can help refugees and displaced people by offering opportunities for connecting them with education, healthcare, integration, security, safety, and employment. Hence, they can share the social, political and economic activities in the digital space. But, many barriers and difficulties associated with the environment, infrastructure, and internet &cost connection in unstable societies (where refugees and displaced people would be found) which prevent the successful adoption of such services and therefore, needed to be addressed.

We captured examples of good practice in supporting the provision of social welfare, education, health services and encouraging self-reliance and integration of refugees with local communities, to realize the study's objectives. Therefore, the scope of the cases studied, in this chapter, is to understand best practice in supporting refugees and displaced people within a positive capability approach.

In our research, we have given examples of positive interaction between the displaced communities/refugees and their hosting communities. This is the 'positive capability' approach and lens that informed us on how we researched the good practice elements in the field studies in unstable countries.

We conclude that technology can enhance the quality of life, or even be the difference between life & death for those people living in and flee from unstable societies. The potential for applied

technological solutions is significant, a video call to a far-away medical professional, finding a route to a safe place, keeping in contact with displaced family members.

In order, to have a deeper understanding of the factors affecting the eService adoption, by the Syrian refugees and displaced people, we have used the lens of Institutional Theory in chapter 8, for that purpose. We, therefore, examined the eService related changes (factors affecting the adoption) in the given environment through the influence of the main key pressures namely: economic, political, technical and social.

8 CHAPTER 8

REVISE THE INSTABILITY FRAMEWORK

8.1 OVERVIEW

In chapters 5, 6, 7 we discussed the findings that emerged from the undertaking primary studies, we argued that the found elements have a degree of impact on adopting eServices successfully in conflict zones that based on examples and activities and best practices in a different level of instabilities. Collectively, both types of elements (enablers and barriers) are forming the output part of the final instability framework shown in figure 8.2. however, it is important to comprehend, theoretically, the concepts of the found barriers and enablers. In this chapter, we are discussing those elements through the lens of institutional theory for the found barriers and through the reinventing government principles for the found enablers.

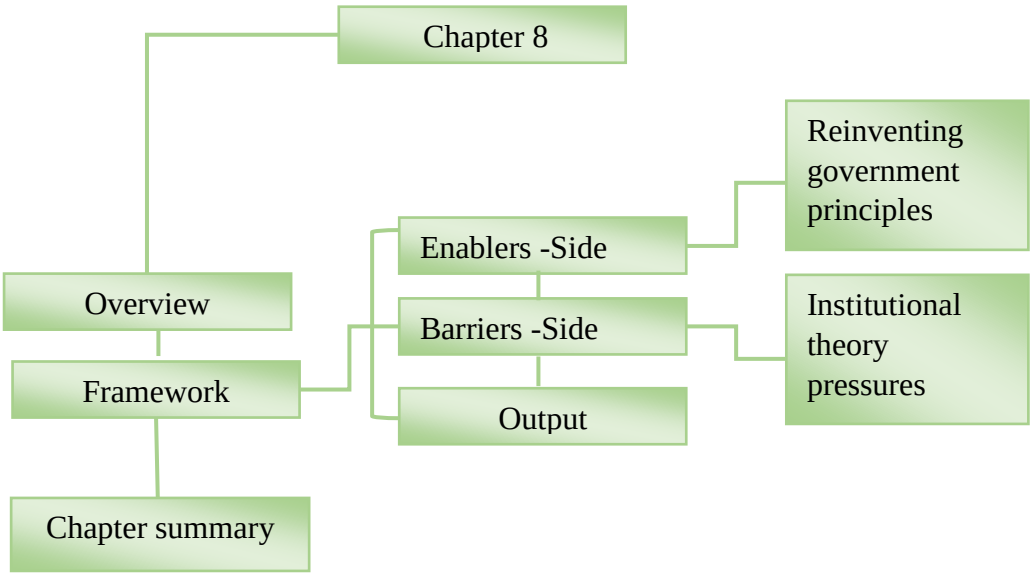


Figure 8-1: Chapter 5 overview

To achieve the objective of this chapter: In section 8.1, we give an overview of this chapter, follows in section 8.2 Enablers side of the framework discussed through applying the reinventing government principles on a different level of instability context and extended to include new principles. Section 8.3 Barriers side of the framework discussed through the lens of the Institutional Theory and finally in section 8.4 Chapter summary.

8.2 INSTABILITY FRAMEWORK

In chapter 3, we defined the initial instability framework and highlighted its main components which found as a result of our critical literature review of the related topics. In which, we have defined the three main components namely: Barriers, Enablers and Outputs that are forming the initial instability framework. We have discussed the enabling & Barriers factors, respectively, which emerged from examining the literature review in the search for elements that contribute to the adoption of eServices during instability. Barriers elements thought to be understood through the lens of the institutional theory pressures. The same for the Enabler elements thought to be looked at through the lens of the reinventing government principles by Osborn & Gabler (1992) and during the information age by Heeks (2001). The Output component is the collections of both sides which resulted from the primary research.

The initial instability conceptual framework has been updated to reflect the research findings from the primary studies and forms our final instability framework. Figure 8.2 illustrates the final instability framework and shows the updated parts and components which was a result of our primary research study as following :

- The development of the initial Instability Conceptual Framework give us the start point and the solid standing from which we start collecting our data. The emphasise of our study was on the eService delivery system during geopolitical instabilities which targeting the people who forced to be uprooted from their environments and surroundings and becoming

displaced and refugees people. This framework builds on prior literature in the area of eService development in government under stress and makes use of similar frameworks to facilitate a better understanding of the nature of the eService development process, in particular, to identify barriers and success factors. We adopted the Osborn and Gaebler's work, 'reinventing government', and work of Heeks in the 'information age' that identifies a set of principles of government strategy best practices, in which we will adopted their principles as a guides and to be repeated in high level of instability (those are the enablers side of the FW that will be extracted as a result from the conducted study in chapter 5). On the other hand we adopted the Institutional Theory to understand the barrier to eService during instability (those are the barriers side of the FW that will be extracted as a result from the conducted study in chapters 6 and 7).

- We compared eGov strategies among countries with different levels of stability. Where three cases of different level of instability were chosen namely: High level represents Syria, Medium level represents Saudi Arabia and Low level represents UAE. The idea of eGov strategy and instability is defined and discussed. Three eGov strategies from three countries are selected (Syria, Saudi Arabia and the United Arab Emirates). The eGov maturity status of the three countries is presented. The finding of the eGov strategies of the three countries with rankings is presented in the results section. Where each country has its own distribution of strategy aspects. We Concluded our work about learning lessons from best practices from the low level and the medium level for policymakers in the high level of instabilities to consider and to appreciate.
- The study in chapter 5, contributes to understanding the eGov strategy in a different level of instabilities that highlights the different approaches undertaken by policymakers in different environments (in order to narrow the gap between design strategy and eService delivery in the studied context. From conducting the strategy's components for each case,

we were able to identify the implemented activities that follow the strategic plan for each case in the undertaking environment, those are the examples of the good practice in a different level of instabilities which to be considered as the learning lessons for different contexts.

- A survey (In chapter 6) was developed to capture the perspective from displaced Syrians (as an example of the high level of instability case) on 'government' service provision. The survey aimed to cover as much eService related information from Syrian people (inside and outside Syria) refugees and/or displaced people as possible. This was a challenging research project given the geopolitical situation limiting access and clearly potentially impacting people's willingness to participate in such research. Both a paper and online version of the survey was used. Two samples of the survey were designed and distributed. The first sample was aimed at distributing amongst Local Syrian Citizens living inside Syria (LSC-Sample). The second sample aimed at Syrian refugees outside Syria (RSC-Sample). The survey tried to test the attitudes of the participants towards the current eService under the current circumstances in Syria, the problems they facing in using these technologies and accessing suitable services. The investigation for the second sample (refugees outside Syria) covered displaced Syrians in different countries due to the large volume of the Syrian population which has fled to neighbouring countries such as Turkey, Lebanon, Jordan, Egypt and UK. This also provided a comparison from people who have experienced the use of electronic sources other than the one provided by the Syrian government. There were still challenges in conducting the survey with it taking longer than the time assigned for it to be completed due to a considerable challenge of getting access to displaced people. The Survey started on 20 April 2016 and was completed and translated from Arabic into English by end of August 2016. The people who worked on our behalf faced many difficulties on the ground including their availability and the willingness of the participants to take part in

the survey as well as the situation in Syria. A total of 1634 respondents participated in filling out the survey, however only 415 fully completed the survey. This is interesting in itself since the survey was anonymous and didn't contain any information that would identify any respondents.

In chapter 7, we followed up on the survey findings, where the result indicate possible areas of good practice in the use of technology to support and engage refugees, It is this survey that has prompted the need to conduct follow-on fieldwork since the responses indicate really interesting examples of supporting and integrating activity which we would like to follow up to capture this good practice. The potential for capturing good practice in supporting displaced and refugee people that best integrates with local communities is huge in the Middle East. The aim of this primary study is to understand best practice in supporting refugees and displaced people within a positive capability approach. As we mentioned, this study builds on our previous research into Syrian refugees and displaced people in Jordan and turkey including field work and more recently Syrian refugees in Turkey, Jourdan and UK and within Syria itself. The work is being to capture examples of good practice in supporting the provision of social welfare, education, health services and encouraging self-reliance and integration. The research was able to capture and understand this good practice in its context, which will help inform the support of displaced people more widely. In our research, we gave examples of positive interaction between the refugees/ displaced communities and the hosting communities. Based on the above discussed ways of derivation of the Framework sources, we can divide the instability frameworkinto three level of instabilities (Low, Medium and High level of Instabilities) in which we can based our Framework design on :

- **Low-level instability**: in chapter 5, we studied the strategies of enabling the successful implementation of the eGov by highlighting examples from the United Arab Emirates.
- **Medium level instability**: in chapter 5, we also studied the strategies of enabling the successful implementation of the eGov by highlighting examples from the Saudi Arabia.
- **High-level instability**:

- Enablers: We will look at the strategies and the implemented initiatives within the low and medium levels through the reinventing government principles. Enablers component from the initial framework will be updated under this discussion. Enabling elements from these two levels will have huge impacts on enabling successful initiative and produce activities best practice to be adopted by the high-level instabilities.
- Barriers: have been updated and discussed at the High level of instability component, where looked at through the lens of institutional theory main pressures (Political, Social, Economic and Technology)
- Outputs: Twenty factors were identified in chapters 6 &7 that formed the heart of our instability framework (discussed individually in the mentioned chapters). They divided into two levels each level has ten elements:
    - LEVEL 1 contains the primary elements that those have the direct influence on the adoption . Level 1 forms the main themes found from both the survey and the case studies as following from the survey :
        - The importance of eService in education and heath
        - Connectivity considered as an important issue in unstable society
        - People awareness of the innovation
        - Financial constraints and devices' affordability
        - Digital literacy

      From the case study the themes found and have been represented in the instability frame work as following :

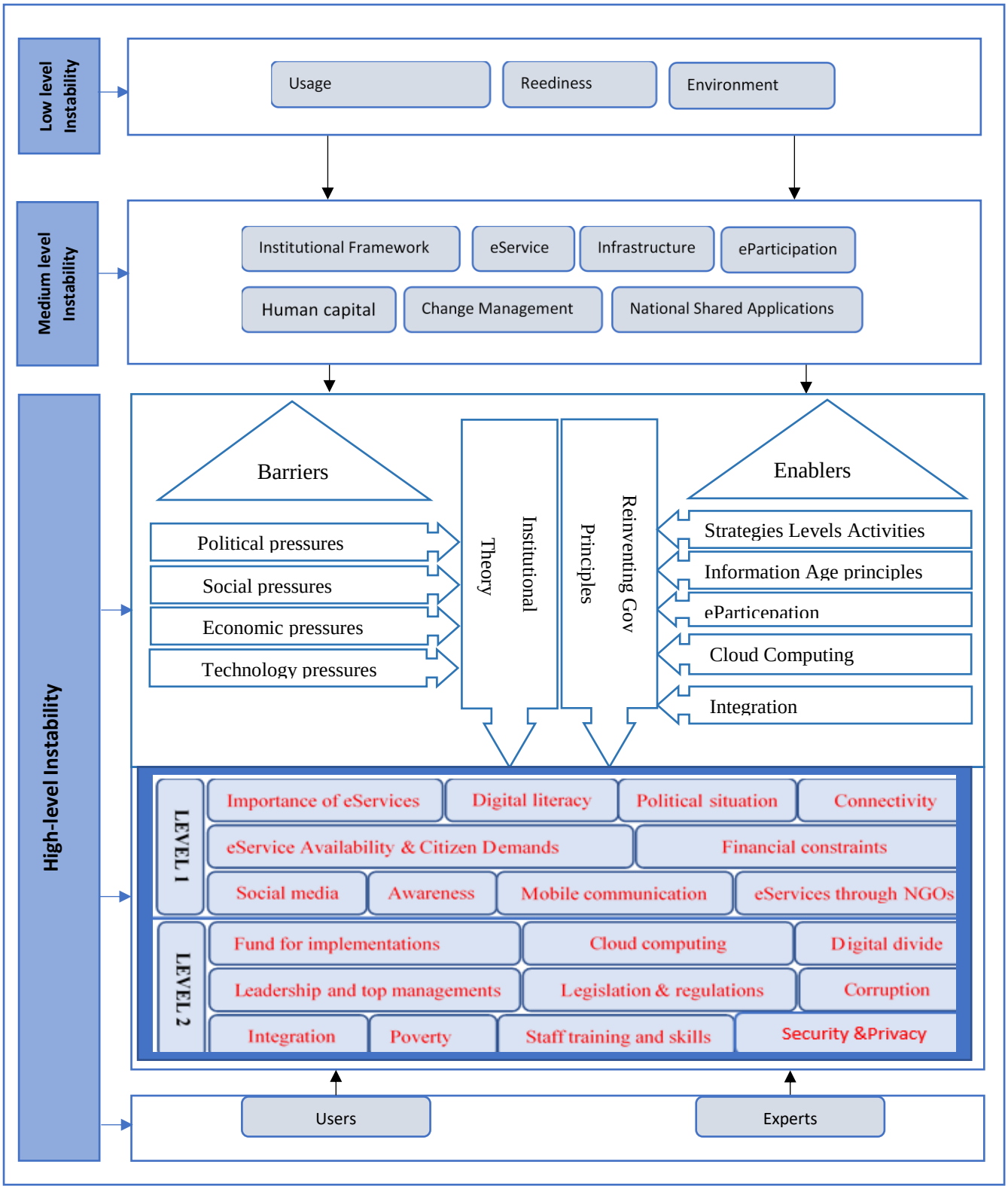
        - Political influence and control
        - Mobile communications
        - Social media
        - NGOs

All the above elements have been represented in RED in the main instability framework figure 8.2

- LEVEL 2 contains the secondary elements that those may found impeded within one or more elements of the level 1.

- Users & Experts: those component are the beneficiaries and the providers of the service delivery where our primary finding was based on their inputs. Therefore, they have the primary influence on the whether the new services will be successfully adopted or not. Figure 8.2 shows the different components of this framework.

Figure 8-2: eService Framework during geopolitical instabilities



8.3 REINVENTING GOVERNMENT PRINCIPLE & INFORMATION AGE

The driver factors discussed through the lens of the ten reinventing government principles that

The *'reinventing government'* principles introduced by Osborne and Gaebler (1992) were identified based on the transformation of government institutions in the USA. Heeks (2001) extended this work with examples from other countries of varying geopolitical stability, also, it has been introduced in chapter 3, Section 3.4

Our approach is to apply these principles in understanding and evaluating countries with three distinct levels of instability: UAE, Saudi Arabia & Syria. We then aimed to extend the principles to include new ones as follows:

8.3.1 Catalytic Principle

The pre-information age Catalytic Government aimed to increase *efficiency* by prompting and facilitating others to deliver services on its behalf (rather than providing them directly) - this could include the creation of communication and societal networks and the redistribution of historically centralised resources. The Catalytic Government adopts strategies that target common societal problems. It provides economic direction, encourages the growth and integration of non-profits, increases social equity and fights discrimination. Different sectors of the economy (public, private, and non-profit) are expected to provide the goods and services, either individually, or as a collective effort. For example, Osborn & Gabler (1992) highlights the efficiency benefits enabled by the Private Industry Council (under the Federal Job Training Partnership Act which brought together local public and private leaders to deliver training in places where there was a localised need. Heeks (2001) offers another example of efficiency from Ghana, where the Controller And Accountant General's Department linked up more than 150 computers, reducing the data-gathering and communication costs associated with government management citizen data.

Table 10 shows how the Catalytic Principle may expose strategies and policies observed at the three levels of instability seen our case studies.

Table 8-1: Catalytic government in different level of instability.

Instability	**Observation**
Low	The UAE eGov Environment Framework shows that citizens are using ICT more than businesses, therefore, to encourage businesses, policies that govern the ICT sector still require revision to be more efficient. Despite high adoption, awareness promotion also remains necessary at this stage to increase the penetration rate of broadband and mobile internet use among different user categories.
Medium	Saudi Arabia launched the government Cloud Computing Initiative in order to increase efficiency among government agencies by sharing reliable and secure information. Also, the Tadawulaty Procurement Initiative, which raises awareness and encourages transparency is another example of efficiency improvement in the Saudi capital markets.
High	Partner-Private companies, humanitarian & aid agencies and NGOs are adopting the role of efficiency-catalyst by (for example) delivering health and education through digital channels in unstable areas such as refugee camps. However, the availability of digital technology does not itself determine who can use eServices effectively: digital skills, awareness & willingness are also necessary, along with strategy that enables and rewards these traits. As an outcome, catalysing organisations are producing strong tools that provide

	education, improve literacy, make healthcare accessible and improve the life of refugees.

8.3.2 Community Owned Government

This principle focuses on empowering communities to play significant roles in defining and delivering government services. Placing control in the hands of communities, reduces bureaucracy and strengthens the communities as they have greater awareness of their affairs and can contribute to problem solving.

Osborne and Gaebler (1992) argue that community members can add special knowledge and experience that professionals and bureaucrats do not have; furthermore, they argue that centralizing bureaucracy and removing community contribution weakened the communities they observed. Similarly, community-oriented policing, through which the police collaborate with neighbourhoods has a positive effective in many ways.

The role of a government exhibiting this principle is to facilitate the delivery of services that the community contributes to. This includes the removal or avoidance of barriers to adoption, encouraging community involvement, and countering negative actions caused by mischief or corruption. We discuss this type of government in Table 8.2

Table 8-2: community-owned government in different level of instability

Instability	**Observation**
Low	The UAE eGov Framework suggests that providing eServices through multiple electronic channels (including social networking sites and service kiosks) combined with a user-centred-design approach for eGovernment portals & services, will

	attract more users, hence, result in empowering the UAE's communities. This is described in the The *usage dimension* of of the framework, whereas the *readiness dimension* champions eParticipation which encourages the involvement of communities in the decision making process, thus also increasing community digital engagement.
Medium	The Saudi Arabian Ministry of Communication and Information Technology initiated the e-Training Caravan in order to bridge gender, wealth and location based digital gaps. The caravan empowers entire communities with the digital literacy necessary to master basic online communication and social media use, thus enabling them to access government eServices.
High-	Technology has a huge impact on empowerment and emancipation of refugees. For example, in Turkey (at the beginning of the Syrian conflict) the adoption of eParticipation systems encouraged individuals and the refugee community to become active agents in a responsive process. When data from this approach is analysed it provides an opportunity to identify trends that can help provide predict better, more appropriate and more timely services to those in need.

8.3.3 Competitive

The strategy here relies on competition to improve quality and effectiveness of government services.

Service providers compete to respond quickly to changing demands, strive to satisfy customers and manage costs: those which achieve these goals will survive. Osborne and Gaebler (1992) believe in competition rather than regulation to improve the quality of government services highlighting that competition keeps the cost of services down. Competitive Governments have the responsibility to

create the market rules that ensure the equity, accountability and performance monitoring of service providers. We discuss this type of government in Table 8.3, with examples provided from the three levels of instability.

Table 8-3: Competitive Government in a different level of instabilities.

Instability	**Observation**
Low	The UAE Government established competition between government agencies in order to improve service delivery, simultaneously they increased delivery channels (e.g. kiosks and internet cafe's, aka 'mobile centres') and introduced telecoms competition and lifted regulations on wireless and other digital technologies to accelerate their deployment. Services developed by competing government agencies could then leverage the national telecoms infrastructure (EDGI rank 32, see section **UAE case study finding section above**) and exploit the additional channels.
Medium	The Saudi government (as part of its work-stream of Human Capital, Communications and Change Management) created an annual awards program recognising agencies that have: supported their eGov ambitions (e.g. those which have increased roles of women in eService management).
High	We found several of the Syrian Refugee Community Centres in Istanbul (SRCCI) competing with each other to provide the best education services to refugees. These community centres are funded either from the Turkish government itself or from different NGOs. An interview with the director of the Small Project Istanbul (SPI) community centre revealed that they are investigating the possibility of providing an online education course for those people who are not be able to attend the centres in person.

8.3.4 Mission-Driven

This principle contends that public organizations should be driven by their mission, not by their rules and their budgets. Government agency managers should therefore be free to find the best way to accomplish the agency mission in order to contribute to the overarching government vision.

Mission-driven organizations give their employees the freedom to pursue the organization's mission: the potential benefits of this include systems that are more efficient, effective, innovative, and flexible.

Governments and institutions, under the Mission-Driven Principle, focus on the important issues and respond to changes that predict future improvements by giving employees and managers the freedom they need to accomplish tasks. Table 8.4 discusses this principle based on the findings from different levels of instability.

Table 8-4: Mission driven government in different level of instabilities

Instability	**Observation**
Low	Local agencies are directly responsible for service provision. Coordination and communication with other agencies is facilitated by common tools and functionality delivered through the UAE eGov Environment Framework. Service development and can thus be focused on agency mission rather than technical burden and establishing bureaucratic processes. Refer to Chapter 5, case study1
Medium	The Saudi government publishes an eService roadmap detailing current and future eServices provided by its various agencies. eService development and delivery is governed by citizen demand which influences mission development and selection. The private sector plays crucial roles in the development and quality assurance of

	these services, and their delivery through the Saudi 'Dashboard' portal. Refer Chapter 5, case study 2.
High	In 2008 the Syrian government began issuing identity cards to all citizens as part of its eGov project. These cards were intended to facilitate secure access to online services as well as storing personal details (e.g. date of birth, properties owned). The Syrian uprising caused the suspension of the project in 2012 and in early 2013 policymakers within the Syrian government began investigating solutions for economic enhancement, exploring a move towards sustainable approaches to government service delivery. They concluded that electronic transactions should replace paper processes in order to reduce cost, whilst improving efficiency, productivity and service quality. It was therefore necessary to recognise the incomplete and ongoing mission that needed to be concluded, and so, despite the heavy burdens, collapsing economy & divided society; the ID card project was restarted in 2014 (at a cost of €28m), potentially facilitating the move towards all-digital eGov services and promoting a service-based economy. Refer to chapter 5, case study of the Syrian eGov.

8.3.5 Results-Oriented

A results-oriented government strategically focuses on outcomes, rather than inputs; and often needs to find novel ways to measure and reward outcomes based on the quantity, quality, and cost of services delivered. This approach can eliminate rules, increase productivity and reduce costs. Osborne and Gaebler (1992) argue that governments have historically focused on inputs whilst ignoring outcomes. Table 8.5 discusses examples of results-oriented government at different levels of instability.

Table 8-5: Result oriented government in different level of instabilities

Instability	Observation
Low	UAE eGov uses a Performance Indicator Card system for measuring results of eService implementation. Service usage is measured through "Khadamate" (My Services) to establish performance metrics, and thus development-enabling rewards are provided to the teams responsible for the services with the best results.
Medium	Saudi Arabia created the Office of Strategy Management to track eService implementation; adopting an indicator system for measuring progress and performance against strategic objectives. The system helps to expose and share best practices amongst the government's agencies. The Saudi eGov portal achieved the World Summit Award 2013
High	Our case studies showed that displaced people are becoming increasingly adept at utilising online services from governments and NGOs in order to enhance their quality of life. The self-reliance strategy adopted by many host countries and NGOs can broaden refugee opportunities, resulting in a better economic return for all parties. Broadband internet access, for example, affords refugees connection to job opportunities and participation in local and dispersed community & commerce matters, which can improve personal and community well-being and self-reliance. Focus on outcomes (rather than inputs) is therefore especially relevant when delivering health, learning and commerce-supporting eServices in geo-politically unstable areas. Refer to Chapter 7, Section 7.3

8.3.6 Customer-Driven

Often, bureaucracy-derived government services fail to meet customer needs.

The Customer-Driven Principle demands that any strategy which aims at providing citizens with services must make an effort to accurately perceive the needs and wants of all citizens, for example, through surveys, customer contact, customer interviews and feedback.

Communication technology should be a key enabler to revolutionise the way governments interact with citizens, enabling rich end-user dialogue and transforming opaque bureaucracy-driven design to become transparent and user-focused. Table 8.6 shows the customer-driven principle at three levels of instability.

Table 8-6: Customer-driven government in a different level of instabilities.

Instability	**Observation**
Low	The UAE is recognised as a world leader in consulting with citizens during the government decision making process. Citizen feedback on improvement and performance of eServices is collected via tools provided by the eGov department.
Medium	The Saudi Arabian eGov initiative developed several eService channels to meet direct citizen demand, for example, the National Contact Center collects and routes citizen queries regarding available services to the appropriate department, simplifying the information discovery process, and also simplifying the delivery of results by using citizens preferred response channels of web, email or even SMS.
High	Technology in the form of mobile and social media is an important enabler for refugees as they undertake the difficult process of integrating into unfamiliar environments such as refugee camps. NGOs and other agencies have therefore adopted flexible and diverse approaches to communication and information sharing. A blend of systems has emerged and evolved, based on user demand, to deliver information (for example, about education opportunities and where to send children for health checks). Being customer-driven leads to a constant struggle to make these

	systems fit for purpose. Without a combination of user-driven technologies, it will be hard to meet the needs of the refugees, however, the diversity of user requirements and user-systems in use at the SRCCI (populated by 2.7million refugees) leads to difficulties in managing the operation and development of appropriate and timely services.

8.3.7 Enterprising

An enterprising government maximises revenue by fostering an innovative and sustainable economy, whilst minimising its own spending. Osborne and Gaebler (1992) describe how governments have used novel methods to earn money that would otherwise need to be raised from taxes, for example, investments in niche public services that can generate fees from use of natural resources such as golf courses and marinas.

Table 8-7: Enterprising government in different level of instabilities

Instability	**Observation**
Low	Our case study (In chapter 5) showed the enterprising aspect of the UAE eGov portal which advertises tourist attractions and sells event tickets (including natural resource exploiting desert adventure trips).
Medium	Findings from chapter 5 show that Saudi Arabia's SADAD e-payment gateway (a service of the Ministry of Finance) encourages enterprise with and within government by facilitating online & mobile payments.
High	Chapters 5,6 & 7 shows that The Syrian conflict has affected the country's natural resources and also deprived the country of key skills and human capital. We thus recognise that in areas with high instability, opportunities for familiar enterprise are

	curtailed and alternative enterprises (and measures of enterprise success) must be found. Digital technology has empowered many Syrian refugees to establish small online businesses (for example, selling crafts & skills to undertake small projects); such enterprise reduces their need for state support. Separately, the Syrian government's re-establishment of the national digital ID card initiative is expected to reduce administrative overheads and thus reduce costs across multiple government departments when delivering eServices to Syrian citizens

8.3.8 Anticipatory

This principle suggests that governments should incorporate mechanisms into their decision-making processes to plan for the future, to anticipate their upcoming obligations and recognizing the impact of short-term decisions in the future builds. Anticipatory governments seek to prevent problems rather than delivering services to correct them. Osborne and Gaebler (1992) suggest that the anticipatory government require redesign budget systems, accounting systems, and reward systems and they have provided many examples where governments have incorporated mechanisms into their decision-making processes to plan for the future, which will enable public institutions to be successful in pursuing their goals. Table 8.8, shows the Anticipatory government in different levels of instability.

Table 8-8: Anticipatory government in different level of instabilities

Instability	**Observation**

Low-Level Instability	The deployment of the Emirates ID Authority's Biometric Enrolment by the UAE ID Authority as part of the National ID Registration Program is recognized as one of the world's best biometric programs that would solve many future problems. As the current system just coping with the current demands, But, to solve the future anticipation big demands, this Biometric Enrolment was developed.
Medium Level Instability	Under the stream of Communications and Change Management, the Saudi eGov established the eGov mobile services "Ma'ak" (for Android and iPhone devices) in order to shift Saudi government agencies and individual to adopt this type. This shift will create an ideal and attractive environment and will be adopted nationwide, everywhere and anytime. The more channels delivering eService, the adoption will increase and a future heavy load of administrative work will be solved.
High-Level Instability	Finding from chapter 7, case study 3 shows that the preparations by the Turkish government to host a huge number of the Syrian refugees repaid back. After the second wave of the Syrian refugee influx. Its strategy aims at preventing problems and focuses on anticipations of the occurrence of government's future problems beforehand rather than waiting and delivering services to fix or solve them. Hence, Turkey was prepared to host this number of refugees. They already prepared for a registration system to cope with this huge amount of influx. Furthermore, the solid framework which Turkish government had developed made of the legal and administrative framework to protect and assist Syrian refugees. This framework - firmly catalyst by the Government itself and run by the Disaster and Emergency Management Agency (AFAD) - facilitated the Syrian refugees for access to health care, education, labour market and social assistance and provides them with their right and duties. Furthermore, the government established an asylum Law- refugees'

	rights and protection - which is complied with the international standards include manage international protection and migration-related matters.

8.3.9 Decentralizing

This strategy means that transfer decision-making authority to those individuals who are in the best position to develop effective and innovative solutions to problems. These individuals are usually at the bottom of the organizational hierarchy. Hence in a centralized system, knowledge accumulates at the top of an organization where decision makers are far from the reality. In the decentralized system, organizations become more flexible more effective and enable innovation where employees have some degree of decision making authority that improves commitment and morale which also leads to increased productivity. In the information age, Heeks (2001) stated that the World Bank provides support and fund to promote decentralization of health planning and management in Ecuador. Table 8.9, shows the Decentralized governments in three contexts (low, medium and high levels of instability).

Table 8-9: Decentralized government in different level of instabilities

Instability	**Observation**
Low	The strategy adopted by the Dubai eGov is an example of transferring the decision-making authority of implementing the majority of the activities (Chapter 5, Case study 1). While the government departments focused on eService delivery, the central authority focused on building common parts such as payment, customer, support, etc. needed by all agencies which effectually integrate with the central eGov.
Medium	Saudi Arabia eGov (Chapter 5, Case study 2) initiates the eTransformation model, which was developed to centralize the database for all government services. This will enable the distribution of data across the government agencies and hence,

	facilitates the decentralized the decision making as long the needed information correctly distributed.
High	In chapter 7 (case study: immigration and passports department, section 7.3.1), found that the Syrian conflict resulted in centralized the decision-making process, especially, after closing down many Syrian embassies around the world. For example, Syrian refugees in Europe are facing difficulties in reuniting their families, some of which are Identification documents and proof of their relationships. These official documents are required to be issued and certified by Syrian institutions and government departments inside Syria, which is not available to many Syrians, including passports. The interim government of the Syrian opposition and coalition which is internationally recognized tried to offer this service and issue these papers (including an electronic version of the service for people who are in different countries) to those who cannot get them for inside Syria. It was a good idea at the time, in which it solves the problem of hundreds of thousands of Syrians who have fled the country where it will issue these documents and renew passports for those displaced people, but the problem that this document do not get recognition internationally and considered to be illegal documents, hence, prompted the interim government to cancel the idea.

8.3.10 Market-Oriented

This strategy gives the priority to utilize a market mechanism instead of an administrative program to provide goods and services to the public taking into consideration that the government does not have the resources to fulfil all of the public's needs through central control. This strategy focuses on steering the decisions and activities through restructuring the marketplace instead of attempting to directly control them through administrative programs. Osborne and Gaebler (1992) argue that

this principle can make a huge difference and have an impact on the market by many methods such as: providing information to consumers, catalysing private sector suppliers, creating market institutions to fill gaps in the market, sharing risk, changing investment policy. In the information age, Heeks (2001) give the smart cards example from Spain that allows people to claim unemployment benefits at kiosks and to check on job and training vacancies. Table 8.10 shows this type of government through examples from the three case studied.

Table 8-10: Market-oriented government in different level of instabilities

Instability	**Observation**
Low	One of the Initiatives initiated by the Ministry of Finance in the UAE is the eProcurement platform for government agencies. It has the mechanism to connect all beneficiaries from the private and public sectors in one place to finalize procurement transactions electronically
Medium	eProcurement System in Saudi Arabia is one of the most important and essential pillars of the eGov and considered to be the most important national projects which represented by Ministry of Finance and accessed via the government procurement portal. The eProcurement project provides for standardization and simplification of tendering and procurement for all government sectors. Also, support the principle of transparency among government agencies, suppliers and easy procedures for suppliers.
High	Procurement process, during the Syrian crisis, played a crucial role in managing the refugee's supports and suppliers. After the situation inside Syria fallen into complexity and difficulty and the Syrian refugees start pouring into the Jordanian Turkish and Lebanese soil. UNHCR, the refugee agency the leading agency in provides refugees with the essentials for survival has established, through the

	procurement management and contracting service within the department of emergency, security, and supply, a new standby and emergency call centres to deliver more timely and effective within logistics and procurement. In order to meet the refugee's needs and to provide the beneficiaries and partner companies with the appropriate quality products or services at specific time and place and at the lowest total cost, UNHCR implemented standardized procurement guidelines, policies rules & regulations, and practices to support and facilitate the transactions.

8.4 EXTENDED PRINCIPLES

The privious examples are complement to the Osborne and Gablers(1992) work and this section is extending their work. In this section, we discuss some principles (extended to the reinventing principles discussed in the previous sections) that governments have adopted in the process of enhancement of their policies, in such, the new developed technologies have roles in shaping governments policy particularly within countries going through instabilities. for example, eParticipation gives citizen chances to express their needs, hence, their voices count in the drawing the next strategy, conducting draft moderation, usage and response policy and draft legislation and laws which meet their needs and demands. Also, developing an integration standard system for all operational services in term of connecting data involves connecting all government agencies and ministries to one shared data and data centre will result in shaping the process of the decision-making and in the efficiency of the service delivery. Also, the cloud computing will shape positively the eService transactions and deliver. We will discuss the above argument by applying these principles to the three cases of the different levels of instabilities (low, medium and high). Tables 8.12, shows the eParticipation principle. Table 8.13, shows the integration principle. And table 8.14, discuss the cloud computing principle as follows.

8.4.1 eParticipation

Table 8-11: eParticipation in different level of instabilities

Instability	Observation
Low	One of the lists of strategic performance indicators developed by the UAE eGov is to enhance the level of eParticipation among citizens where their voice count in the drawing the next strategy. Also, this step will identify and meet the needs of the Emirates citizens. It is the policy used for conducting draft Moderation, usage and response policy. "SHARIK" is a platform facilitate sharing information publicly and enabling discussion on topics concerning the services of UAE eGov and life in the UAE in general.
Medium	The Saudi Arabia eGov has a strategy to develop a social media communication with public and business and to open the gate for sharing the public views. This tool will be used as a central eParticipation by eGov agencies to grasp the importance from blogs and feedback. By adopting such online participation concepts, the Saudi government utilizes those methods to work towards draft legislation and laws which meet the needs and demands of the Saudis citizens.
High	Our findings show that The United Nation refugee agency (UNHCR) records the refugees' views regularly. The registered shared views by the refugees pushed the boundaries of the UNHCR to offer them a free connection and access to the internet, to establish internet centres and drags the Turkish government's attention to the importance of the refugees' connectivity, therefore it offers 100 Turkish ponds worth internet access for every refugee. The refugee's view has enhanced the policymaking in some situations.

8.4.2 Integration

Table 8-12: Systems Integration in different level of instabilities

Instability	Observation
Low-Level Instability	According to the UAE eGov strategy, the intention is to build a strong government information infrastructure which will involve connecting all government agencies and ministries to one shared data and data centre and which allows for conducting intermediate operations and common applications. This is allowing for smoothening the integration and consequently for a better eService delivery. The number integrated eServices is 2570 entries on one portal.
Medium Level Instability	Saudi Arabia developed an integration standard system for all operational services in term of connecting data through the Government Service Bus which allows the government agencies to communicate effectively. Riyadh municipality has already completed integration with the Government Service Bus under control of "Yesser". Several services are now available through GSB including inquiries about construction permit, shop license. For example, the Riyadh municipality has completed integration with Ministry of Justice.
High-Level Instability	The findings from studying unstable society, in particular, the Syrian refugee in Alzaatri camp in Jordan, have highlighted how technology much needed to coordinate government activity in registering and supporting refugees and thus, joining up data collection such as registration, health, education, inevitably required. but the government technology didn't really fit the bill for the activity, hence, camp management moved from the local government to UN and NGOs for a period of time where integration technologies have been used to manage data across the camp and amongst different partner humanitarian and aid agencies and the government

	itself. Furthermore, our findings show that ICT has an important role, particularly mobile technologies, in supporting the information flows and general integration of activity within the refugee communities and between these communities and the other stakeholder groups (hosting communities, NGS, local/national government bodies).

8.4.3 Cloud Computing

Table 8-13: Cloud Computing in different level of instabilities

Instability	**Observation**
Low-Level Instability	The ABU DHABI eGov set up a cloud computing platform which will enable transparency, improvement in service performance, reliability and security to UAE's citizens purchasing cloud services. for example, the UAE's citizen will make better, more informed purchasing decisions and ensure optimal performance for their cloud applications and services.
Medium Level Instability	Saudi eGov adopting cloud computing to transfer the processing and storage space of PCs to what called cloud where all IT programs will be transferred from being products to be serviced. And furthermore, developing a data centres that offering huge storage spaces for users. This will impact positively on the Saudi's eService transactions and deliver.
High-Level Instability	Cloud computing plays a significant role in the lives of displaced and refugees people. In this sense, managing the registration and equally distributed the services (money, food, clothes, accommodation), the service transactions and recording the

	development and the integration of the new societies, all done through the big database space which clouds computing has offered. On the other hand, the cloud computing works as a storage database for refugees getting access to their documents identifications and personal stuff anytime and everywhere. That they usually get lost or damaged on the runaway routes.

8.4.4 Recap on adopting the reinventing government principles

By applying the above models (Osborn &Gabler and in the information age Heeks) as a theoretical lens on our study, guided by their principles. We in a better position in understanding the drivers and principles of good strategies in planning for service delivery to societies during instability as well as the context and issues of providing eGovernment services in the undertaking case studies and understanding as to what degree each case strategy has influenced on the implemented activities. As we were motivated by the similarities between societies going through changes, such as Syria, and societies driven by innovations in their transformation process, such as UAE and Saudi Arabia, we were able to extract the good practice from the low and medium level instability which can be utilized by policymakers in the high level of instability.

- From the different level of instability real-life examples, we have integrated, in twenty principles, a vision and blueprint (the driving strategy) for policymakers (in unstable societies) to succeed in a better service delivery and to work as guidelines to help to deliver the needed service fairly and equally to refugees and displaced people.
- We looked at the motivation of reinventing government (Osborn & Gabler, 1992) and reinventing government in the information age (Heeks, 2001) for innovation as a mechanism to suggest ways of providing services that benefit the displaced people and way of solving similar problems.

- We think that the reinventing government (Osborn & Gabler, 1992) and reinventing government in the information age (Heeks, 2001) are powerful conceptual tools that unleash different ways of thinking and can be tested as an analytical tool by tackling the most common problems and provide ways for improvements.

8.5 INSTITUTIONAL THEORY

Barriers side of the framework under the B-Side component of the initial instability framework updated and discussed through the lens of the Institutional Theory. Those factors were found and discussed individually in chapters 6&7.

We apply Institutional Theory (referee to the full explanation of the Institutional theory in chapter 3, section 3.5)as a theoretical lens using the dimensions of Economic, Political, Technical and Social to understand the context and issues of providing eGovernment services to refugee and displaced people which are often characteristic of unstable societies and which considered a very challenging domain. This informed with case examples, insights from a general investigation into refugee context, examination of activity within a refugee camp and a large survey of mostly Syrian refugees across the Middle East.

8.5.1 Technological Pressure

The fast development of technologies and its penetration into the most aspects of the modern life has placed new pressures on governments for adopting new technologies such as online services, security and privacy, system integration, connectivity and using interoperability standards for building eGov systems (Silva & Figueroa, 2002). On the other hand, many researchers have used the institutional theory as a theoretical lens or analytical methods to comprehend the IT key pressures affecting the adoption of eGov. Examples of researchers that utilized the institutional theory in their study such as Teo et al. (2003) they have suggested that the adoption of institutional theory may add values for identifying and examining IT- based adoption. They used institutional

theory as a theoretical lens to comprehend the information technology keys adoption. Moreover, Kim, Kim, & Lee (2009) have adopted institutional theory as an analytical method for an anti-corruption system in Seoul Metropolitan government.

However, overcoming technological pressures allows users of enjoying the eService delivery through a single one-stop shop portal which contains the answer to most eService related queries where no issues of techniques are problematic. Furthermore, adopting sensitive ICT-related procedures such as security and privacy, system reliability and availability and international standards is the core of building trust with users and attract even unsure people. Integrated model (also discussed as an extended principle in section 8.4.2 above) among different government agencies would overcome many duplication and bureaucratic behaviours that traditional services users experienced. The standards of eServices implementations give users predictions of similar functionalities in different situations which consequently would help in bridge some gap in the digital literacy and reduces financial constraints by beaning less connected to the internet which is expensive especially, for displaced people. For example bridging the digital gap amongst the Syrian refugees in Turkey required establishing learning and training system for best integration with the Turkish society, this example taken from the Syrian Refugee Community Centre in Istanbul (SRCCI)case study.

Our Interviews (findings from cases discussed in chapter7) exposed several themes that relate to technological pressure: service channels, systems integration & interoperability, cloud computing, information sharing for communities and government agencies and (from survey chapter 6) the availability and cost of mobile communications (presented in RED in the Instability Framework figure8.2).

The (United Nations, 2012) declared that it is "*essential that governments exploit all possible delivery channels in order to reach out to as many people as possible, no matter how poor, illiterate*

or isolated". The Syrian Government's primary channel for eService delivery (an example of the High Level of Instability discussed in Chapter 5, Section 5.4.3) is the portal found at http://egov.sy/. It is particularly focused on information provision and sharing, with over eleven-hundred eServices offered in both Arabic and English. Despite these numerous services, many government agencies and ministries neither contribute to nor have access to information from this portal, which limits its overall effectiveness (and denies the opportunity for elevated levels of integration and enhanced intermediate operations). If such integration were achieved it would reduce government reliance on paperwork (speeding up & simplifying processes, and saving money through improved efficiency), and remove the need for citizens to physically visit government departments & agencies, saving them money, time and effort, and potentially reducing personal risk by not requiring movement through unstable or dangerous areas where the situation on the ground cannot be predicted (interviews from Case studies Chapter 7). Some systems support multiple service delivery channels in order to reach as many citizens as possible. They "*extend from traditional citizen touch-points like counter and voice services, to online means like Internet access through personal computers (PCs), mobile phones and tablets and to emerging media like mobile apps and social media*." (United Nations, 2014a). e.g. Talaby Gate (2012) is an emerged eService by the Syrian eGov initiated after the Syrian conflict began 2011, which enables displaced citizens to log complaints and receive replies and guidance.

Our findings (Chapter 6, Section 6.3) that 60% of Syrian refugees and displaced people own smartphones with access to the internet, hence, they may benefit from eServices provided by the host countries, NGOs or Syria itself (on a limited scale). One interviewee emphasised that reliance on mobile services has remained high and possibly increased, noting that" *the first thing that a refugee is concerned about, in their new host country, is the internet, in order, to stay in touch with the family left behind, to be updated with the news of their country and to find sources of surviving in their surroundings*". Our interviews highlighted that displaced people are reliant on mobile

technology for connecting to eServices, due to its convenience, relatively low cost, the resilience of the network and relative geographical freedom.

Findings from interview cases in chapter 7, highlighted that many social media concepts, such as mass communication, knowledge sharing, education, skills marketplaces, (etc.) are being applied to solve problems for the most vulnerable people in unstable societies. Beyond basic information access and exploitation of social media, smartphones can be used for one-to-one services such as consulting a doctor to solve many basic medical care needs.

Access to these services, however, requires access to the internet which is a challenge for both service providers and end users. One solution that overcomes the requirement for a constant connection to the internet is the use of offline applications and websites. These can be downloaded or synchronized during periods of fast/inexpensive connectivity (e.g. in a shopping mall), and then used later without incurring additional data costs. Many people do not have a tariff plan for online data usage, so the exploitation of offline digital channels is a pressing challenge (refers to the Syrian refugee's community centres in Istanbul case study, chapter 7).

8.5.2 Social pressures

To what degree societies are using eGov and utilizing eService provided is determining the degree of the successfulness of eGov initiative. Hence, no matter how sophisticated the development technologies if no adoption for this innovation by citizens which has been maintained. A survey by the United Nations (2012) state that "*shifting from a structurally disintegrated government to one that is a more interconnected single-purpose whole-of-government will require collaboration and streamlining not only along the whole spectrum of governance but also with the private sector and civil societies*". Furthermore, it argues that eGov development revolves around the quest for citizen-centric design which implies an understanding of the specific needs of different segments of society and their capacity to benefit from the provided technologies. Therefore, by obtaining the

citizen's satisfaction, organisations will be able to reduce any negative social pressure associated with eService adoption, hence this may lead to successful transformation with respect to social behaviour (Moaman Al-Busaidy, 2011).

On the other hand, the social pressures elicited by whether the eService could reach all people equally, regardless of their locations, gender, age, economic background or their educational background. This issue becomes even more challenging in reaching different people in unstable society. The situation is quite different as the pressures are more manageable in countries hosting refugees as there are no obstacles due to a securities reasons i.e. establishing a training program. The use newspapers, radio and television in promoting and announcing new eServices or about the benefits of using existing service would raise the level of awareness among people that would enhance the communication and connectivity (refers to Chapter 6, Sections 6.3). As a result, this might place more demands for new and better quality eServices that would result in citizen empowerment, increased the quality of life, increased privacy and security especially for displaced and refugee people.

Our conducted interviews (Case studies in Chapter 7) exposed several salient social pressures including public awareness, the digital divide, social integration, community & refugee empowerment, and eService demand (have been presented in RED in the Instability framework figure 8.2).

Unequal access to information and communication technologies (aka digital divide) can be influenced by physical location (urban vs rural areas), gender, age and profession. A citizen's level of income and digital literacy are also determining factors for the level of the digital divide. In unstable societies, these factors may be amplified. During the Syrian conflict, the digital divide increased when eGov infrastructure development was postponed as human capital resources were drained by population displacement.

The social integration of displaced Syrians (disintegration from their home communities and reintegration with receiving communities) presents many challenges. The main purpose of establishing SRCCIs (Chapter 7, Case study 3, Section 7.3.3) is the empowerment of refugees and community. Their programs aim to deliver education and social assistance to refugee families including legal, medical, skills training, language, literacy training, information services. These social items are as important as their basic needs such as food, clothes and accommodation.

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Syrian child refugees had to face very difficult conditions, dealing with long journeys to reach safer places. They are emotionally and physically vulnerable after being uprooted from their homes and surroundings and risk losing the opportunity of a formal education if none is available, or if survival-needs lead to them begging on the streets or working in factories to help their families. Refugees must integrate with their new society and send their children to school if they are to recover from the trauma of fleeing their homes and have any meaningful quality of life. The gap years of their education will have a huge impact on their future and on the societies, they integrate with. Through centres like SRCCI, some of the lost generation will be saved. Community centre directors hope that fostering a learning culture amongst refugees will help establish and maintain a stable society and promote positive integration within host communities (these examples taken from the from the Syrian Refugee Community Centre in Istanbul (SRCCI)case study.). These circumstances generate a new demand by refugees & displaced people for services and technologies that can improve and enhance their life. These demands, in turn, require improvement to government ICT

infrastructure and eServices provision in order to help bridge the digital gap amongst refugees and displaced people (also refers to Chapter 6. Section 6.3).

8.5.3 Economic pressures

Economic pressure has strong roles in shaping and directing IT related systems and hence has a huge impact on public service organisations. In general, organisations which rely on information system as a driver for change effected dramatically according to the economic changes and this is true for eService providers within instability as it gets affected even more as the situation on the ground unpredictable. Lubbe & Heerden (2003) noted that the elements of transaction cost and the cost of information dissemination are the main economic elements affecting the progress of any IT based development and can improve the performance of a given IT service. Eggers (2004) argues that in providing online service, it means that eliminating paper-based service hence reducing cost and improving efficiency and effectiveness of the service provided and therefore improving the economic standard. From a different angle, United Nations (2014) state that to provide opportunities for economic growth, the public sector must deliver essential services that meet citizen needs. The impact would be on facilitate citizen engagement and participation in public policymaking, service delivery and promote the empowerment and well-being of all people (including vulnerable people who has been displaced). On the other hand, Hwang & Syamsuddin (2008) argue that in order to develop and implement an effective eGov project and enforce transparency, strong economic resources needed. Some economic pressure found in the eGov literature were highlighted in chapter2.

Access to affordable communication technology is important for both economic and people living within unstable environment providing needed information on issues, economic and social opportunities, educational resources, as well as providing a much-needed channel to connect displaced peoples (Sections: 6.3.1, 6.3.2, 6.3.4 and 6.3.5). We argue that economic and refugee

migration is a development theme and should be considered within a development lens. A big influx of refugees can have a significant impact on local hosting communities as well as the wider hosting country (Chapter 7, Case study 3). However, there is significant complexity with any refugee context, for instance, the significant influx of refugees in Jordan, Lebanon, Turkey and money other countries have been Syrians as a result of the Syrian Civil War. Such big influxes of refugees must have a significant impact on the local countries affecting their ability to function in a normal fashion, stretching local facilities and resources, disrupting the provision of education, health and many other government services, and distorting the local economy and labour markets. This phenomenon also has an impact on the countries of origin as they deprive those countries of key skills and human capital. Hence, all aspect of life will be affected as a result of this disruption.

However, in chapter 6 we found that the population of unstable societies can be affected economically by the adoption of eService, hence, the found barriers are challenged by the current economic situation in Syria. The improvement of the eServices quality that the government provides requires a significant amount of spending and budget to maintain connectivity, implementing new channels for education and health care that resulted in providing more eServices, in turn required promoting through raising the level of awareness among users and diffusion through advertising, furthermore, improve the digital literacy among citizen also attracts more users which require budgeting as well (chapter 6, section 6.3). The economic impact would consequently attract more users for adoption, means enhancement of the eGov capability for the long run. As a return for the individuals under the Syrian current situation would promote self-reliance by broadening their opportunities for improving their own lives which result in a better economic return in both directions (users and providers).

Our case studies in chapter 7, uncovered various economic pressures affecting the success of eService delivery amid geopolitical instability.

Citizens are becoming increasingly adept at utilising online information and services from governments and NGOs in order to enhance their quality of life. This evolution has been catalysed by incremental increases and improvements to the data and services that are available. Initiatives promoting education, health & gender equality have to lead to significant improvements in the living conditions of refugees and displaced people. eService components such as eHealth, eLearning and eCommerce are thus increasingly important for ensuring sustainable economic development in geopolitically unstable areas. In parallel, services that enable and promote economic entrepreneurialism may help establish (or re-establish) self-reliance among displaced people and refugees.

International sanctions, the drain of human capital caused by the large population migration, coupled with a lack of funding for infrastructure repairs and development, are all compounded by the high cost of digital connectivity for end users - consequently those under the most financial and personal stress, those in the greatest need, and those with the largest potential to be helped, may use online services differently, less often and less effectively.

After six years of disruption and instability, characterised by several phases, the Syrian economy has deteriorated significantly. Since 2011, all of the components of Syria's GDP have plunged with serious drops in manufacturing and agriculture. Exports have lost 80% of their real value from 2010 to 2015. This has resulted in shortages of normally available materials and supplies. There have been repeated increases in the price of fuel and food driven by demand that can often outstrip supply. In short, everything has become expensive and rare, however, this has not stopped the Syrian people from carrying on with their normal life, especially, in zones that are free of conflict.

8.5.4 Political Pressure

Political pressure plays significant roles in modifying and adopting changes in any organizations where rules and regulations in the public sectors are informed according to predefined political

views under certain conditions, where rules and regulations instruct and guide the top management for directing and shaping decisions (Scott, 2001). Hence, eGov transformation facilitated by political rules and regulations in conducting vision and strategies that may lead to a successful implementation of delivery systems. On the other hand, some political rules and regulations may add more constraints and build barriers in front of adopting such implementation hence, prevents the required transformations due to some governments in the developing countries found that democracy, transparency, and participation might be a threat, hence we may find some discouraging rules for progress. In adopting and supporting eGov rules, a leadership is required for undertaking this role and puts the transformation in place (ALOMIRI, 2015). Furthermore, United Nations (2012) argue that Prerequisites for achieving the shifting from a structurally disintegrated government to one that is a more interconnected single-purpose whole-of-government include long-term vision and leadership commitment, a strategic framework, an IT management programme aligned with the overall strategy, and technical integration of IT systems.

Although the civil war in Syria continues with no indication of abating, daily life goes on and almost all government ministries and institutions remain fully functional within safe zones, especially in the capital Damascus. During the first two years of the conflict, political pressures diverted attention from the country's ICT Strategy and Operational Plan, resulting in an effective pause in its development. Subsequently, the top management and strategy leaders refocused on eGov and the delivery of eServices, resuscitating previous efforts in these areas (Chapter 7, case studies 1 &2).

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Political pressures influence all aspects of the Syrian eGov strategy, with political leaders, senior ministry officials and staff involved in drafting legislation and regulations are key to its success.

Political pressures stemming from and associated with eGov include the lack of uniform standards for communication between departments and systems (a problem exacerbated by the rapid pace of technological change) - selection and enforcement of standards is a requirement of senior civil servants and elected officials. x Additionally, legislation and regulations covering identification, verification, traceability, encryption and coding standards, must all be continually developed, reviewed and enforced (chapter 5, case study 3; chapter 7 case studies 1&2). The absence or underdevelopment of digital communication & security regulations can be prohibitive to successful eGov initiatives; for example, a critical enabling agent for digital services is the availability of online banking, however, whilst the Syrian Government (in association with NGOs) has made several attempts to launch eBanking systems (Farzali, Kanaan, Kanaan, & Atieh, 2012; Bwalya & Zulu, 2012) their success has been limited by these political pressures, as well as the more obvious technological challenges.

Furthermore, the role of NGOs in eGov strategy and implementation cannot be overlooked. In addition to providing funding, expertise, and the enabling services, they also influence the government in its behaviour and provide an independent audit and mediation services (chapter 7, section 7.4.4).

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8.5.5 Recap on adopting the institutional theory

In this discussion, we can conclude that using institutional theory was a good lens in highlighting the eService related changes in the given environment through the influence of the main key

pressures. It also encourages the idea of "best practice" among eService providers as long they share a set of operation similarities that makes it an ideal strategy to complement the found good practices examples in the reinventing government discussion. Thus, it then is transferred to the high-level instability for adoption and utilization. Institutional theory is an ideal theory to be adopted as a theoretical lens which has a deeper perspective for barriers to eService adoption, and that allows for a better understanding of the pressures which facing the implementation of eService in unstable societies.

8.6 CHAPTER SUMMARY

The focus of this chapter was to: introduce the updated elements of the final Instability Framework and to discuss the Barrier-Side through the lens of the Institutional Theory and the Enablers-Side through the lens of the reinventing government principles. In such:

- Examples of eServices found in some cases of the unstable societies BUT adopted widely in low and medium levels of instability. Hence, the final instability Framework highlighted the found examples from different cases for policymakers to implement during instability.
- The Institutional Theory gives an in-depth understanding of the barriers that facing organisations in implementing the required service successfully, through investigating the implementation under the four main pressures (Political, Social, Economic and Technology). However, it doesn't explain in a great deal the enabling side of the implementation (the principles that motivate the adoption and implementation of delivering the service successfully). Therefore we apply the 10 reinventing government principles that found by Osborn & Gabler (1992) as a lens for highlighting the motivating examples found in the three level of instability. In this sense, the two approaches are complementing each other.

The updated Framework unleashed ambiguities of the economic, political, social and technological pressures facing the adoption of eService in a stress situation. On the other hand, policy-making in a different level of geopolitical instabilities such as Saudi Arabia, UAE and Syria discussed with several examples of running activities through the ten principles of the Reinventing Government and highlighted the best practice for policymakers to adopt.

Twenty factors were identified in chapters 5,6 &7 and have formed the heart of our instability framework. They divided into two levels each level has ten elements: level 1 contain the primary elements that those have the direct influence on the adoption and the level 2 contains the secondary elements that those may found impeded within one or more elements of the level 1. In chapter 8 those elements were discussed under the classification of the Institutional Theory and the principles of the Reinventing Government.

9 CHAPTER 9

CONCLUSION, CONTRIBUTIONS, LIMITATIONS AND RECOMMENDATIONS

9.1 OVERVIEW

After a long and hard four and half years in doing this research, the journey comes to end. This study provides an understanding of the support that governments can offer to people within unstable societies. Digital technologies can provide displaced people with access to work and education opportunities, however, establishing and managing such digital environments presents new technical demands, regardless of the level of stability within a country. There are therefore many challenges to the adoption of eServices for refugees and displaced people, which were analysed through the lens of the four main key pressures of the institutional theory (economic, political, social and technological; and through the lens of the reinventing government principles (discussed in chapter 8) in order to understand the fundamental aspects of eService during instability , the research conducted mixed method research both quantitative and qualitative to empirically investigate those factors contribute to the successful adoption. Including the investigation of eGov strategies based on three different level of instabilities, three case studies based on unstable societies and two samples survey- displaced internally and refugees. This helped the researcher to understand the fundamental aspects of eService during instability. The study has been able to identify the primary and secondary challenges and consequently proposed instability framework (FW) and suitable theories for the successful adoption of eService in unstable societies. Moreover, we suggest technology related strategies that may assist in the effective adoption of the eService in developing countries that suffer from instability, thus, realizing the first objective of this research (list of objectives in section 1.10 in chapter 1).

This chapter is structured as follows: The next section (9.2) determines the research overview and realizing the research objectives. Contributions in section (9.3). Next, the research limitations in section (9.4). This is followed by highlighting the recommendations for the research in Section (9.5). The chapter will then conclude in Section (9.6). Figure 9.1. outlines the different parts of this chapter.

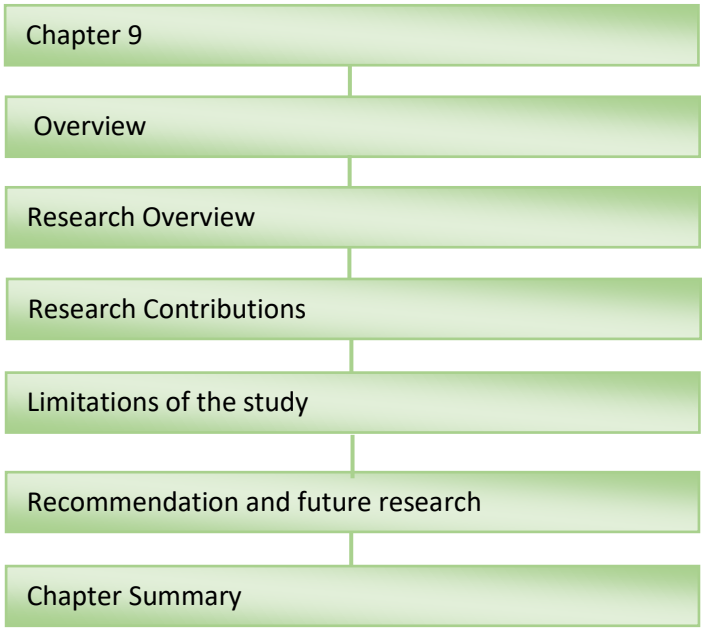


Figure 9-1: chapter 9 outline

9.2 RESEARCH OVERVIEW AND REALIZING THE RESEARCH OBJECTIVES

In this research, we covered the aspect related to support people during geopolitical instability therefore, we looked at the aspects of the geopolitical Instabilities of some countries which resulted in unstable societies and as a consequence, the number of refugees and displaced people have increased. Recently, the figure reached the largest number since the second world war and 80% out of 65 million refugees or internally displaced are found in developing countries. Although they often struggle to obtain the basics for survival, they are also living without the technology they need to obtain vital information, communicate with the local and international communities, and link to

basic services. Obstacles and challenges associated with their lives (studied in previous chapters) preventing successfully the adoption of the eService that may be elevating their lives. Although Digital Technology the driving force for changes transforms much of the way people live and work, is leaving those vulnerable people behind.

- Chapter 1

we introduce the fundamental of the research issues, including the background of the research problems, research context, rationale, motivation and significance of the study, research aim, research questions and objectives, and the research chapters structure have been outlined and discussed. In this chapter we discussed the fundamental of the research study, in which, the geopolitical instability issues and the factors that led Syria to be classified as one were addressed. We introduced the case study of the Syrian eGov and its main components and the factors that affect the development and implementation of eServices in during instability. We also, highlighted the various elements of the rationale, motivation and significance for conducting this study. followed by the research aim, questions objectives and the different methods adopted which led the study and, finally, we introduced the overview of each chapter.

- Chapter 2

The study in chapter 2 has realized the 2nd objective of the research which is: To review the literature in order to identify best practice in supporting displaced people and highlight the complexities of the successful eService delivery in different levels of instability (list of objectives in section 1.10 in chapter 1).

- Chapter 3

The study in chapter 3 has realized the 3^{ed} objective of the research which is: To develop an initial conceptual framework for classifying barriers and enablers affecting the successful adoption of

eService delivery in developing countries with different level of instability (list of objectives in section 1.10 in chapter 1).

- Chapter 4

The study in chapter 4 has realized the 4th objective of the research which is: To adopt the most suitable methodology in realizing the research objectives and answering the research question (list of objectives in section 1.10 in chapter 1).

- Chapter 5

The study in chapter 5 has realized the 5th objective of the research which is: To expose the gaps between design and implementation and to produce a guide for policymakers to enhance future policies based on studying eGov in a different level of instability (list of objectives in section 1.10 in chapter 1).

- Chapter 6

The study in chapter 6 has realized the 6th objective of this research, which is: To find evidences about the users' needs and demands from unstable context through questionnaires and interviews (list of objectives in section 1.10 in chapter 1).

- Chapter 7

The study in chapter 7 has realized the 7th objective of this research, which is: To find evidences in supporting the adoption of the eService through case studies in unstable societies (list of objectives in section 1.10 in chapter 1).

- Chapter 8

The study in chapter 8 has realized the 8th and 9th objectives of this research which are:to update the initial conceptual instability framework to reflect the changes based on the found evidence & to adopt the reinventing government principles & Institutional Theory as a conceptual lens to better classifying and understanding the collected data (list of objectives in section 1.10 in chapter 1).

9.3 CONTRIBUTIONS

The main contribution we have made, as a result of our research in adopting eServices by refugees and displaced people in unstable countries is that we have a better understanding of how to support citizens in areas of high level of instabilities which we have translated that into a framework which captures the challenges, issues and examples (to demonstrate good practices in supporting government activities in such environments). So our contributions, which has developed throughout the thesis, provide a better understanding of how displaced people have services provided and part of that understanding is providing examples, where we have represented the outcome in various publications. Further contributions listed in table 9.1.

Table 9-1: Main findings contribution derived from the Conceptual Framework

Findings Contributions	**Reference**
Dimension one (Environment), Dimension two (Reediness), Dimension three (Usage)	Chapter 5, sections (5.4.1.1), (5.4.1.2), (5.4.1.3)
Human capital, communications and change management, eService, National shared applications, infrastructure, eParticipation, institutional framework	Chapter5, sections (5.4.2.1), (5.4.2.2), (5.4.2.3), (5.4.2.4), (5.4.2.5), (5.4.2.6)
The importance of eService in education and heath	Chapter 6, section 6.3.1
Connectivity as an important issue in unstable society	Chapter 6, section 6.3.2
People awareness of the innovation	Chapter 6, section 6.3.3
Financial constraints and devices' affordability	Chapter 6, section 6.3.4
Sufficient online services and effective functionality	Chapter 6, section 6.3.5
Digital literacy	Chapter 6, section 6.3.6
Political influence and control	Chapter 7, section 7.4.1

Mobile communications	Chapter 7, section 7.4.2
Social media	Chapter 7, section 7.4.3
NGOs	Chapter 7, section 7.4.4
Technological Factors: service channels, systems integration & interoperability, cloud computing, information sharing for communities and government agencies	Chapter 7, case studies 1,2 and 3
Social Factors : Public awareness, digital divide, social integration, community & refugee empowerment, and eService demand	Chapter 7, case studies 1,2 and 3
Economic Factors : Impact of economic on the quality of life & Increases and improvements to the data and services that are available & The cost of the initiatives to promoting education, health & Improvements in the living conditions of refugees and displaced people.	Chapter 7, case studies 1,2 and 3
Political factors: eGov strategy, political leaders, senior ministry officials and staff , legislation and regulations	Chapter 7, case studies 1,2 and 3

Table 9-2: Main Analysis contribution derived from the Conceptual Framework

Analyse Contributions	**Reference**
eGov Strategy of the UAE: Dimension one (Environment), Dimension two (Reediness), Dimension three (Usage)	Chapter5, section 5.4.1
eGov Strategy of the Saudi Arabi:	Chapter 5, section 5.4.2
Catalytic Government (steering rather than rowing)	Chapter 8, section 8.3.1

Community Owned Government (Empowering rather than Serving)	Chapter 8, section 8.3.2
Competitive Government (Injecting Competition into Service Delivery)	Chapter 8, section 8.3.3
Mission-Driven Government (Transforming Rule-Driven Organizations)	Chapter 8, section 8.3.4
Results-Oriented Government (Funding Outcomes, Not Inputs)	Chapter 8, section 8.3.5
Customer-Driven Government (Meeting the Needs of Customer, Not the Bureaucracy)	Chapter 8, section 8.3.6
Enterprising Government (Earning rather Than Spending)	Chapter 8, section 8.3.7
Anticipatory Government (Prevention rather Than Cure)	Chapter 8, section 8.3.8
Decentralized Government (From Hierarchy to Participation and Teamwork)	Chapter 8, section 8.3.9
Market-Oriented Government (Leveraging Change through the Market)	Chapter 8, section 8.3.10
eParticipation (Extended Principles)	Chapter 8, section 8.4.1
Integration (Extended Principles)	Chapter 8, section 8.4.2
Cloud Computing (Extended Principles)	Chapter 8, section 8.4.3
Technological Pressure (Institutional Theory)	Chapter 8, section 8.5.1
Social Pressure (Institutional Theory)	Chapter 8, section 8.5.2
Economic Pressure (Institutional Theory)	Chapter 8, section 8.5.3

Political Pressure (Institutional Theory)	Chapter 8, section 8.5.4

Table 9-3:Research Contributions

Contribution	Overview	Reference	Related publication
Instability Framework (Novel framework)	A guidance framework with a set of factors contributes to the successful adoption of eService during instabilities.	Chapter 8	Main factors for successful adoption of eService during instabilities: Framework . (paper under construction)
An innovative and new structured snowball literature review method in high level of instability.	From conducting a semi-structured snowball literature review we were able to identify factors likely to impact the success of eService projects in during geopolitical instabilities. We also explored the specific geopolitical context of Syria and introduced the scaling effect this may have on generic barriers and issues.	Chapter 2.	The Need for Policies to Overcome eGov Implementation Challenges (Alsaeed, Adams, & Boakes, 2014b)
Classification and taxonomy of challenging factors in implementing eService in high level of instability..	We classify these challenges in four categories (Human, Political, Infrastructure and Organisational), believe to contribute to successfully implement eService in developing countries.	Chapter 2	Challenges to the Successful Implementation of E-Government Initiatives in Middle-East Arabic Countries and Syria (Alsaeed, Adams, & Boakes, 2014a)

Extending the use of the principles of reinventing government by Osborne and Gaebler(1992) and Heeks (2001) in high level of instability..	Redefined the ten principles of reinventing government by Osborne and Gaebler(1992) to be used in a new context. We have applied those principles in the Syrian context as a theoretical lens in a different context.	Chapter 3, chapter 8	E-service Adoption in Developing Countries with Instability Status: The Case of e-Government in Syria (Alsaeed & Adams, 2015)
Initial Conceptual Framework of eService during instabilities	This study proposes a conceptual framework which captures the main factors (both enablers and barriers) influence and contributes toward a successful implementation of eServices in countries that have unstable status.	Chapter 3	Conceptual Framework of eService delivery the system in Developing Countries with a high level of Instability (Alsaeed & Adams, 2016a)
A guidance for conducting mixed method research in unstable environment	The methodology used to realize the research aim and objectives and providing the rationales in selecting a suitable research strategy was adopted in order to answer the research question which related to eService adoption in unstable countries	Chapter 4 &9	
Research guidance through Poster	A full cycle of research guide presented through a conference poster.	Chapters 3&4&5&6 &7	eServices Adoption in Countries under Pressures and the Impact on Displaced and Refugee People

			(Alsaeed & Adams, 2016b)
A novel plan and strategy on Comparison eGov strategies amongst countries with different level of instabilities	Shows the eGov Strategies and activities how can impact on the development of eServices in unstable countries and what can we do to narrow the gap between strategy and implementation to achieve the best eService delivery to displaced people and refugees.	Chapter 5	Understanding eService strategies in countries with different level of instability Comparative study (Alsaeed & Adams, 2017)
Novel Understanding of eService strategies in countries with different level of instability	gain an understanding of the eGov strategies and implementation amongst countries with different level of instability. They highlighted the most appropriate procedures and methods to be carried out as a way forward to fill the current situation gap towards adopting eGov successfully in their context.	Chapter 5	Understanding eService strategies in countries with different level of instability Comparative study (Accepted for publication)
Use the survey method in unstable societies to extract challenging themes for the eService adoption	report on a study of Syrian refugees and displaced people using a survey exploring the use of eServices for citizens inside and outside of Syria.	Chapter 6	Key challenges for sustainable eServices in unstable societies: the case of Syria (paper under review)
Use the comparative case studies in in unstable societies to extract	Qualitative approach through adopting three case studies of eService activities from Syria and Turkey to shed light on elements that contribute to	Chapter 7	eService Adoption During Geopolitical Instabilities: Case Study of the Syrian Refugees

challenging themes for the eService adoption	successful implementation of eService initiatives in unstable environments		(Alsaeed, Adams, & Boakes, 2017)
A Novel use of Institutional theory during instabilities.	The institutional theory was adopted as a theoretical lens to have a deeper perspective at the found barriers to eService adoption in unstable environments.	Chapters 3&8	eService Adoption During Geopolitical Instabilities: Case Study of the Syrian Refugees (Alsaeed et al., 2017)

9.4 LIMITATIONS OF THE STUDY

The current geopolitical context and issues of access-to relevant people (who were distributed across countries) and stakeholders (including multiple agencies) made this investigation more difficult, therefor, presents a set of limitation of the study. The geopolitical situation in Syria has resulted in millions of people being displaced across the Middle East and Europe, which limited our options for research. In addition to financial constraints; travelling to Syria, to find people who would be willing to participate in primary research was assessed as unfeasible due to the high risk to both the researcher *and* participants.

During our literature review phase, we struggled to find similar work. Insufficient data was published on the topic of -- assisting governments in the support of displaced & refugee people in unstable societies-- which created a challenge from the start. To address this limitation we were required to adopt a novel strategy for the research. Further we studied the eGov strategies of countries with differing instability levels. For our work we limited it to three countries: UAE, Saudi Arabia and Syria. An analysis of more countries and different countries may have resulted in different insights emerging. However, the selection does provide interesting comparative and insights. Therefore, we identify and compare their differing strategies and implementation

activities, exposing the most important aspects of successful policy-making, and thus highlighting potential problem-areas for eService deployment in unstable societies.

We have grasped a set of essential elements from these studies (for example, we have recognized some successful practices at differing levels of instability, which we have suggested are applied to cases where instability is high) however, our approach has its own limitations, and each case requires more focus and concentration in order that specifics and ramifications be more broadly understood. We hope therefore that this study, and its data, will provide source material and impetus for further research in this area.

Based on our findings, we designed a connected mixed-method model for surveying the Syrian refugee population. We devised an online & offline survey that targeted two populations, one being displaced-people within Syria, and the other being Syrian refugees in Turkey, Jordan, the Middle East, the EU and the UK. Within Syria, we employed local research staff for distribution and mediation of questionnaires and interviews.

We received 1634 partially completed responses and 415 fully completed. Although the survey has captured important insights, we cannot make claims for wider applicability across the whole representation that the research method captured (it was an impossible task to get a full representative sample from such environment). In order to overcome some of the aforementioned limitations we used mediation (trusted people based in Damascus) to distribute the LSC-Samples (inside Syria) on our behalf, and allowed for the survey to be completed within a flexible time period. We put extra concerns on the safety of the participants and our agents who have distributed our survey, including their availability and their willingness to participate, and the freedom of finding participants within the given areas.

The survey prompted the need to conduct follow-on fieldwork when responses disclosed interesting examples of the use of technology to support and engage refugees; so further case studies and

interviews were undertaken to try and capture the nature of this good practice, we have resolved the way of getting access to the relevant people by conducting several semi-structured interviews face to face, via webcam and through mediation with current and former Syrian government employees. Although the number of interviewees was small, it doesn't stop us from gaining a significant insight of the topic. Many reasons have limited our research such as: it was hard to gain free access to those people who are directly involved in eGov implementation; time for conducting interviews was limited; interview locations were constrained; people were fearful and reluctant to participate; and, translation of responses from Arabic to English without losing meaning or stripping responses of their emotional context was a challenging task. We must assume that the 1634 partially completed survey responses we received are evidence of these and other issues, all of which limited our options for research and clearly missing the full insights from the non-completed.

Following the survey we conducted interviews with former and current policymakers and civil servants, some of whom are now refugees and therefore difficult to locate; and whilst travelling *to* Syria was impossible, we were able to interview participants in other countries, and directly in Syria through the use of proxy interviewers and webcams.

We found no other examples of eService research conducted in and about unstable societies, so the challenges faced are novel, and therefore recognising them is a necessity to making our research robust. These challenges include: limited options for conducting research (due, for example, to difficulties of finding distributed participants); limited access to robust responses from people and stakeholders (due, for example, to incomplete information caused by limited interviewee coverage); and, limited trustworthiness of responses (because interviewees are subjective and may be heavily influenced by experiences caused by the instability).

Given this context, our approach was the most suitable that we could have used where a tried and tested research processes was not possible, and our approach to addressing the challenges may help

other researchers to undertake further work studying supportive technology use for refugees or people from unstable countries.

In the analysis process we adopted the Institutional Theory (Scott 2001, 2004, 2008) as well as the principles of described in 'Reinventing Governments' (Osborne & Gabler, 1992) and extended by 'In The Information Age' (Heeks, 2001). We limited our analysis to these theoretical lenses which we considered were well suited to the research of unstable phenomena and societal transformation.

And finally, though there may be aspects of this research that has wider applicability (possible structural and organisational attributes of eGov, or political and cultural aspects), the result should be consider within the complex context of Syrian refugees and displaced people and consequently the applicability may be limited to other eGov activity with similar context.

9.5 RECOMMENDATION AND FUTURE RESEARCH

The researcher argues that there are remain some limitations and challenges which indicate that this research can be further developed. The researcher is also working on a research paper which aims at developing a better provisional model for refugee assistance and integration. Which required measuring the development and sustainability in urban planning of refugee also conducting more research on the use of technologies for social integration in the hosting communities. From this research we are able to provide some recommendations and suggestions (specific to unstable environments) as follows:

1. Some clear messages were emerging in the data collected. Such as the importance of ICT for the Syrian people, both internally displaced within Syria and refugees outside Syria. The ICT provides a key link with other members of their displaced communities (internal and external). It was clearly a very important attribute for the respondents in keeping a link to their family, friends and wider community. The insights from the Syrian displaced people shows the importance of ICT in both economic and service provision, but also in the ability to remain in

contact with family, friends and the wider Syrian communities. Hence, governments in partner with Humanitarian and Aid agencies should enhance and appreciate the ICT as a powerful tool in empowering refugees. (refer to survey and case studies in chapter 6&7 and technological pressure in chapter 8)

2. Another important theme was the importance for the ICT to provide information and a link to services. Even within a conflict region life goes on. Citizens require services such as health and education as well as a need to participate in their local economy. This was becoming more prominent as the displaced people remain in a displaced state(refer to survey RSC-Sample chapter 6) .
3. Some case examples used hoped to highlight issues related to the refugee context. Many societies are affected by economic and migrant refugees, as well, of course, the displaced peoples themselves. We argued that refugee is an economic development issue and should be considered as such (refer to the economic pressure in chapter 8 and findings from chapters 6&7)
4. Access to affordable communication technology is important for both economic and refugee migrants. Indeed, it provides the base for needed information on issues, economic and social opportunities, educational resources, as well as providing a much-needed channel to connect displaced peoples (refer to the economic pressure in chapter 8 and finding from chapters 6&7).
5. In using the case examples, we captured some of the complexities of the refugee's context. The mass migration of refugees based on the geopolitical event starting it. With such mass migrations, there are responsibilities from the wider international community: it is a global responsibility, and usually with an impressive array of global supports from many entities from general citizens, NGOs, charities, local communities, humanitarian& Aid agencies and governments (refer to the social pressure in chapter 8 and finding from chapters 6&7).
6. Since a civil war erupted in March 2011, nearly 11 million Syrians have fled their homes. half of them have sought refuge in neighbouring countries of Lebanon, Northern Iraq, Jordan and

Turkey—and the majority of these displaced Syrians are children. Devastated families have lost loved ones, homes and jobs. But with the right support, children affected by conflict can develop the coping skills they need to bounce back and move forward with their lives including NGOs support (refer to findings from chapters 6&7).

7. Consider finding an alternative way of delivering education - other than the traditional classroom lessons- to children (who have been affected and resulted in the displaced from their homes) such as the online education solutions. As the number of the affected children is huge where more than 11 million Syrians have left their homes out of 65 million worldwide refugees. Where children and youth are particularly vulnerable, during conflict such groups of people they lose safety and access to education. And as the war goes on they are not attending school for many reasons: schools damaged or destroyed, not be safe on the way to schools, not available teachers or the cost associated, or children being sent to labouring. Therefore, it is important to understand the broad scope of this issue without feeling as if the situation is hopeless (refer to case studies in chapter 7& technology pressure in chapter 8).
8. The Syrian conflict, which began in March 2011, has affected all aspects of life and de-stabilized the country's infrastructure. Today, Syrian citizens may face difficulty and danger when travelling to and visiting government sites to use offline government services. This demand for services by Syrian citizens, therefore, presents a major challenge for both the Syrian government and governments hosting Syrian refugees. eServices are therefore an attractive option for mitigating these difficulties and dangers (refer to findings from chapter 5&7 and technology pressure in chapter 8).
9. Consider Mobile based technology as an alternative channel for eService delivery in an unstable environment, where mobile network reaches people in most locations which are not the case for a different network (refer to findings from chapter 5,6 & 7 and technology pressure in chapter 8)

10. Pay more attention to a rural area and provide services smiler to the one in the urban area, by providing the necessary infrastructure, this would bridge the digital divide among citizens (refer to findings from chapters 5,6&7 and social pressure in chapter 8).
11. High-speed internet and provide people with adequate and reliable internet connection as well as cut the cost of connectivity down, hence, more people would consider joining the service (refer to economic, technology pressures in chapter 8).
12. Establishing digital literacy training programs and pay attention to the education process as a whole, especially, for those who rolled out from schools as a result of the conflict (refer to finding from chapter 6 and social pressure in chapter 8).
13. Considering Social media as a platform for dissemination of eServices information as well as utilizing the media including television, radio and newspaper to raise awareness among all (refer to finding from chapter 6 and social &technology pressures in chapter 8).
14. Involvements of NGOs in empowering the eService delivery by cooperating and collaborating with the government whether the Syrian one or the countries hosting refugees to provide the best of services (chapter 7, findings).
15. Advertising campaign focusing on emerging eService, especially in education and health (chapter 6, findings).
16. Highlight eServices benefits and advantages which available to those people in camps and community centres (finding from chapters 5,6,7,&technology pressures in chapter 8) .
17. System integration among government's arms and establishing culture of Collaboration and cooperation (chapter 5 & chapter 8)
18. Policy makers, in unstable context, should consider the reinventing government principles (discussed in chapters 3 & 8) as a start point for a sustainable strategy as enablers to successfully adopt the eService delivery in unstable society as they proven as leading principles in

transforming societies going through changes by gives lots of examples of transforming governments into a better ones (effectively and efficiently) from the USA context .

19. Consider implementing a digital literacy and communication training programmes for refugees. To enhance their digital skills and to be able to use the internet and the web effectively and fully and to be able to increase their online communication skills with governments, humanitarian service provider or with social media. Furthermore, through this course, they will be aware of the security issues and on how to protect their data (refer to chapters 5,6 and 8).

20. Consider the collaboration with private sectors, NGOs, humanitarian and aid organisations for activating the digital service delivery for refugees such as SMS health alert, civil registration, education courses, etc. refugees will benefit from disseminating related information digitally (refer to chapters 7&8).

21. Empower the well-being and self-reliance aspects among refugee communities by utilizing the use of social media, disseminating information and group discussion. The type of published date and the repeated cases & events based on refugee's personal experience will contribute in learning and education and make their followers aware and empower with different skills (refer to chapters 7,8).

22. Consider establishing internet centres for free access to the internet similar to the internet café for those refugees who can't afford to buy a mobile device or connecting to the internet through a monthly or a daily plane. The host communities will also benefit from those centres as well which work positively towards strengthen the interactions and the communications with the refugees and learn from each other (case studies in chapter 7).

23. Overcome the financial constraints on digital connectivity, by helping refugees connecting to the internet with low cost as possible and offering affordable mobile data plans by reducing the costly prices or offering discounts or even by offering free data packages or working with

humanitarian agencies in offering a complete and free digital service to the most vulnerable people (chapter 7 & technology pressures in chapter 8).

24. Improve Access to Networks to refugee's population who don't have access to a 3G and more mobile network where most of them found in rural areas. Enhancing the internet networks for those refugees will benefit their host communities as well (chapters 5,6, 7 & technology pressures in chapter 8).

25. Delivering more eServices and through different channels and consider Mobile phones one of the main and effective channels that allow for reaching refugees everywhere and anytime (refer to findings from chapters 7 and technology pressures in chapter 8).

26. Consider the availability and affordability of technologies by implementing new technologies (ease of use and friendly interfaces) especially for novice refugees users and improving the existing technologies (refer to chapter 7& 8).

9.6 CHAPTER SUMMARY

Through this research, we attempted to identify the key factors that may enable the adoption of eServices during geopolitical instabilities. Hence, elevating the lives of people who affected by conflicts. In highlighting those factors, policymakers in unstable societies becoming aware of the suitable ways to enable displaced and refugees people in adopting the government services provided digitally. Thus, empower both the affected people and the community hosting them, furthermore promoting self-reliance through improving social and economic opportunities. The proposed conceptual model and the classification of found keys will provide policymakers with a frame of reference for better understanding the successful implementation of eServices during geopolitical instabilities. This research aspires to add contribution in this area which can benefit the displaced people and host communities.

REFERENCES

Abanumy, A., Al-badi, A., & Mayhew, P. (2005). e-Government Website Accessibility : In-Depth Evaluation of Saudi Arabia and Oman. *The Electronic Journal of E-Government Volume*, *3*(3), 99–106.

Abdul Rahim, A., & Al Athmay, A. (2013). E-governance in arab countries: status and challenges. *Global journal of business research*, *7*(5).

Abu-Shanab, E. a. (2012). Digital Government Adoption in Jordan: An Environmental Model. *International Arab Journal of E-Technology*, *2*(3), 129.

Al-Busaidy, M. (2011). *Evaluating The Institutional Factors Affecting E- Government Implementation.* Brunel University.

Al-Busaidy, M., Weerakkody, V., & Hackney, R. (2010). E-Government Implementation in Oman: A Comparative Study of Three Public Agencies. *16th Americas Conference on Information Systems (AMCIS 2010)*, *2003*, 1–10. Retrieved from http://aisel.aisnet.org/amcis2010/261

Al-Khouri, A. M. (2012). eGovernment Strategies: The Case of the United Arab Emirates. *European Journal of ePractice*, *17*, 126–150.

Al-Khouri, A. M. (2013). e-Government in Arab Countries: A 6-Staged Roadmap to Develop the Public Sector. *Journal of Management and Strategy*, *4*(1), 80–107. http://doi.org/10.5430/jms.v4n1p80

Al-Omari, A., & Al-Omari, H. (2006). E-Government Readiness Assessment Model. *Journal of Computer Science*, *2*(11), 841–845. http://doi.org/10.3844/jcssp.2006.841.845

Al-Shboul, M., & Alsmadi, I. (2010). Jordan E-Government Challenges and Progresses. *International Journal of Advanced Corporate Learning (iJAC)*, *3*(1), 37–42. http://doi.org/10.3991/ijac.v3i1.1164

Alanezi, M. A., Mahmood, A. K., & Basri, S. (2012). E-Government Service Quality: a Qualitative Evaluation in the Case of Saudi Arabia. *The Electronic Journal on Information Systems in Developing Countrie(Ejisdc)*, *54*(3), 1–20.

Alfawwaz, B. M. (2011). *Evaluation of eGovernment Websites Usability in Jordan*. Brunel University London.

AlKhatib, H. (2013). *E-government systems success and user acceptance in developing countries: The role of perceived support quality*. Brunel University. Retrieved from http://dspace.brunel.ac.uk/handle/2438/7471

Almarabeh, T., & Amer, A. A. (2010). A General Framework for E-Government : Definition Maturity Challenges , Opportunities , and Success. *Europen Journal of Science Research*, *39*(1), 29–42. Retrieved from http://www.eurojournals.com/ejsr.htm

Almarabeh, T., Mohammad, H., & Abu Ali, A. (2009). E-government in Jordan. *European Journal of Scientific Research*, *35*(2), 188–197.

ALOMIRI, H. (2015). *The impact of leadership style and organisational culture on the implementation of e-services: an empirical study in saudi arabia*. Plymouth University.

Alsaeed, A., & Adams, C. (2015). E-Service adoption in developing countries with instability status: The case of e-government in Syria. In *Proceedings of the European Conference on e-Government, ECEG* (pp. 393–402). Portsmouth,UK.

Alsaeed, A., & Adams, C. (2016a). Conceptual Framework of eService delivery system in Developing Countries with a high level of Instability. *SOCRATES*, *4*(3), 13–34. Retrieved from http://www.socratesjournal.com/index.php/socrates/article/view/219

Alsaeed, A., & Adams, C. (2016b). eServices Adoption in Countries under Pressures and the Impact on Displaced and Refugee People. *Unpublished Poster Presentation at:Annual Conference of Technology*. Portsmouth,UK.

Alsaeed, A., & Adams, C. (2017). Understanding eService strategies in countries with different level of instability Comparative study. In *In Unpublished poster presentation at: 17th European Conference on Digital Government - ECDG 2017*. Lisbon, Portugal.

Alsaeed, A., Adams, C., & Boakes, R. (2014a). Challenges to the successful implementation of e-government initiatives in middle-east arabic countries and syria: literature review. In *tGov workshop 14* (Vol. 14, pp. 27–38). London: Brunel University.

Alsaeed, A., Adams, C., & Boakes, R. (2014b). The Need for Policies to Overcome eGov Implementation Challenges. *International Journal of Electronic Government Research*, *10*(3), 66–79. Retrieved from https://www.igi-global.com/gateway/article/full-text-pdf/120260

Alsaeed, A., Adams, C., & Boakes, R. (2017). eService adoption during geopolitical instabilities: Case study of the Syrian refugees. In *17th European Conference on Digital Government - ECDG 2017* (pp. 20–28). Lisbon, Portugal.

Alshehri, M., Drew, S., & Alfarraj, O. (2012). A Comprehensive Analysis of E-government services adoption in Saudi Arabia: Obstacles and Challenges. *International Journal of Advanced Computer Science and Applications*, *3*(2), 1–6. Retrieved from papers3://publication/uuid/A1CEA70F-B951-4D95-9F49-566F06677E09

Alsmadi, I. (2011). Security Challenges for Expanding E- governments Services. *International Journal of Advanced Science and Technology*, *37*, 47–61.

Altaany, F., & Al-zoubi, M. I. (2013). A Comparison between E-Government Ranks in Jordan and Malaysian Government. *International Journal of Advanced Computer Research*, *3*(13).

Andersen, T. B. (2009). E-Government as an anti-corruption strategy. *Information Economics and Policy*, *21*(3), 201–210. http://doi.org/10.1016/j.infoecopol.2008.11.003

Azab, N., Kamel, S., & Dafoulas, G. (2009). A Suggested Framework for Assessing Electronic Government Readiness in Egypt. *eJournal of eGov*, *7*(1), 11–28.

Basamh, S. S., Qudaih, H. a, & Suhaimi, M. A. (2014). E-Government Implementation in the Kingdom of Saudi Arabia: An Exploratory Study on Current Practices , Obstacles & Challenges. *International Journal of Humanities and Social Science*, *4*(2), 296–300.

Bonham, G., Seifert, J., & Thorson, S. (2001). The Transformational Potential of e- Government: The Role Of Political Leadership. In *The 4th Pan European International Relations Conference of the European Consortium for Political Research*. Canterbury, U.K: University of Kent.

Btoush, M. a H. (2009). *Evaluation of EmGovernment Services in Jordan : Providers '& Users â€™ Perceptions*. Sheffield Hallam University.

Bwalya, K. J., & Zulu, S. (2012). *Handbook of research on e-government in emerging economies: Adoption, e-participation, and legal frameworks* (Vol. I). Hershey/ USA: Information Science Reference (an imprint of IGI Global). http://doi.org/10.4018/978-1-4666-0324-0

Chatfiel, A. T., & Alhujran, O. (2009). A Cross-Country Comparative Analysis of E-Government Service Delivery among Arab Countries. *Information Technology for Development*, *15*(3), 151–170. http://doi.org/10.1002/itdj.20124

Chatfield, A. T., & Alhujran, O. (2009). A Cross-Country Comparative Analysis of E-Government Service Delivery among Arab Countries. *Information Technology for Development*, *15*(3), 151–170. http://doi.org/10.1002/itdj

Chen, A. J., Pan, S. L., Zhang, J., Huang, W. W., & Zhu, S. (2009). Managing e-government implementation in China: A process perspective. *Information & Management*, *46*(4), 203–212. http://doi.org/10.1016/j.im.2009.02.002

Choudrie, J., & Dwivedi, Y. . (2006). Investigating factors influencing adoption of broadband in the household. *The Journal of Computer Information Systems*, *46*(4), 25–34.

Ciborra, C., & Navarra, D. D. (2005). Good governance, development theory, and aid policy: Risks and challenges of e-government in Jordan. *Information Technology for Development*, *11*(2), 141–159. http://doi.org/10.1002/itdj.20008

Creswell, J. W. (2006). *Understanding Mixed Methods Research* (Second). Thousand Oaks, California, US: Sage Publication, Inc.

Crotty, M. (1998). *The foundations of social march: Meaning and perspective in the research process*. London, UK: Sage Publication, Inc.

Dada, D. (2006). The Failure of E-Government in Developing Countries: A Literature Review. *The Electronic Journal of Information Systems in Developing Countries(EJISDC)*, *26*(7), 1–10.

Denzin, N. K., & Lincoln, Y. S. (1998). *The Landscape of Qualitative Research: Theory and Issues.* London, UK: Sage Publication, Inc.

Dong, L. F., Sanganna, Gari, R. R., Li, Z., Craig, M. M., & Hou, S. F. (2010). Graphenesupported

platinum and platinum-ruthenium nanoparticles with high electrocatalytic activity for methanol and ethanol oxidation. *Carbon*, (48), 781–787.

Easterby-Smith, M., Thorpe, R., & Lowe, A. (2002). *Management research* (SECOND). London, UK: Sage Publication, Inc.

Ebrahim, Z., & Irani, Z. (2005). E-government adoption: architecture and barriers. *Business Process Management Journal*, *11*(5), 589–611. http://doi.org/10.1108/14637150510619902

Ebrahim, Z., Irani, Z., & Al Shawi, S. (2004). A Strategic Framework for E-government Adoption in Public Sector Organisations. In *The Tenth Americas Conference on Information Systems(AMCIS)* (pp. 1116–1125). New York, USA: AIS Electronic Library (AISeL). Retrieved from http://aisel.aisnet.org/amcis2004/140

Eggers, W. D. (2004). Boosting E-Government Adoption. In *Raising eGovernment Adoption Rates– FTA Annual Meeting*. Deloitte Research Public Secto. Retrieved from http://mobile.taxadmin.org/fta/meet/04am_pres/eggers.pdf

Eisenhardt, K. M. (1989). Building Theories from Case Study Research. *Academy of Management Review*, *14*(4), 532–550. http://doi.org/10.5465/AMR.1989.4308385

El-qawasmeh, E., & Owais, S. (2010). e-democracy in middle east : hard to approach. *Journal of Theoretical and Applied Information Technology*, *21*(1), 57.

Elsheikh, Y. M. a. (2011). A model for the Adoption and Implementation of Web-based Government services and applications. A Study Based in Grounded Theory Validated by Structural Equation Modelling Analysis in a Jordanian Context. Retrieved from http://hdl.handle.net/10454/5378

Eom, S. (2012). Institutional Dimensions of e-Government Development: Implementing the Business Reference Model in the United States and Korea. *Administration & Society*, 1–33.

European Commission. (2001). *European governance: A White Paper*. Brussels, Belgium: European Commission. Retrieved from http://europa.eu/rapid/press-release_DOC-01-10_en.htm

Farzali, E., Kanaan, G., Kanaan, R. K., & Atieh, K. (2012). E-Government in Syria: Obstacles and

Interoperability Framework. In *Handbook of Research on E-Government in Emerging Economies: Adoption, E-Participation, and Legal Frameworks* (Vol. 1, pp. 217–236).

Gant, J. (2008). Electronic Government for Developing Countries. *International Communication Union*, *2*(52).

Government of UAE. (2012). *Uae federal egovernment strategy 2012-2014*. Dubai: Telecommunications Regulatory Authority (TRA) of UAE eGovernment.

Greene, J. C., Caracelli, V. J., & Graham, W. F. (1989). Toward a conceptual framework for mixed-method evaluation designs. *Educational Evaluation and Policy Analysis*, *11*(1), 255–274.

Guba, E. G. (2000). The alternative paradigm dialog. In E. G. Guba (Ed.), *The paradigm dialog* (p. 17−27). Thousand Oaks, CA: Sage Publication, Inc.

Hackney, R., Desouza, K. C., & Chau, P. (2008). eGovernment strategies: ICT innovation in international public sector contexts. *Journal of Strategic Information Systems*, *17*(2), 73–74. http://doi.org/10.1016/S0963-8687(08)00023-1

Hadgu, A. T., Naini, K. D., & Niederée, C. (2015). Welcome or Not-Welcome: Reactions to Refugee Situation on Social Media. *Association for Computing Machinery(ACM)*, *1*. http://doi.org/10.1145/1235

Hall, R. (2013). Mixed Methods in Search of a Paradigm. In T. Le & Q. Le (Eds.), *Undertaking Research in a Challenging and Changing World* (pp. 71–78). Sydney, Australia: Nova Science Publishers, Inc. Retrieved from http://auamii.com/proceedings_phuket_2012/hall.pdf

HASSAN, H. (2011). *An investigation of e-services in developing countries: the case of e-government in egypt*. Granfield university.

HASSAN, H. S. H. (2011). *An investigation of e-services in developing countries: the case of e-government in egypt*. Cranfield university.

Hassna, G., & Ahmad, H. (2006). E-Government in Syria Concepts, Strategies and Implementation Policies. In *2nd International Conference on Information & Communication Technologies* (pp. 894–899). IEEE.

Hay, C. (2006). Constructivist institutionalism. In R. A. W. Rhodes, S. A. Binder, & B. A. Rockman (Eds.), *The Oxford handbook of political institutions* (pp. 56–74). OXFORD/ UK: Oxford University Press.

Heeks, R. (2001). *Understanding e-Government for Development* (No. 11). *i-Government Working Paper*. Manchester,UK: Institute for Development Policy and Management. Retrieved from http://www.sed.manchester.ac.uk/idpm/research/publications/wp/igovernment/documents/igov_wp11.pdf

Heeks, R. (2002). *Development Informatics: Working Paper Series.* (11). *Failure, Success and Improvisation of Information Systems Projects in Developing Countries.* Manchester,UK: University of Manchester, Precinct Centre. Retrieved from http://www.man.ac.uk/idpm/idpm_dp.htm#devinf_wp

Heeks, R. (2003). *Most eGovernment for Development Projects Fail :how risk can be reduced?* (iGovernment Working Paper Series No. 14). Manchester.

Heeks, R. (2006). *Implementing and managing e-government: An International Text.* (First Edit). Thousand Oaks, California, US: SAGE Publications Inc. Retrieved from http://site.ebrary.com/lib/alltitles/docDetail.action?docID=10218197&ppg=1

HEEKS, R. (2004). *eGovernment as a Carrier of Context* (No. 15). *iGovernment Working Paper Series*. Manchester, uk.

Heeks, R., & Bailur, S. (2007). Analyzing e-government research: Perspectives, philosophies, theories, methods, and practice. *Government Information Quarterly*, *24*(2), 243–265. http://doi.org/10.1016/j.giq.2006.06.005

Helbig, N., Ramón Gil-García, J., & Ferro, E. (2009). Understanding the complexity of electronic government: Implications from the digital divide literature. *Government Information Quarterly*, *26*(1), 89–97. http://doi.org/10.1016/j.giq.2008.05.004

Hudson, L., & Ozanne, J. (1988). Alternative Ways of Seeking Knowledge in Consumer. *Journal of Consumer Research*, *14*(4), 508–521.

Hwang, J., & Syamsuddin, I. (2008). Failure of E-Government Implementation: A Case Study of

South Sulawesi. In *Third 2008 International Conferences on Convergence and Hybrid Information Technology* (pp. 952–960). IEEE computer society.

Hyde, K. F. (2000). Recognising deductive process in qualititive research. *Qualitative Market Research: An International Journal*, *3*(2), 82–90.

Information Management Unit. (2016). *DYNAMO:Syria Dynamic Monitoring Report*. Gaziantep: Assistance Coordination Unit.

International Telecommunication Union. (2015). *Measuring the information society Report 2015: The ICT development index*. *International Telecommunication Union*. Geneva / Switzerland. Retrieved from http://www.itu.int/en/ITU-D/Statistics/Pages/publications/mis2015.aspx

IOM International Organisation for Migration. (2016). *IOM Regional Response to the the Syrian Crisis*. Retrieved from http://www.turkey.iom.int/ustmenu.asp?id=93&euid=91&sid=93

Irani, Z., Ezingeard, J. N., Grieve, R. J., & Race, P. (1999). A case study strategy as part of an information systems research methodology: a critique. *International Journal of Computer Applications in Technology*, *12*(1), 190–198.

Jait, A. (2012). *Government E-Services Delivery Requires Citizens a Wareness :the Case of Brunei Darussalam*. Loughborough University.

Janowski, T. (2015). Digital Government Evolution: From Transformation to Contextualization. *Government Information Quarterly*, *32*(3), 221–236. http://doi.org/10.1016/j.giq.2015.07.001

Joseph, S., & Avdic, A. (2016). Where do the Nordic Nations ' Strategies Take e-Government ? *Electronic Journal of E-Government*, *14*(1), 3–17.

Kafaji, M. A. (2013). Evaluating the roll of service quality as a mediator on user satisfaction in e-government applications. *Problems of management in the 21st century*, *8*(55).

Kaplan, B., & Maxwell, J. A. (1994). Qualitative Research Methods for Evaluating Computer Information Systems. In S. J. Jay (Ed.), *Evaluating Health Care Information Systems: Methods and Applications* (pp. 45–68). Thousand Oaks, California, US: Sage Publication, Inc.

Kavanaugh, A. L., Sheetz, S. D., Sandoval-Almazan, R., Tedesco, J. C., & Fox, E. A. (2014).

Media use during conflicts: Information seeking and political efficacy during the 2012 Mexican elections. *Government Information Quarterly*, *33*, 595–602. http://doi.org/10.1016/j.giq.2016.01.004

Khan, G. F., Moon, J., Rhee, C., & Rho, J. J. (2010). E-government Skills Identification and Development : Toward a Staged-Based User-Centric Approach for Developing Countries. *Asia Pacific Journal of Information Systems*, *20*(1), 1–31.

Khasawneh-Jalghoum, S. S. (2011). *A Case Study of Drivers and Barriers to E-Government Initiative in Jordan*. University of Manchester. Retrieved from https://www.escholar.manchester.ac.uk/api/datastream?publicationPid=uk-ac-man-scw:127302&datastreamId=full-text.pdf

Kim, S., Kim, H. ., & Lee, H. (2009). An institutional analysis of an e-government system for anti-corruption: The case of OPEN. *Government Information Quarterly*, *26*(1), 42–50.

Klein, H. K., & Myers, M. D. (1999). A Set of Principles for Conducting and Evaluating Interpretive Field Studies in Information Systems. *MIS Quarterly*, *23*(1), 67–93.

Kondra, A. Z., & Hurst, D. C. (2009). Institutional processes of organizational culture. *Culture and Organization*, *15*(1), 39–58.

Kuhn, T. S. (1962). *The Structure of Scientific Revolutions* (Second, En). Chicago, USA: THE UNIVERSITY OF CHICAGO PRESS. http://doi.org/10.1119/1.1969660

Layne, K., & Lee, J. (2001). Developing fully functional E-government: A four stage model. *Government Information Quarterly*, *18*, 122–136.

Lee, S. M., Tan, X., & Trimi, S. (2005). Current Practices of Leading e-Government Countries. *Communications of the ACM*, *48*(10), 99–104.

Lincoln, Y. S., & Guba, E. G. (2000). Paradigmatic controversies, contradictions, and emerging confluences. In N. K. Denzin, Y. S. Lincoln, & E. G. Guba (Eds.), *Handbook of qualitative research* (SECOND, pp. 163–188). Thousand Oaks, CA: Sage Publication, Inc.

Linnefell, W., Hallin, A., & Lagergren, M. (2014). E-government Policy Formation -- Understanding the roles of change drivers, veto players and advocacy coalitions. *Electronic*

Journal of E-Government, *12*(2), 131–141.

Lubbe, S., & Heerden, J. M. Van. (2003). *The Economic and Social Impacts of E- Commerce*. Hershey - USA: Idea Group Publishing.

Meijer, A. (2015). E-governance innovation: Barriers and strategies. *Government Information Quarterly*, *32*(2), 198–206. http://doi.org/10.1016/j.giq.2015.01.001

Montagna, J. M. (2005). A framework for the assessment and analysis of electronic government proposals. *Electronic Commerce Research and Applications*, *4*(3), 204–219. http://doi.org/10.1016/j.elerap.2005.01.003

Myers, M., & Avison, D. (2002). *Qualitative research in information systems: a reade*. London, UK: Sage Publication, Inc.

Myers, N. (1997). Environmental refugees. *Population and Environment: A Journal of Interdisciplinary Studies*, *19*(1), 167–182.

Neuman, W. (2006). *Social research methods:qualitative and quantitative approaches* (6th edn). Boston, MA, USA.: Allyn and Bacon.

Noman, H. (2012). The Emergence of Open and Organized Pro-Government Cyber Attacks in the Middle East: The Case of the Syrian Electronic Army. Retrieved from https://opennet.net/emergence-open-and-organized-pro-government-cyber-attacks-middle-east-case-syrian-electronic-army

Oates, B. J. (2006). *Researching Information Systems and Computing*. London, UK: Sage Publication, Inc.

Obeidat, R. a., & Abu-Shanab, E. a. (2010). Drivers of e-government and e-business in Jordan. *Journal of Emerging Technologies in Web Intelligence*, *2*(3), 204–211. http://doi.org/10.4304/jetwi.2.3.204-211

Ogonek, N., Gorbacheva, E., Räckers, M., Becker, J., Krimmer, R., Broucker, B., & Crompvoets, J. (2016). Towards Efficient EGovernment: Identifying Important Competencies for EGovernment in European Public Administrations. *Electronic Government and Electronic Participation. Proceedings of IFIP EGOV 2016 and ePart 2016*, *23*, 155–162.

http://doi.org/10.3233/978-1-61499-670-5-155

Osborne, D., & Gaebler, T. (1992). *Reinventing Government: How the entrepreneurial spirit is transforming the public sector* (first). New York - USA: PLUME-Penguin Group-Penguin Bookes USA, Inc.

Patel, S. (2015). The research paradigm – methodology, epistemology and ontology – explained in simple language. Retrieved April 20, 2017, from http://salmapatel.co.uk/academia/the-research-paradigm-methodology-epistemology-and-ontology-explained-in-simple-language

Peters, B. G., Pierre, J., & King, D. S. (2005). The politics of path-dependency: Political conflict in historical institutionalism. *Journal of Politics*, *67*(4), 1275–1300.

Porumbescu, G., Vrabie, C., & Ahn, J. (2012). The Influence of Context on Participatory E-Government Applications: A Comparison of E-government Adoption in Romania and South Korea. In *The 7th Edition of the International Conference on European Integration - Realities and Perspectives* (pp. 825–836).

Rabaiah, A., & Vandijck, E. (2009). A Strategic Framework of eGovernment : Generic and Best Practice. *Electronic Journal of E-Government*, *7*(3), 241–258.

Reichardt, C., & Rallis, S. (1994). *The qualitative-Quantitative debate: New Perspectives*. San Francisco - US: Jossey-Bass.

Remenyi, D., Williams, B., Money, A., & Swartz, E. (1998). *Doing Research in Business and Management: An Introduction to Process and Method*. London, UK: SAGE Publications Ltd.

Robson, C. (2002). *Real World Research* (SECOND). Oxford/ UK: Blackwell Publishing.

Saint-Martin, D. (2004). *Building the new managerialism state* (2nd ed). Oxford/ UK: Oxford University Press.

Sallard, O., & Alyousuf, N. A. (2007). *Measuring and Evaluating E-Government in Arab Countries. Working Group 2 on E-Government and Administrative Simplification*. Dubai, UAE: Dubai School of Government.

Saunders, M., Lewis, P., & Thornhill, A. (2002). *Research methods for business students*. (M. HarlowSaunders, P. Lewis, & A. Thornhill, Eds.) (Thired). Prentice Hall.

Scott, R. W. (2001). *Institutions and organizations* (First). Thousand Oaks, California, US: Sage Publications.

Scott, R. W. (2004). Institutional theory. In George Ritzer (Ed.), *Encyclopedia of Social Theory* (pp. 408–414). Thousand Oaks, California, US: SAGE Publications Inc.

Scott, R. W. (2008). Approaching adulthood: The maturing of institutional theory. *Theory and Society*, *37*(1), 427–442.

Seo, D. B., & Bernsen, M. (2016). Comparing attitudes toward e-government of non-users versus users in a rural and urban municipality. *Government Information Quarterly*, *33*(2), 270–282. http://doi.org/10.1016/j.giq.2016.02.002

Strachan, P., Wanous, M., & Mofleh, S. (2008). Developing Countries and ICT Initiatives: Lessons Learnt from Jordan's Experience. *The Electronic Journal on Information Systems in Developing Countries (EJISDC)*, *34*(5), 1–17.

Suleiman, F., Obeid, W., Ahmad, U., Boussaad, R., Anbar, M., & Dlain, A. (2008). *Government Services Reform & Modernization Program (GSR) E-Government Strategy: General Framework for E-Government Initiative in the Syrian Arab Republic.* Damascus/ Syria: The Ministry of Communications and Technology. Retrieved from http://www.moct.gov.sy/moct/sites/default/files/Strategy-Framework-4 00 En.pdf

Suleiman, F., Obeid, W., Ahmad, U., Boussaad, R., Anbar, M., & Dlain, A. (2009). *Government Services Reform & Modernization Program (GSR) E-Government Strategy: E-Government Strategy in Syria (Orientations).* Damascus/ Syria: Ministry of Communications and Information Technology(MOCT). Retrieved from https://info.undp.org/docs/pdc/Documents/SYR/00061326_E-Government.pdf

SWEISI, N. A. A. O. (2010a). *E-government services : an exploration of the main factors that contribute to successful implementation in Libya.* University of portsmouth.

SWEISI, N. A. A. O. (2010b). *E-Government Services an Exploration of the Main Factors that Contribute to Successful Implementation in Libya By*.

Syria Arab Republic. (2008). *Enhancing Institutional Capacity for E-Government Implementation syria*. Damascus, Syria Arab Republic: Ministry of Communications and Technology

(MOCT).

Syria Arab Republic & UNDP. (2008). *Enhancing institutional capacity for eGovernment implementaion.* Damascus/ Syria: Ministry of Communications and Information Technology(MOCT). Retrieved from https://info.undp.org/docs/pdc/Documents/SYR/00061326_E-Government.pdf

TALABY Gate team. (2012). TALABY Gate. Retrieved from http://complaints.egov.sy/index.php

Teo, H. H., Wei, K. K., & Benbasat, I. (2003). Predicting intention to adopt interorganizational linkages: An institutional perspective. *MIS Quarterly*, *27*(1), 19–49.

Timmermans, A. (2001). Arenas as institutional sites for policymaking: Patterns and effects in comparative perspective. *Journal of Comparative Policy Analysis: Research and Practice*, *3*, 311–337.

Transtec S.A. (2015). *Independent Programme Evaluation (IPE) of UNHCR ' s Response to the refugee influx in Lebanon and Jordan*. Brussels, Belgium. Retrieved from www.transtec.be

Trochim, W. M. (2006). *The Research Methods Knowledge Base* (SECOND). Cincinnati, OH.: Atomic Dog Publishing, Inc. Retrieved from http://www.socialresearchmethods.net/kb/

Undesa. (2008). *United Nations e-Government Survey 2008: From e-Government to Connected Governance*. *New York*. New York - USA: Department of Economic and Social Affairs Division for Public Administration and Development Managemen. Retrieved from https://publicadministration.un.org/egovkb/Portals/egovkb/Documents/un/2008-Survey/Complete-survey.pdf

UNHCR. (2012). *Displacement the new 21st Century Challenge.* Geneva, Switzerland: 2013 United Nations High Commissioner for Refugees. Retrieved from http://www.unhcr.org/statistics

UNHCR. (2013). *Syria Regional Response Plan January to June 2013*. Field Information Coordination Support Section. Retrieved from http:/data.unhcr.org/syrianrefugees

UNHCR. (2014a). *2014 Syria Regional Response Plan: Strategic Overview*. Retrieved from http://reliefweb.int/sites/reliefweb.int/files/resources/Syria-rrp6-full-report.pdf

UNHCR. (2014b). *2014 Syria Regional Response Plan Strategic Overview*. New York, NY, USA.

UNHCR, & accenture. (2016). *CONNECTING REFUGEES: How Internet and Mobile Connectivity can Improve Refugee Well-Being and Transform Humanitarian Action*. UNHCR's Division of Information Systems and Telecommunications (DIST), Accenture Development Partnerships (ADP). Retrieved from www.unhcr.org/connectivity-for-refugees

UNHCR Syria. (2015). *Protecting and supporting the displaced in syria: unhcr Syria End of Year Report 2015*. Damascus, Syria. Retrieved from syrdareporting@unhcr.org

UNICEF. (2015). *Humanitarian Response Plan 2016 - Syrian Arab Republic*. Office for the Coordination of Humanitarian Affairs. Retrieved from www.humanitarianresponse.info/en/operations/syria

UNICEF. (2016). *Syria Crisis: April 2016, Humanitarian Results. Unicef mena Regional Office*. Retrieved from www.unicef.org/infobycountry/syriancrisis_68134.htm

United Nations. (2010). *E-Government Survey 2010 Leveraging e-government at a time of financial and economic crisis*. New York - USA: Department of Economic and Social Affairs Division for Public Administration and Development Managemen. Retrieved from https://publicadministration.un.org/egovkb/Portals/egovkb/Documents/un/2010-Survey/Complete-survey.pdf

United Nations. (2012). *E-Government Survey 2012: E-Government for the People*. New York - USA: Department of Economic and Social Affairs Division for Public Administration and Development Managemen. Retrieved from https://publicadministration.un.org/egovkb/Portals/egovkb/Documents/un/2012-Survey/Complete-Survey.pdf

United Nations. (2014a). *E-government survey 2014: e-government for the future we want*. New York - USA: Department of Economic and Social Affairs Division for Public Administration and Development Managemen. Retrieved from https://publicadministration.un.org/egovkb/Portals/egovkb/Documents/un/2014-Survey/E-Gov_Complete_Survey-2014.pdf

United Nations. (2014b). *United Nations E-Government Survey 2014 "E-Government for the Future We Want."* New York - USA.

United Nations. (2016). *UN E-government survey 2016. E-Government in Support of Sustainable Development*. New York, USA: United Nations Department of Economic and Social Affairs,Division for Public Administration and Development Management. Retrieved from http://workspace.unpan.org/sites/Internet/Documents/UNPAN96407.pdf

Wallström, Å., Engström, A., Salehi-Sangari, E., & Styvén, M. E. (2009). Public E-Services from the Citizens' Perspective - Adopting a Market Orientation. *International Journal of Public Information Systems*, *2*(2), 123–134.

Walsham, G. (1995). Interpretive Case Studies in IS Research: Nature and Method. *European Journal of Information Systems*, *4*(2), 74–81.

Wanous, M., Mofleh, S., & Strachan, P. (2008). Developing countries and ict initiatives: lessons learnt from jordan's experience. *The Electronic Journal on Information Systems in Developing Countries (EJISDC)*, *34*(5), 1–17. Retrieved from http://www.ejisdc.org

Weber, R. (2004). The Rhetoric of Positivism Versus Interpretivism: A Personal View. *MIS Quarterly*, *28*(1), 3–12.

Webster, J., & Watson, R. T. (2002). Analyzing the Past to Prepare for the Future: Writing a Literature Review. *MIS Quarterly*, *26*(2), xiii–xxiii. http://doi.org/10.1.1.104.6570

Wold Bank. (2010). Information & Communication Technologies: e-Government. Retrieved April 20, 2004, from http://www.worldbank.org/en/topic/ict/brief/e-government

Yesser. (2012). *2nd National e-Government Action Plan For Kingdom of Saudi Arabia*. Riyadh: Ministry of Communications and Information Technology.

Yin, R. K. (2003). *Applications of case study research*. Newbury Park, CA, EUA: SAGE Publications Ltd.

Yin, R. K. (2006). *Case Study Reserach - Design and Methods* (Second Edi). Thousand Oaks, California, US: SAGE Publications. http://doi.org/10.1016/j.jada.2010.09.005

Yin, R. K. (2014). *Case Study Research: Design and Methods* (fifth). London, UK: SAGE Publications Ltd.

Zhi, J., & Zhenhua, Y. (2009). The Local e-Government Practice in China: A Survey of the G2C

Practice of "Changxing County. In *International Conference on information Management, Innovation Management and Industrial Engineering* (pp. 548 – 551).

Appendix 1

Appendix A: Interview Questions (Arabic)

أسئلة المقابالت باللغة العربية

تهدف الدراسة ككل للتحقيق في تنفيذ تكنولوجيات الحكومة االلكترونية ، واآلثار التي تقوم بها مثل هذة التقنيات في المجتمعات وبالأخص المجتمع السوري ونظم العمليات وتاثيرها في القطاع العام. المرحلة الحالية من هذه الدراسة تهدف إلى استكشاف مبادرات الحكومة الإلكترونية والخبرات ذات الصلة في السياق السوري لفهم الأسباب الرئيسية وراء مستوى الإختلافات في تنفيذ مبادرات الحكومة االلكترونية بين مؤسسات القطاع العام. ومن المتوقع أن المواد المتوقعة استخدامها في هذة الدراسة وايضا طريق الممارسة باستخدام مقابلة الأفراد المسؤليين والمطبقين والمتبنيين للخدمات الإلكترونية بين مختلف مستويات الإدارة في القطاع العام الحكومي سيوفر أساسا متينا لدراسة أنشطة الحكومة الإلكترونية في سورية ، والمساعدة في الجهود الرامية إلى العمل من أجل وضع نموذج مفاهيمي وتصنيف الهمية االنشطة والعمليات الجديدة المستخدمة لتطوير تقديم الخدمة في القطاع العام. ومن المتوقع أن تعالج القضايا الرئيسية الخاصة بتطبيقات الحكومة االلكترونية في المقابلات الشخصية ومن خالل االسئلة لمبينة أدناه

1- متى بدأت الحكومة الالكترونية
2- كم عدد المؤسسات الحكومية المرتبطة بأنظمة مؤسستكم ز و كم عدد الموظفين
3- من القائد لمبادرة الحكومة الالكترونية هل هو –الفريق الفني – الادارة العليا بالمؤسسة – الهيئة العامة لتقتية المعلومات
4- هل يوجد خطة او استراتيجية واضحة لدى مؤسستكم لتطبيق الحكومة الإلكترونية
5- هل المسؤولين على دراية كافية و بأهمية و فائدة تطبيقات الحكومة الإلكترونية
6- ماهي المراحل المنفذة من خطة تقديم الخدمات الإلكترونيةز
7- هل بالامكان شرح الخدمات المقدمة بالنسبة للحكومة الإلكترونية
8- ماهي المعوقات الاساسية لمبادرة الحكومة الإلكترونية
9- على الصعيد اليومي, كم عدد المعامالت المنجزة بشكل الكتروني ؟
10- من خالل تبني عملية خدمات الحكومة االلكترونية, ما هي الصعوبات التى تم مواجهتها؟
11- ما أثر الحرب الأهلية السورية على إدارة الحكومة الإلكترونية؟
12- هل هناك أي خدمات عبر الإنترنت للنازحين أو اللاجئين؟
13- هل توفر الحكومة أي أدوات تعليمية للتعليم عبر الإنترنت لسد الثغرات في التعلم المؤجل؟
14- أي مساعدة طبية طارئة يتم توفيرها من خلال القنوات الرقمية ؟
15- كيف تؤثر الحرب الأهلية عادة على المؤسسات الحكومية؟

16- هل تعتقد أن الخدمات عبر الإنترنت قد تقوم بتنقيح وإصلاح عملية إجراءات المنظمات الحكومية خلال حالات عدم الاستقرار؟

الضغوط االقتصادية

أ صف الفائدة الحقيقة من خالل تطبيق خدمات الحكومة االلكترونية لالقتصاد الوطني؟

ب ما هو التاثير الناتج عن تطبيق الحكومة االلكترونية على دورة العمل وبيئة التشغيل؟

ج من خالل عملك, كيف ترى ان اهداف تطبيق الحكومة االلكترونية تعكس اهداف تنمية االقتصاد الوطني؟

د عرف من خالل خبرتك العملية, كيف ان تنفيذ مختلف تطبيقات الحكومة االلكترونية تؤثر وتحافظ على التقليل من تكلفة التشغيل

هـ من خالل نظرتك كمنفذ لهذه الخدمات, كيف يفيد تطبيقات الحكومة االلكترونية االقتصاد الوطني؟ وهل يعتبر الموارد االقتصادية كاساس يعوق من تقدم تنفيذ مختلف تطبيقات الحكومة االلكترونية؟

الضغوط السياسية

أ هل تعتبر تطبيق سياسات التحول للخدمات االلكترونية من االولويات الرئيسية للقيادة بالمؤسسة؟ واذا كان االمر كذلك, هل باالمكان ايضاح الدور الذي تقوم به القيادة بالمؤسسة نجو تطبيق الحكومة االلكترونية؟

ب كيف تصور الدعم والموافقات من قبل القيادات العليا باالتجاه نحو تطبيقات الحكومة االلكترونية؟

ج كيف نستطيع وصف عملية التشريع الحالية الستخدام االنترنيت ؟

د هل هناك تشريع واضح ونتظيم لعميلة استخدام الخدمات االلكترونية في مؤسستك؟)على سبيل المثال , التصاريح االلكترونية, التوقيع االلكتروني , حماية المعلومات والبيانات, وحقوق النشر والتوزيع(

هـ صف الهيكل التنظيمي لالدارة الداخلية بمؤسستك باختصار؟ وهل هناك اي اختالف من قبل او بعد تطبيق مشروع الخدمات االلكترونية؟

و هل باالمكان وصف التعاون وتبادل المعلومات فيما بين المؤسسات المطبقة لمشاريع الحكومة االلكترونية؟

ح هل هناك أي مؤسسة تقوم بالتنسيق والتحفيز على عملية تطوير الحكومة االلكترونية, صف؟

الضغوط االإجتماعية

أ هل هناك معايير منهجية في تكنولوجيا المعلومات واالتصاالت؟ واذا كان الجواب بنعم , هل هذه المناهج برتبطه بحاجة الفرد والمجتمع الخاصة بالمستقبل التجاري للمواطن؟

ب عند تطبيق أي مشروع مثل الحكومة االلكترونية ، هل هناك أي مرافق للتدريب لمثل هذا المشاريع الوطنيه ؟ وإذا كان الجواب نعم ، يرجى وصف نوعية التدريب المتاح؟

ج هل هناك أي استراتيجية متاحة في شرح االستفادة من كل الخدمات االلكترونية بمؤسستك وفي مختلف مستويات المستخدمين؟ وإذا كان الجواب نعم ، هل يمكن أن تصف تلك الوسائل؟

د كيف تصف استراتيجية التواصل مع الجمهور ، ال سيما المواطنين؟ وهل هي معقدة ؟

الضغوط التكنولوجية

1- هل تعتقد في ما يلي من العوامل ان من شأنها أن تؤثر في تطور تطبيقات الحكومة االلكترونية في المؤسسة الخاصة بك؟

لا اعرف	لا	نعم	الجمهور المستهدف
			الوصول الى االنترنت في المدن والمناطق المختلفة
			الوصول إلى االنترنت في المناطق الريفية
			عدم وجود شبكة حكومية واسعة)المركزية والمحلية على مستوى
			االإتصال(
			عدم وجود شبكات محلية في المكاتب الحكومية
			كافية الحاسبات وسرعة معالجة
			عدم الوثوق بامدادات الطاقة
			شبكة كافية لألمن

لا اعرف	لا	نعم	البنية التحتية
			الفاكس أجهزة الكمبيوتر وقواعد البيانات والشبكات القائمة(
			موفري الوصول إلى االنترنت)عمانتل(
			وصالت االنترنت غير موثوقة

كفاءة عرض النطاق الترددي)سرعة اتصاالت(

الدعم التقني
توافر الدعم الفني لتصميم
توافر الدعم التقني لتنفيذ
توافر الدعم الفني لعمليات
أخرى)حدد:(

الشراكات الصناعية
لالستشارات الفنية
أجهزة كمبيوتر ومعدات الشبكات
االتصاالت السلكية والالسلكية
إدارة قواعد البيانات ومواقع االنترنيت
أجهزة الخادمات
برامج ومعدات ألمن ، الجدران النارية ، كشف التسلل
البرمجيات
أخرى)حدد(

2- هل هناك دوائر لتقنية المعلومات خاصة بوحدات الحكومة وتتعلق بتطبيق مشروع الحكومة إللكترونية؟

3- هل هناك معايير ثابتة ومتعارف عليها لقاعدة البيانات وتطوير التطبيقات لجميع الوحدات الحكومية؟)الوثائق ذات الصلة(

4- إذا كنت شاركت في مرحلة التكامل بين قواعد البيانات الخاصة بمؤسستك في تطبيق مشروع الحكومة االلكترونية الرجاء وصف عملية التكامل؟

5- هل هناك أي برنامج جاري انشائها لتعقب اتجاهات االستخدام في استخدام المواطنين لخدمات الحكومة االلكترونية وتكنولوجيا المعلومات واالتصاالت لضمان وجود البنى التحتية الكافية لدعم االتجاهات المستقبلية المتوقعة لالستخدام؟

6- هل صناعة تكنولوجيا المعلومات واالتصاالت المحلية كافية وقوية؟ وهل يمكن االعتماد عليه؟

7- هل الدعم الداخلي التقني لتكنولوجيا المعلومات واالتصاالت متاحة وبسهولة؟

8- كيف تصفون الدعم الخارجي التقنية؟

أسئلة ختامية

أ- هل هناك أي مجال من المجاالت المحددة التي ترغب في إدراجها أو استبعادها من هذا البحث؟

ب- ما هو الشي الذي قمتم به بشكل مختلف؟

APPENDIX B: INTERVIEWS QUESTIONS (ENGLISH)

General Questions

1. When did e-government implementation/initiatives start?
2. How many government agencies are connected to your organisation? And how many employees work in the IT department?
3. Is these initiatives driven by technical team / top management / Information Technology Authority?
4. Does your organisation have a clear plan and strategy towards e-government?
5. Do your organizational top management has a clear vision and realize the significant of e-government project?
6. What are the stages/phases that you followed to fully implement e-government in your organisation? And in which stage your organisation is?
7. Are there any eServices offered/ started? If yes, can you describe it?
8. What are the key challenges that influence e-government initiatives in your organisation?
9. How many citizen queries does your local authority receive on daily basis?
10. What barriers do you think you faced while adopting e-government?
11. What the implication of the Syrian civil war on running the eGovernment?
12. Are there any online services for displaced people or refugees?
13. Is the government provide any online education learning tools to fill the gaps of postponed learning?
14. Any emergency medical help provided through digital channels?
15. How the civil war affects normally running the government institutions?
16. Do you think online services may refine and reform the process of the routines of the government organizations?

Economic Pressures questions

1. Describe the potential benefit of the product/e-service to the development of the national economy? (Transaction cost)
2. Describe the impact of the product/e-service on the fulfilment of business processes and the operating environment? (Revolution and growth of ICT)
3. How do your e-government objectives reflect on the national economy objectives? (Revolution and growth of ICT)

4. Define how does the e-government Impact on Protect expenditures? (Protect expenditures)
5. In your opinion, how does your e-government benefits the National Development of economic?
6. Would you consider economic issues as a key challenge in developing the e- government implementation in your organisation?

Political Pressure questions

1. Is e-government implementation a priority for the leadership? And if so, could you explain the role that played by leadership in your organisation toward e- government implementation?
2. How would you illustrate the support and commitment of the top management in your organisation towards the e-government implementation?
3. How would you describe the current legislative process?
4. Is there any online services regulation and legislation in your organization? (e.g. Digital Authorizations, E-signature, Cyber-crime, Data protection, and Copyrights).
5. Describe the organisational structure of your local authority? And explain if there was any change before and after e-government project?
6. Can you explain the collaboration between the e-government organisation and other government organizations?
7. Is there any respected coordination institution that motivates and coordinates the e-government development process?

Social Pressure questions

1. Are there standards curricula in ICT? If yes, so are these curricula in ICT focused on business/citizen needs? (DD)
2. When you develop any project such as e-government, are there any training facilities for such project for the public? If yes, please describe training available? (Citizen empowerment)
3. Is there any available strategy in explaining the benefit of each e-service for the different level of users? If yes, could you describe it?
4. How would you describe the communication strategy with the public, especially citizens? Is it complicated?

Technical Pressures questions

1. Do government agencies have their own IT units that relate to the e- government project organisation?
2. Are there standards for database and application development? (relevant documentation)
3. If you have come across the need for integration of your systems, can you please describe what the process towards integration was?
4. Is there any on-going program to track usage trends in citizens' usage of e- government services and to ensure that adequate ICT infrastructures exists support future projected usage trends?
5. Is the local industry of ICT strong enough? And is it reliable?
6. Is internal ICT technical support easily available?
7. How would you describe the external technical support?
8. Would you consider the following as factors that would influence the development of the e-government in your organization?

Questions		**Yes**	**No**	**Don't Know**
1	Access Internet in cities			
2	Access Internet in rural areas			
3	Lack of government wide intranet (central and local level connectivity)			
4	Lack of LANs in government offices			
5	Inefficient technology legacy system in place (e.g. phone, fax computers, databases, and existing networks)			
6	Internet access providers			
7	Unreliable internet connections			
8	Adequate bandwidth (Speed of connections)			
9	Adequate computing and processing speed			
10	Reliable power supply			
11	Adequate network security			

	Availability of technical support for design			
	Availability of technical support for implementation			
	Availability of technical support for operations			
	specify any partnerships that have been developed :			
	Technical consultants			
	Computers and networking equipment			
	Telecommunications			
	Database management and hosting			
	Servers			
	Security, firewalls, intrusion detection			
	Software			
	Are any of the below areas of e-government development in your organization being outsourced?			
	Network architecture and online service delivery development			
	Website development			
	Human resources training			
	Ongoing operations and technical support			
	Transactions and collections			
	Is the ICT infrastructure development plans comprises the following:			
	Universal access to Internet			
	Backbone network development			
	Wireless technology			
	Broadband technology			

	Open standards			
	Does the e-government organization have set standards for the national e-government portal usability (look and feel) to the following			
	Interface			
	User Feedback			
	Usage metrics			
	Indexing of Information			
	Describe what best characterises the provision of online government services?			
	No services online			
	Only information available online			
	One way interaction possible			
	Two-way interaction possible			
	Complete transaction possible within single agency			
	Complete transaction across multiple agencies			

Closing Questions (Interviewee opinions)

- Are there any specific areas that you would like to be included and/or excluded in this research instrument?
- What would you have done differently?
- What do you think is the most interesting part of the interview?

Appendix C: Survey Questions

-

(LSC-Sample)

What is your current age?

18 – 22 ☐

23 - 30 ☐

31 – 45 ☐

46 – 65 ☐

Over 65 ☐

ما هو عمر

18 – 22 ☐

23 - 30 ☐

31 – 45 ☐

46 – 65 ☐

Over 65 ☐

What is your gender?

Male ☐

Female ☐

الجنس

ذكر ☐

أنثى ☐

What is your level of education?

Below high school ☐

High school ☐

University graduate ☐

University post graduate ☐

ماهو تحصيلك العلمي ؟

أقل من ثانوية عامة ☐

ثانوية عامة ☐

درجة جامعية ☐

دراسات عليا ☐

What is your current employment status?

Student ☐

Employed ☐

Unemployed ☐

Retired ☐

ما هو عملك الحالي؟

طالب ☐

موظف ☐

عاطل عن العمل ☐

متقاعد ☐

How do you consider your computer literacy?

Low ☐

Medium ☐

High ☐

كيف تنظرون إلى المعرفة بالكمبيوتر؟

ضعيف ☐

متوسط ☐

جيد ☐

How do you classify the necessity of the internet in your life?

1-Not at all important ☐

2-Low importance ☐

3-Neutral ☐

4-important ☐

5-Extremely important ☐

6- Please justify your answer

كيف تصنف ضرورة الإنترنت في حياتك؟

1-غير ضروري ☐

2-ضروري قليلا ☐

3- ضروري متوسط ☐

4-ضروري ☐

5- ضروري جدا ☐

6- يرجى تبرير إجابتك

What type of access to the internet do you have?

I use 3G mobile broadband technology ☐

2G cellular network on a basic phone ☐

Internet delivered via a phone line ☐

Satellite broadband Technology ☐

I have no internet access at all ☐

Other, (please indicate)…… ☐

ما هو نوع الوصول إلى الإنترنت لديك؟

- ☐ تكنولوجيا النطاق العريض المتنقلة Gيمكنني استخدام الجيل الثالث 3
- ☐ الشبكة الخلوية على الهاتف الأساسي 2G
- ☐ يتم تسليم الإنترنت عبر خط الهاتف
- ☐ الأقمار الصناعية
- ☐ ليس لدي أي اتصال بالإنترنت على الإطلاق
- ☐ أخرى، (يرجى الإشارة)

What type of device(s) you use to get connected?

- ☐ I have my own PC
- ☐ I use libraries to have access
- ☐ I use Internet Cafes
- ☐ I use mobile phones
- ☐ Other (Please indicate)…

ما نوع الجهاز (الأجهزة) التي تستخدمها للحصول على اتصال؟

- ☐ لدي جهاز الكمبيوتر الخاص بي
- ☐ يمكنني استخدام المكتبات
- ☐ مقاهي الإنترنت
- ☐ الهواتف النقالة
- ☐ أخرى (يرجى الإشارة)

How often do you use the internet?

- ☐ Daily basis
- ☐ Twice or more a week
- ☐ Weekly basis
- ☐ Only when needed
- ☐ Never
- ☐ Other (Please indicate)……..

كم مرة تستخدمون الإنترنت؟

- ☐ يوميا
- ☐ مرتين أو أكثر في الأسبوع
- ☐ أساس أسبوعي
- ☐ فقط عند الحاجة
- ☐ إطلاقا
- ☐ غير ذلك (يرجى الإشارة)

ما هو أكثر شيء يشغلك عند استخدامك الإنترنت؟

- ☐ معلومات غير دقيقة
- ☐ انتهاك أمن المعاملات
- ☐ انتهاك الخصوصية
- ☐ تكلفة استخدام الخدمة
- الجهاز القدرة على تحمل التكاليف
- ☐ تهديدات الفيروسات الضارة
- ☐ غير ذلك (يرجى الإشارة)

Are you aware of the online services provided by the government?

- ☐ Not at all aware
- ☐ Slightly aware
- ☐ Somewhat aware
- ☐ Moderately aware
- ☐ Extremely aware

هل أنت على علم بالخدمات الإلكترونية التي تقدمها الحكومة؟

- ☐ لا علم على الإطلاق
- ☐ أدرك قليلا
- ☐ إلى حد ما أدرك
- ☐ مدرك
- ☐ أدرك تمام

Have you ever visited any of the government websites?

Yes ☐
No ☐
If yes, give details please ……..

هل سبق لك أن زرت أي من المواقع الحكومية؟

نعم ☐
لا ☐
إذا كانت الإجابة بنعم، يرجى إعطاء تفاصيل

What the reasons for using the eServices?

Searching for information ☐

Submitting online application form ☐

Downloading documents ☐

Making payment online ☐

Other (please indicate)…….. ☐

ما هي أسباب استخدام الخدمات الإلكترونية؟

البحث عن المعلومات ☐

تقديم نموذج الطلب عبر الإنترنت ☐

تنزيل المستندات ☐

إجراء الدفع عبر الإنترنت ☐

غير ذلك (يرجى الإشارة) ☐

Which of the following eService is most important to you? (You can tick more than one box)?

Bills payments ☐

Civil Registration ☐

Travel Documents and Passports ☐

Properties ☐

Vehicle registration and transport ☐

Education information ☐

Health information ☐

Other (please indicate)…….. ☐

أي من الخدمات الإلكترونية التالية هو الأكثر أهمية بالنسبة لك؟ (يمكنك وضع علامة على أكثر من مربع واحد)؟

- مدفوعات الفواتير ☐
- السجل المدني ☐
- وثائق السفر وجوازات السفر ☐
- العقارات ☐
- تسجيل المركبات والنقل ☐
- معلومات التعليم ☐
- معلومات صحية ☐
- غير ذلك (يرجى الإشارة) ☐

...

Reasons for not using government's websites?

- I have a negative attitude against them and don't trust the electronic transactions ☐
- I prefer the traditional way of providing the service ☐
- I don't know how to use the e-service ☐
- I believe I don't need them ☐
- Not available eService ☐
- Other, (Please indicate)…… ☐

أسباب عدم استخدام المواقع الحكومية؟

- لدي موقف سلبي ولا أثق في المعاملات الإلكترونية ☐
- أنا أفضل الطريقة التقليدية لتوفير الخدمة ☐
- أنا لا أعرف كيفية استخدام الخدمة الإلكترونية ☐
- أعتقد أنني لست بحاجة إليها
- غير متوفر خدمة إلكترونية
- أخرى، (يرجى الإشارة)

☐

(RSC-Sample)

1. What is your current age?

- 18 – 22 ☐
- 23 - 30 ☐

31 – 45 ☐

46 – 65 ☐

Over 65 ☐

2. What is your gender?

Male ☐

Female ☐

3. What is your level of education?

Below high school ☐

High school ☐

University graduate ☐

University post graduate ☐

4. What is your current employment status?

Student ☐

Employed ☐

Unemployed ☐

Retired ☐

5. How do you consider your computer literacy?

Low ☐

Medium ☐

High ☐

Internet Connection Questions

1. How do you classify the Importance of the internet in your life?

1-Not at all important ☐

2-Low importance ☐

3-Neutral ☐

4-important ☐

5-Extremely important ☐

6- Please justify your answer …….

2. What type of access to the internet do you have?

I use 3G mobile broadband technology ☐

2G cellular network on a basic phone ☐

Internet delivered via a phone line ☐

Satellite broadband Technology ☐

I have no internet access at all ☐

Other, (please indicate)…… ☐

3. What type of device(s) you use to get connected?

I have my own PC ☐

I use libraries to have access ☐

I use Internet Cafes ☐

I use mobile phones ☐

Other (Please indicate)… ☐

4. How often do you use the internet?

Daily basis ☐

Twice or more a week ☐

Weekly basis ☐

Only when needed ☐

Never ☐

5. What is the biggest concern(s) of using the Internet?

Inaccurate information ☐

Violation of transaction security ☐

Violation of privacy ☐

Cost of connecting to the internet ☐

Device Affordability

Other, (Please indicate)..... ☐

eService Questions

1. Are you aware of the online services provided by the government?

Not at all aware ☐

Slightly aware ☐

Somewhat aware ☐

Moderately aware ☐

Extremely aware ☐

2. Have you ever visited any of the government websites?

Yes ☐
No ☐
If yes, give details please ……..

3. What the reasons for using the government's online sites?

Searching for information ☐

Submitting online application form ☐

Downloading documents ☐

Making payment online ☐

Other (please indicate)..... ☐

4. Which of the following eService is most important to you? (You can tick more than one box)

Bills payments ☐

Civil Registration ☐

Travel Documents and Passports ☐

Properties Registration ☐

Vehicle registration and transport ☐

Education information ☐

Health information ☐

Other (please indicate)…….. ☐

5. Reasons for not using government's websites?

I have a negative attitude against them and don't trust the electronic transactions ☐

I prefer the traditional way of providing the service ☐

I don't know how to use the e-service ☐

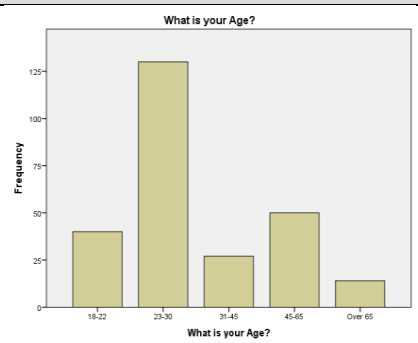
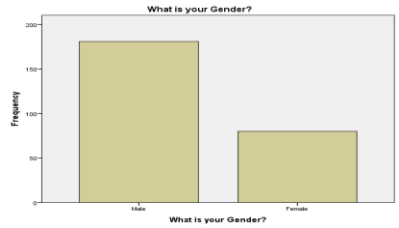
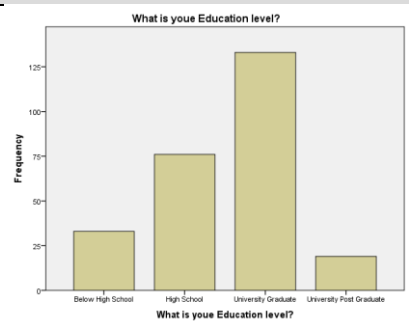
I believe I don't need them ☐

Not available eService ☐

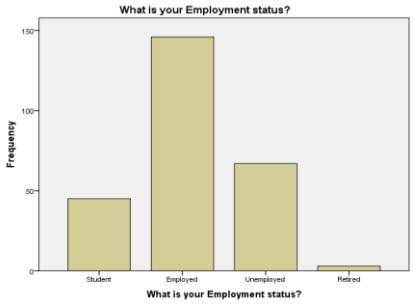
Other, (Please indicate)…… ☐

APPENDIX D: SURVEY RESULTS

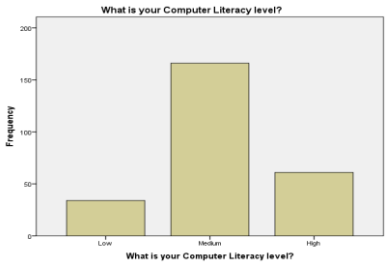
Demographic responses

LSC-Sample demographic responses			
Age?			
Age group	Frequency	Percent	
18-22	40	15.3%	
23-30	130	49.8%	
31-45	27	10.3%	
45-65	50	19.2%	
Over 65	14	5.4%	
Total	**261**	**100.0%**	
Gender?			
Male	181	69.3%	
Female	80	30.7%	
Total	**261**	**100.0%**	
Education Level?			
Below High School	33	12.6%	
High School	76	29.1%	
University Graduate	133	51.0%	
University Post Graduate	19	7.3%	
Total	**261**	**100.0%**	
Employment Status?			
Student	45	17.2%	
Employed	146	55.9%	

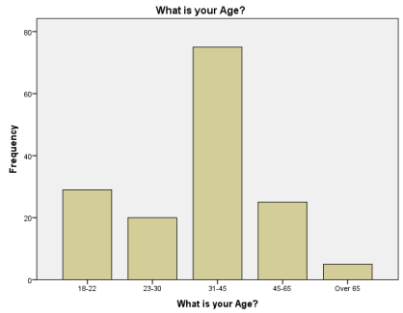
Unemployed	67	25.7%
Retired	3	1.1%
Total	**261**	**100.0%**



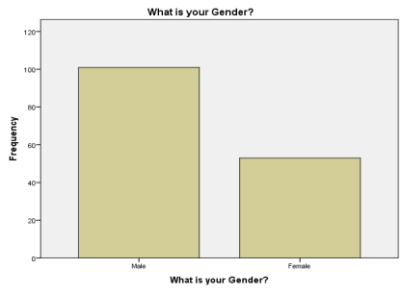
Computer Literacy?		
Low	34	13.0%
Medium	166	63.6%
High	61	23.4%
Total	**261**	**100.0%**



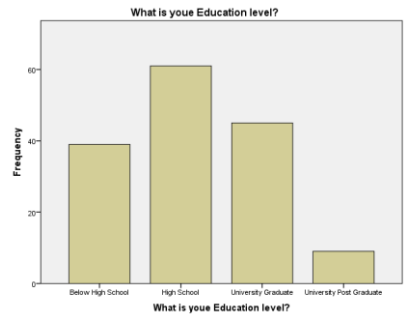
RSC-Sample demographic responses		
Age?		
Variables	**Frequency**	**Percent**
18-22	29	18.8%
23-30	20	13.0%
31-45	75	48.7%
45-65	25	16.2%
Over 65	5	3.2%
Total	**154**	**100.0%**



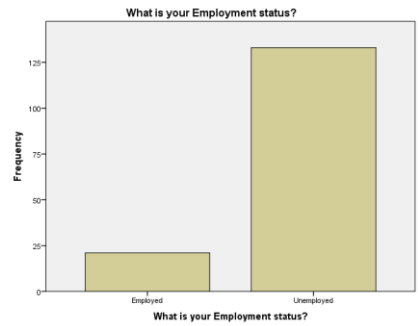
Gender?		
Male	101	65.6%
Female	53	34.4%
Total	**154**	**100.0%**



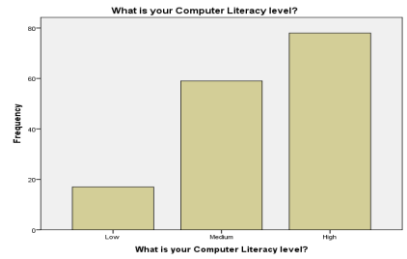
Education Level?		
Below High School	39	25.3%
High School	61	39.6%
University Graduate	45	29.2%
University Post Graduate	9	5.8%
Total	**154**	**100.0%**



Employment Status?		
Student	0	0%
Employed	21	13.6%
Unemployed	133	86.4%
Retired	0	0%
Total	**154**	**100.0%**



Computer Literacy?		
Low	17	11.0%
Medium	59	38.3%
High	78	50.6%
Total	**154**	**100.0%**

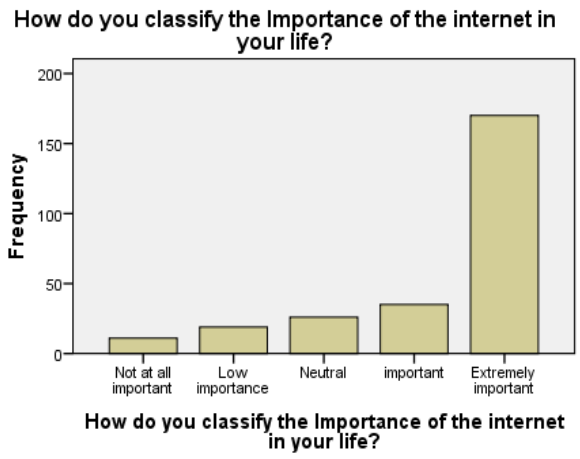


Internet responses

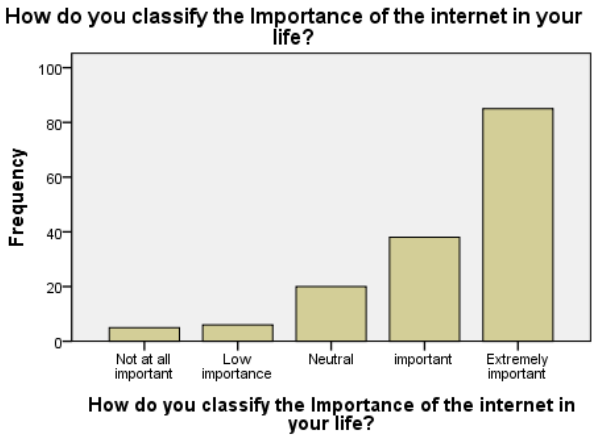
1- Importance of internet

LSC-Sample: How do you classify the Importance of the internet in your life?		
Variables	**Frequency**	**Percent**
Not at all important	11	4.2%

Low importance	19	7.3%
Neutral	26	10.0%
important	35	13.4%
Extremely important	170	65.1%
Total	**261**	**100.0%**

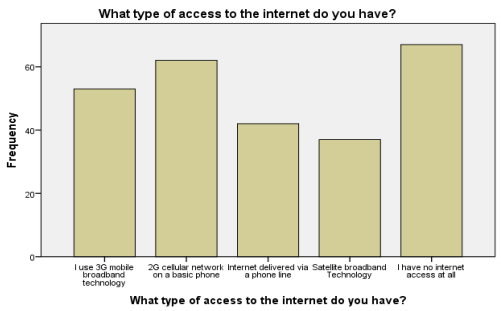


RSC-Sample: How do you classify the Importance of the internet in your life?		
Variables	**Frequency**	**Percent**
Not at all important	5	3.2%
Low importance	6	3.9%
Neutral	20	13.0%
Important	38	24.7%
Extremely important	85	55.2%
Total	**154**	**100.0%**



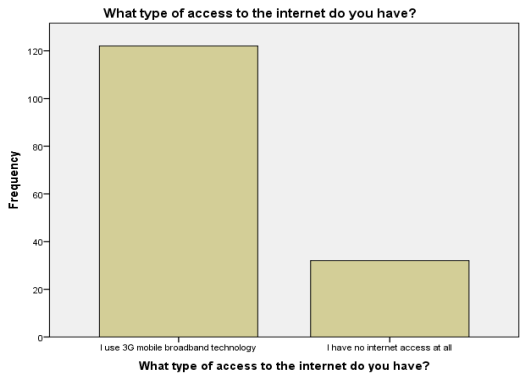
Internet access type

LSC-Sample What type of access to the internet do you have?		
Variables	**Frequency**	**Percent**
I use 3G mobile broadband technology	53	20.3%
2G cellular network on a basic phone	62	23.8%
Internet delivered via a phone line	42	16.1%
Satellite broadband Technology	37	14.2%



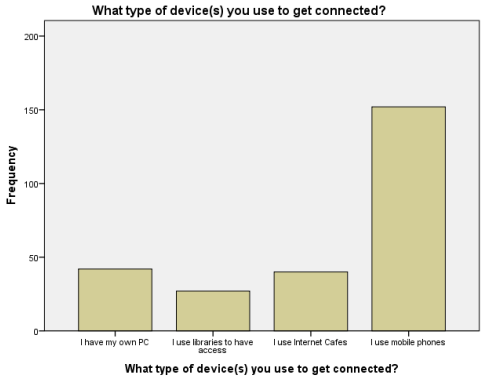
I have no internet access at all	67	25.7%	
Total	**261**	**100.0%**	

RSC-Sample What type of access to the internet do you have?		
Variables	**Frequency**	**Percent**
I use 3G mobile broadband technology	122	79.2
I have no internet access at all	32	20.8
Total	**154**	**100.0**



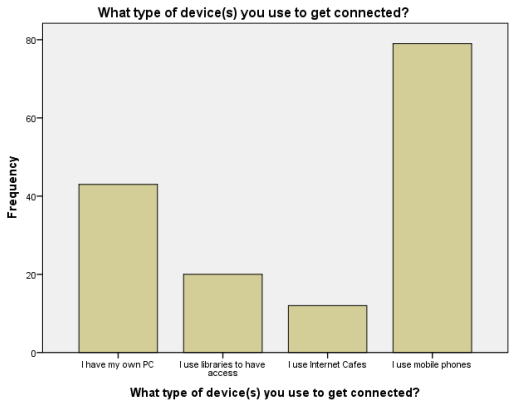
Type of devices

LSC-Sample What type of device(s) you use to get connected?		
Variables	**Frequency**	**Percent**
I have my own PC	42	16.1
I use libraries to have access	27	10.3
I use Internet Cafes	40	15.3
I use mobile phones	152	58.2
Total	**261**	**100.0**



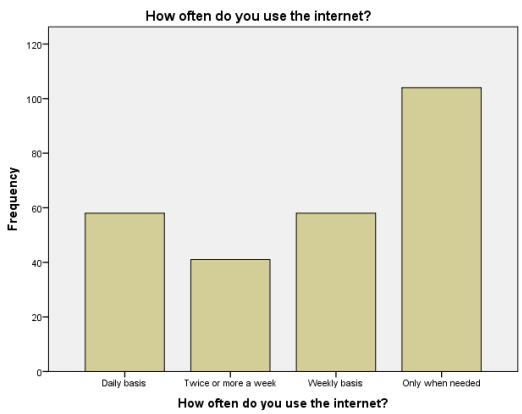
RSC-Sample What type of device(s) you use to get connected?		
Variables	**Frequency**	**Percent**
I have my own PC	43	27.9

I use libraries to have access	20	13.0
I use Internet Cafes	12	7.8
I use mobile phones	79	51.3
Total	**154**	**100.0**

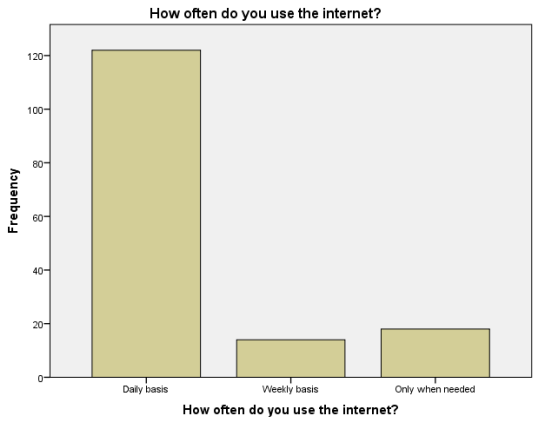


Usage

LSC-Sample How often do you use the internet?		
Variables	**Frequency**	**Percent**
Daily basis	58	22.2
Twice or more a week	41	15.7
Weekly basis	58	22.2
Only when needed	104	39.8
Total	**261**	**100.0**

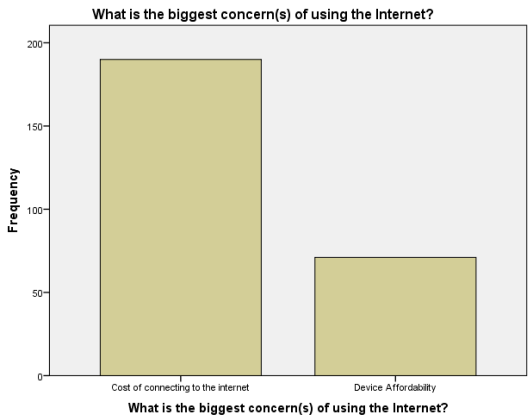


RSC-Sample How often do you use the internet?		
Variables	**Frequency**	**Percent**
Daily basis	122	79.2
Weekly basis	14	9.1
Only when needed	18	11.7
Total	**154**	**100.0**

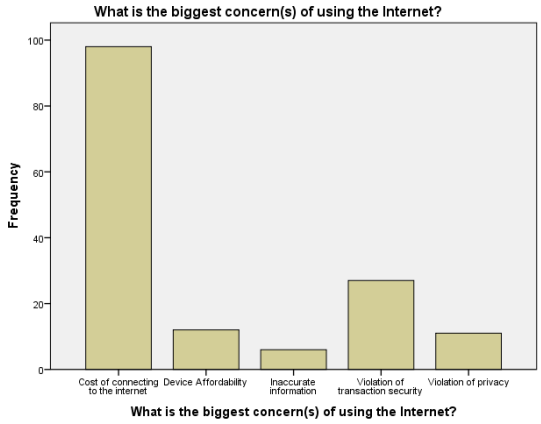


Internet Concerned

LSC-Sample What is the biggest concern(s) of using the Internet?		
Variables	**Frequency**	**Percent**
Cost of connecting to the internet	190	72.8
Device Affordability	71	27.2
Total	**261**	**100.0**



RSC-Sample What is the biggest concern(s) of using the Internet?		
Variables	**Frequency**	**Percent**
Cost of connecting to the internet	98	63.6
Device Affordability	12	7.8
Inaccurate information	6	3.9
Violation of transaction security	27	17.5
Violation of privacy	11	7.1
Total	**154**	**100.0**

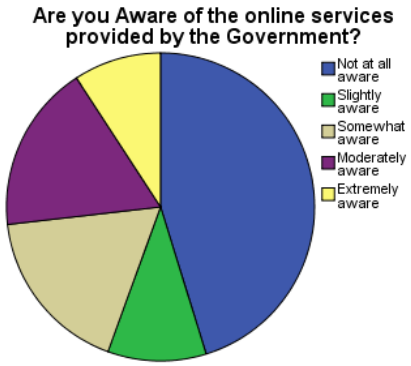


Awareness responses

LSC-Sample

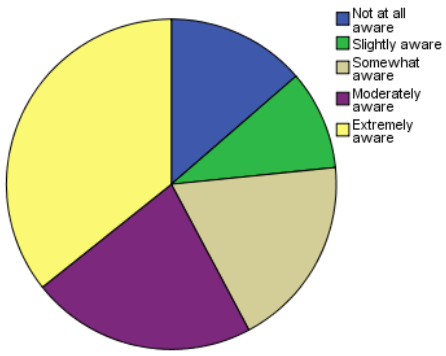
Are you Aware of the online services provided by the Government?		
Variables	**Frequency**	**Percent**
Not at all aware	118	45.2
Slightly aware	27	10.3

Somewhat aware	46	17.6
Moderately aware	46	17.6
Extremely aware	24	9.2
Total	**261**	**100.0**



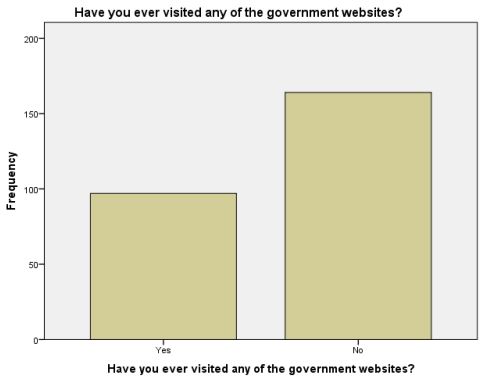
RSC-Sample

Are you Aware of the online services provided by the Government?		
Variables	**Frequency**	**Percent**
Not at all aware	21	13.6%
Slightly aware	15	9.7%
Somewhat aware	29	18.8%
Moderately aware	34	22.1%
Extremely aware	55	35.7%
Total	**154**	**100.0%**

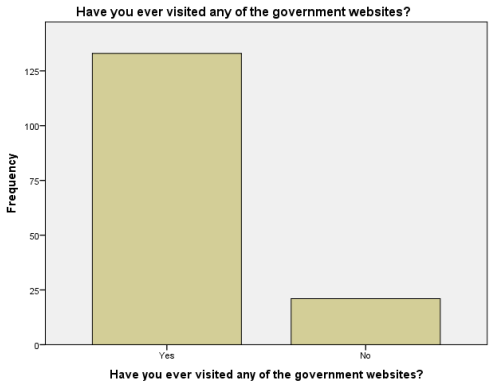


Visit eGov

LSC-Sample Have you ever visited any of the government websites?		
Variables	**Frequency**	**Percent**
Yes	97	37.2
No	164	62.8
Total	**261**	**100.0**

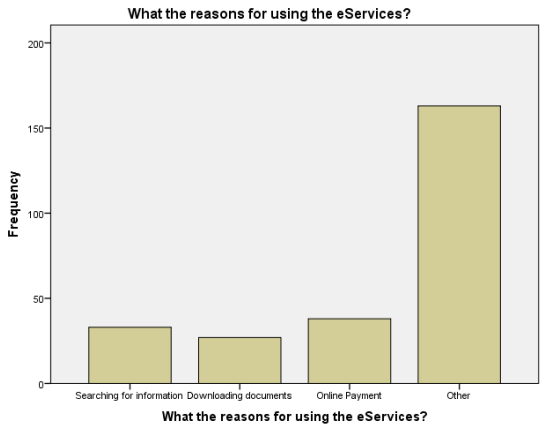


RSC-Sample Have you ever visited any of the government websites?		
Variables	**Frequency**	**Percent**
Yes	133	86.4
No	21	13.6
Total	**154**	**100.0**

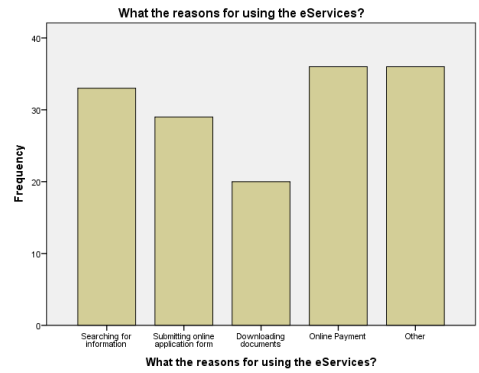


Reasons for using eService

LSC-Sample What the reasons for using the eServices?		
Variables	**Frequency**	**Percent**
Searching for information	33	12.6
Downloading documents	27	10.3
Online Payment	38	14.6
Other	163	62.5
Total	**261**	**100.0**

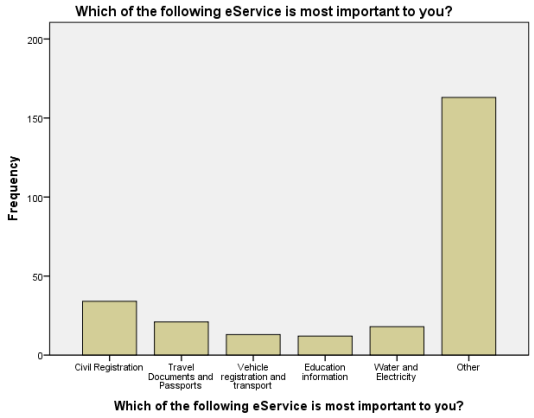


RSC-Sample What the reasons for using the eServices?		
Variables	**Frequency**	**Percent**
Searching for information	33	21.4
Submitting online application form	29	18.8
Downloading documents	20	13.0
Online Payment	36	23.4
Other	36	23.4
Total	**154**	**100.0**

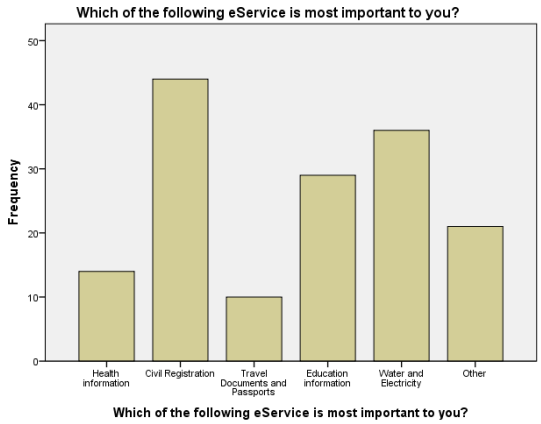


Important eServices examples

LSC-Sample Which of the following eService is most important to you?		
Variables	**Frequency**	**Percent**
Civil Registration	34	13.0%
Travel Documents and Passports	21	8.0%
Vehicle registration and transport	13	5.0%
Education information	12	4.6%
Water and Electricity	18	6.9%
Other	163	62.5%
Total	**261**	**100.0**



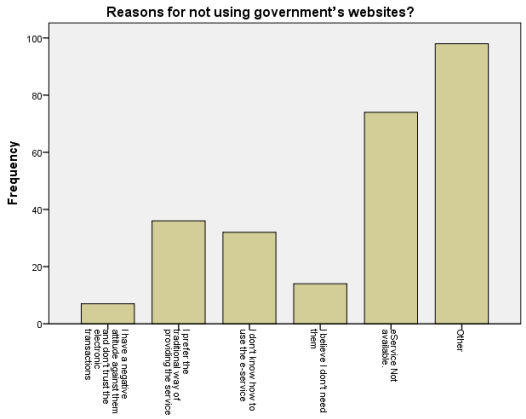
RSC-Sample Which of the following eService is most important to you?		
Variables	**Frequency**	**Percent**
Health information	14	9.1%
Civil Registration	44	28.6%
Travel Documents and Passports	10	6.5%
Education information	29	18.8%
Water and Electricity	36	23.4%
Other	21	13.6%
Total	**154**	**100.0%**



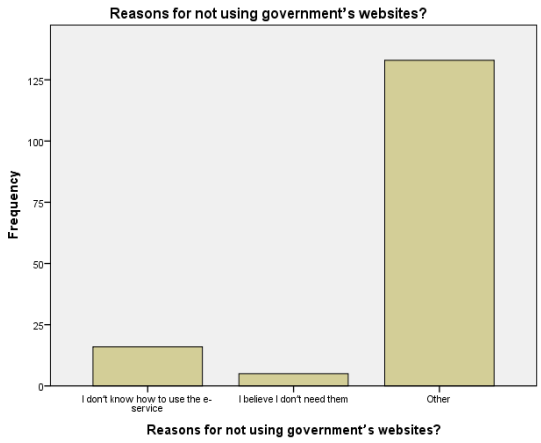
Reasons for not using eServices

LSC-Sample Reasons for not using Government's websites?		
Variables	**Frequency**	**Percent**

I have a negative attitude against them and don't trust the electronic transactions	7	2.7
I prefer the traditional way of providing the service	36	13.8
I don't know how to use the e-service	32	12.3
I believe I don't need them	14	5.4
eService Not available.	74	28.4
Other	98	37.5
Total	**261**	**100.0**



RSC-Sample Reasons for not using Government's websites?		
Variables	**Frequency**	**Percent**
I don't know how to use the e-service	16	10.4
I believe I don't need them	5	3.2
Other	133	86.4
Total	**154**	**100.0**



APPENDIX E: INVITATION FOR PARTICIPATION

DR NICK SAVAGE, Head of School

School of Computing

Buckingham Building, Portland Street

Portsmouth,PO1 3HE

UNITED KINGDOM

Telephone: +44 (0)23 9284 6363

Email: nick.savage@port.ac.uk

Title of Project:

EVALUATING ESERVICE ADOPTION FACTORS INCLUDING ENABLERS AND BARRIERS THAT AFFECTING ESERVICE IMPLEMENTATION IN COUNTRIES WITH DIFFERENT LEVEL OF INSTABILITIES STATUS

Name and Contact Details of Researcher: **Abraheem Alsaeed,** abraheem.alsaeed@port.ac.uk

Name and Contact Details of Supervisor: **Dr Carl Adams,** carl.adams@port.ac.uk

Ethics Committee Reference Number:

Invitation

I would like to invite you to take part in my research study. Joining the study is entirely up to you, before you decide I/we would like you to understand why the research is being done and what it would involve for you. I/ one of our team, will go through this information sheet with you, to help you decide whether or not you would like to take part and answer any questions you may have. I/ We would suggest this should take about 60 minutes. Please feel free to talk to others about the study if you wish. Do ask if anything is unclear.

I am a third year Ph.D. Student in Computing with a background in Web Technologies and Software Engineering, I am researching the factors that enabling to deliver a successful implementation of eServices in countries with instabilities . This research is a part of my PhD degree requirements.

Study Summary

This study is concerned with the current eServices delivered to citizens in unstable society and ways to improve it, this is important because it has the potential to increase civic efficiency and transparency; to facilitate interaction between public, private and government entities; and ultimately to promote

democracy and political stability. We are seeking participants who should be involve in delivering eServices and or a policy making from the Syrian eGovernment, which is an instable society at the time of conducting this study. Participation in the research would require you to attend an interview and take approximately One hour of your time.

What is the purpose of the study?

Exploring the factors that contributes to a successful implementation of eGovernment initiatives practically evaluating the barriers and enablers which affect providing eServices to vulnerable and displaced people in developing countries which have instabilities such as the situation in Syria. The primary reason behind conducting the research is to gain the Doctoral of Philosophy degree.

Why have I been invited?

You have been invited to take part because you have identified yourself of having experience in in the field of the Syrian eGovernment.

Do I have to take part?

No, taking part in this research is entirely voluntary. It is up to you to decide if you want to volunteer for the study. We will describe the study in this information sheet. If you agree to take part, we will then ask you to sign the attached consent form, dated January 2016, version number, 2.0.

What will happen to me if I take part?

You will be interviewed for no more than one hour. If the interview has not been completed in this time, the interview can be extended by mutual agreement or arrangements for continuation at a later date will be made. By mutual consent additional interviews may take place to discuss specific areas of eService process related to countries with different level instability. The interview will look at particular areas of eService process related to countries with different level instability but will allow scope for open answers and discussion of particular areas of interest in more depth.

Expenses and payments

There will be no expenses or payments on your part.

Anything else I will have to do?

No.

What data will be collected and / or measurements taken?

The researcher will tape record the entire interview if the participant agreed, then transcribe the text word for word. The transcribed text then becomes the data that are analysed.

What are the possible disadvantages, burdens and risks of taking part?

There are no known risks or disadvantages of taking part, as we strive to protect your confidentiality, unless you explicitly agree that the name of your company can be mentioned in publications arising from the research. If you are taking part in the face-to-face interview, we will send you the transcript of the interview before the analysis to allow you to ensure that you have not been misrepresented.

What are the possible advantages or benefits of taking part?

In taking part, you will be able to reflect on the current way of working. If you take part in an interview with us, we will provide you with the final research results which could have an impact on changing for better.

Will my taking part in the study be kept confidential?

Yes. All of the information you give will be anonymous so that those reading reports from the research will not know who has contributed to it, unless you explicitly agree that your name may be made public. Nobody other than the researchers will have access to the data, which will be saved securely on password-protected computers and stored securely for 10 years in accordance with the Data Protection Act 1998.

The data, when made anonymous, may be presented to others at academic conferences, or published as a project report, academic dissertation or in academic journals or book. It could also be made available to any commissioner or funder of the research. Anonymous data, which does not identify you, may be used in future research studies approved by an appropriate research ethics committee.

The raw data, which would identify you, will not be passed to anyone outside the study team without your express written permission. The exception to this will be any regulatory authority which may have the legal right to access the data for the purposes of conducting an audit or enquiry, in exceptional cases. These agencies treat your personal data in confidence.

What will happen if I don't want to carry on with the study?

As a volunteer you can stop any participation in the interview at any time, or withdraw from the study at any time before, without giving a reason if you do not wish to. If you do withdraw from a study after some data have been collected you will be asked if you are content for the data collected thus far to be retained and included in the study. If you prefer, the data collected can be destroyed and not included in the study. Once the research has been completed, and the data analysed, it will not be possible for you to withdraw your data from the study.

What if there is a problem?

If you have a query, concern or complaint about any aspect of this study, in the first instance you should contact the researcher(s) if appropriate. If the researcher is a student, there will also be an academic member of staff listed as the supervisor whom you can contact. If there is a complaint and there is a

supervisor listed, please contact the Supervisor with details of the complaint. The contact details for both the researcher and any supervisor are detailed on page 1.

If your concern or complaint is not resolved by the researcher or their supervisor, you should contact the Head of Department:

The Head of Department DR NICK SAVAGE

Department / School of Computing 023 9284 6363

University of Portsmouth nick.savage@port.ac.uk

Buckingham Building

Portland Street

Portsmouth

PO1 3HE

If the complaint remains unresolved, please contact:

The University Complaints Officer

023 9284 3642 complaintsadvice@port.ac.uk

Who is funding the research?

This research is being self- funded by . None of the researchers or study staff will receive any financial reward by conducting this study, other than their normal salary / bursary as an employee / student of the University.

Who has reviewed the study?

Research involving human participants is reviewed by an ethics committee to ensure that the dignity and well-being of participants is respected. This study has been reviewed by the Technology Faculty Ethics Committee and been given favourable ethical opinion.

Thank you

Thank you for taking time to read this information sheet and for considering volunteering for this research. If you do agree to participate your consent will be sought; please see the accompanying consent form. You will then be given a copy of this information sheet and your signed consent form, to keep

APPENDIX F: CONSENT LETTER

DR NICK SAVAGE

Head of School

School of Computing

Buckingham Building

Portland Street

Portsmouth

PO1 3HE

UNITED KINGDOM

Telephone: +44 (0)23 9284 6363

Email: nick.savage@port.ac.uk

Title of Project:

EVALUATING ESERVICE ADOPTION FACTORS INCLUDING ENABLERS AND BARRIERS THAT AFFECTING ESERVICE IMPLEMENTATION IN COUNTRIES WITH DIFFERENT

LEVEL OF INSTABILITIES STATUS

Name and Contact Details of Researcher: **Abraheem Alsaeed**

Email: abraheem.alsaeed@port.ac.uk

Name and Contact Details of Supervisor: **Dr Carl Adams**

Email: carl.adams@port.ac.uk

Please initial box

Ethics Committee Reference Number:

1. I confirm that I have read and understood the information sheet dated January 2016 (version 2.0) for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily. ☐
2. I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason. ☐

3. I understand that the results of this study may be published and / or presented at meetings or academic conferences, and may be provided to research commissioners or funders. I give my permission for my anonymous data, which does not identify me, to be disseminated in this way. ☐
4. I agree to the data I contribute being retained for any future research that has been approved by a Research Ethics Committee. ☐
5. I consent for my interview to be audio / video recorded. The recording will be transcribed and analysed for the purposes of the research (add further details about destruction or subsequent storage of recordings and / or transcripts). ☐
6. I consent to verbatim quotes being used in publications; I will not be named but I understand that there is a risk that I could be identified. ☐
7. I understand that the information collected about me will be used to support other research in the future, and may be shared anonymously with other researchers. ☐
8. I agree to be named as a participant and referred to accordingly. ☐
9. I would like to receive further information about the results of the study. ☐
10. I agree to take part in the above study. ☐

Name of Participant: **Date:** **Signature:**

Name of Person taking Consent: Date: Signature:

Note: When completed, one copy to be given to the participant, one copy to be retained in the study file

APPENDIX G: INVITATION LETTER

Room 108, School of Computing

Buckingham Building, Portland Street

Portsmouth

PO1 3HE

UNITED KINGDOM

T: +44 (0) 23 92846784
E: abraheem.alsaeed@port.ac.uk

Supervisor : Dr Carl Adams

Supervisor T: ++44 (0)23 9284 6447

Supervisor E: carl.adams@port.ac.uk

Study Title:

EVALUATING ESERVICE ADOPTION FACTORS INCLUDING ENABLERS AND BARRIERS THAT AFFECTING ESERVICE IMPLEMENTATION IN COUNTRIES WITH DIFFERENT LEVEL OF INSTABILITIES STATUS

REC Ref No:

Dear Sir/Madam

This is Abraheem Alsaeed, a research student from School of Computing, University of Portsmouth, UK. I am writing to invite you to participate in my research project. The research aim is to investigate about the Barriers and Enablers factors for a successful implementations of eGov initiatives in developing countries with instability state.

For this study, I need to collect first-hand information about the eServices provided by you to the citizens . Considering your experience, I believe that your feedback is very important for my research. I would be grateful if you would give me 45-60 minutes of your busy schedule to conduct an interview.

I would be very happy to answer any questions you may have and can be contacted on the e-mail address above.

I look forward to hear from you in due course. Thanking you in anticipation

Sincerely,

Abraheem Alsaeed

APPENDIX H: APPLICATION FOR ETHICAL REVIEW

University of Portsmouth

Faculty of Technology

Application for Ethical Review – Staff and Postgraduate Research Students

1. Study Title and Key Dates

1.1 title: Evaluating eservice adoption factors including enablers and barriers that affecting eservice implementation in countries with different level of instabilities status.
1.**2 Date of submission: 30 September** 2017 Version Number: 01 Ethics Committee Reference Number: 1.3 Date of study commencement: 01 October 2013 Projected date of study completion (fully written up): 30 September 2017

Applicant Details: Please complete either 2.1 or 2.2 as appropriate

2.1 Principal Investigator (Member of staff –personally or as a supervisor of a taught student)

Name:	Title /Role:	Department:
Telephone:	Email:	

2.2 Principal Investigator (PGRS)

Name: Abraheem Alsaeed Title /Role: PhD Student Department: School of computing

Course of study: PhD in eGovernment

Telephone: +44 (0) 23 9284 6400 Email: abraheem.alsaeed@port.ac.uk

First Supervisor's Name: Dr Carl Adams

Telephone: ++44 (0)23 9284 6447 Email: carl.adams@port.ac.uk

Names and contact details of any other supervisors (if relevant)

Second Supervisor: Dr Rich Boakes Email: rich.boakes@port.ac.uk

Third Supervisor: Dr Mohammed Bader-El-Den Email: mohamed.bader@port.ac.uk

2.3 Co-Researchers / Collaborators

N/A

2.4 Independent or Peer Reviewer

Major Review

Date: 30th of March 2015

DR PENNY ROSS

penny.ross@port.ac.uk

Dr Tineke Fitch

tineke.fitch@port.ac.uk

Dr Carl Adams

carl.adams@port.ac.uk

Outcome:

Confirmation from the Faculty Research Degrees Committee approval of the application for Major Review, after the Review Meeting with the assessors. My registration has been confirmed for the award of PhD.

Funding Details

Self-funded

Research Sites

The research interviews will take place either over the internet (via skype interview, or through any other social media tools) or in the participants' offices. There are NO any particular concerns regarding the health, safety and welfare of both researcher and participants, as there are no potential risks anticipated throughout the project. However, the researcher will fill in the University of Portsmouth risk assessment form on each visit he carries out to a participant's site. Note: the interview will not be conducting in any area of high risk, the main places that more likely to be visited for such purpose would be UAE, Saudi Arabia, Lebanon, Jordan.

Insurance Arrangements

N/A

Study Summary

6.1 Study Summary
The importance of this study is coming from the fact that academic literature covering transformational eGov activity in times of geopolitical instability is uncommon. Furthermore, most governments consistently strive to improve their online services for citizens & businesses and Enhancing digital capabilities at different levels to provide benefits to all stakeholders (Rabaiah & Vandijck, 2009). Therefore, the novelty of our study may added further beneficiaries to this innovation to include vulnerable and displaced people. However, despite the potential benefits that eGov brings to all stakeholders, the level of adoption is still low in developing countries and in countries that face instability eService is still necessary and governments face extra challenges in their provision. Our aim is to address this gap in the literature by identifying factors that might affect the successful implementation among countries that have different level of instabilities. Our work stems from a literature review that focused on factors affecting the development of eService. Also, desk research method was used to carry out a comparative study among three countries that have a different level of instabilities to compare and contrast eService activities, which will enrich our study (Jait, 2012). Finally, a civic registration cases study will be carried out which shows different approaches and strategy adopted for implementation: from these, we derived a novel framework in which we suggest technology-related strategies that may assist in the effective implementation of eService delivery in unstable countries.
6.2 Main Ethical Issues

Those invited to take part will be given a participant information sheet and will sign the consent form before taking part of the data collection exercise. The information sheet will explain what data are to be collected, what they are to be used for and their right to withdraw from the study. Look at appendix A: Participant information sheet, appendix B: Consent form, Appendix C: Invitation Letter, Appendix D: interview questions example.
6.3 Other Risks or Concerns
There are NO anticipated risks or concerns such as: risks to the University's reputation; conflicts of interest such as financial conflicts; personal relationships with other researchers or participants; expectations of commercial funders etc. NO further concerns on conflicts of interest is anticipated.

Compliance With Codes, Guidance, Policies and Procedures

The research will comply with the following documents: The University of Portsmouth Ethics Policy. The University of Portsmouth Research Data Management Policy and associated retention schedules. Guidance on conducting research in your own place of work. The Research Councils UK Policy and Guidelines on Governance of Good Research Conduct. The Research Councils UK Concordat for Engaging the Public with Research The UK Research Integrity Office Code of Practice for Research University of Portsmouth Procedure for the Investigation of Alleged Misconduct in Research

Study Aims and Objectives

8.1 Main Aim / Research Question/Hypothesis
Aim: To Develop a robust framework to support eService system in developing countries with different level of instability. Research Questions: What are the main factors that contribute to successful implementation of e-service in Developing Countries along the different Instability?

How eGov Strategy impacted the development of eServices in countries with different level of instabilities and what are the steps to be carried out to narrow the gap between strategy and implementation. What are the barriers/ enablers that policy makers need to consider during the e-Government strategic planning that might facing to provide e-Services to citizen in developing countries with different level of instabilities.
8.2 Primary Objective
To evaluate challenges and barriers and to investigate the main factors that contribute to the successful implementation of eService Delivery System in countries under different level of stress.
8.3 Secondary Objective(s)
To develop and validate a generic framework suitable for developing countries under stress. To expose the gaps between design and reality of the eService and to produce a guidance for policy makers to enhance future policies.

Research Methods

9.1 Research Method(s)
The methodology goes through different stages as following: Literature review which allows for building the initial conceptual framework (Okoli & Schabram, 2010). A critical Literature Review conducted at this stage and search for a related variable adopted which will be collected accordingly, this will form the initial conceptual framework which will be revised and validated in a later stage of this research. Next stage involves in collecting and analysing Secondary data to investigate the gap between design strategy and eService provision implementation and to find out the impact of eGov Strategy in countries with different level of instabilities, this stage provides a comparative study of eGov Strategy among three countries that shared some geographical, demographical, anthropological and cultural similarities and different in their level of instability (Syria, Saudi Arabia, UAE). The above comparative study employed the structured case approach which allows to loop through the activities for each case in order to revise again the eService framework from the data finding. Analysing each case strategy follows the ABCDE Strategy model.

The Delphi method will be adopted to collect the primary data. This data collection method will be used to obtain information on eService activities from countries with different level of instability. The Delphi method will be conducted through a series of consecutive rounds of interviews with experts, providing general feedback and new information collected from the group from each round of the study. The first round will be an exploratory approach using open-ended questions to characterise the issues gathered from the literature review, which could assist the experts to answer questions and forming views and generating ideas. Second round will include more structured questions depending on the analysis of the findings after each round. Based on the answers to the first questions, the next questions should delve deeper into the topic to clarify specific issues. The final questionnaire aims to focus on supporting decision making, and what the expert are agreed upon. And finally employing nVivo to analyse the interviews (Khan et al, 2010) & (SWEISI ,2010) Note: Appendix D, includes interview question example.

Recruitment of Participants

10.1 General Considerations
Identifying eligible participants. Adequately explaining the study to the potential participants. Recruiting an adequate sample based on study goals and design. Obtaining informed consent and maintaining ethical standards.
10.2 The Research Population
The research population and participations are adults stockholders chosen mainly because they have eService expertise and have involved in the policy making from countries with different level of instability.
10.3 Sampling Strategy
Purposive sampling will be used for this research. Based on three stakeholders groups with between 3-5 of experts for each group as following: 3-5samples from UAE, 3-5 samples from Saudi Arabia, 3-5 samples from Syria, which makes it in total between 9-15 participants in from all countries, for each round. The participants will be selected with regard having an experience on implementation of eService from

countries, which have a different level of instability (very stable country, medium stable country, and unstable country) . Moreover, they need to have a practical understanding of Service delivery system. The chosen sample will be interviewed for about 90 minutes. Writing notes and some other related technical preparation will be added on top of the dedicated time for the verbal interview.

Note: due to the current circumstances in Syria, the Syrian participants will be interviewed with a special consideration about their safety, therefore, one way to conduct an interview could be over the internet (for the safety of both participants and researcher). The participant will be asked, at the first glance, if he/she prefer to have the interview verbally, or if they would prefer a written questions, where they could answer them on their leisure time, furthermore, we will be very careful of adopting any methods that might jeopardize or endanger the safety of the researcher or the participants. On the other hand, no risks have been anticipated or concerned for conducting interviews of the non-Syrian participants.

We have adopted the exclusion criteria to avoid any negative impact on the validity of the study, especially the one that may acquire from bias.

10.4 Recruitment Strategy – Invitations to Potential Participants

The empirical study will be conducting through interviewing potential participants as we have mentioned previously, the researcher intended 1- To contact some former fellow work(Syrian) who were involve in policy making of the eGov implementation and who has long experience in the field of service delivery system and 2- To maintain a network and develop a method of communication contact with non-Syrian participants via sending and invitation letter for potential participation.

10.5 Obtaining Consent

Those invited to take part will be given a participant information sheet and will sign the consent form before taking part of the data collection exercise. The information sheet will explain what data are to be collected, what they are to be used for and their right to withdraw from the study.

The following steps will be considered when obtaining the consent to participant:

1. The researcher will explain verbally the study to the participant, providing all pertinent information as purpose, procedures, risks, benefits and alternatives to participation, time will be given to participants to ask questions.

2. Following this verbal explanation, the researcher will provide the participant with written participants' information sheet and sufficient time will be afforded for the participant to consider whether or not to

participate in the research. "Sufficient time" can range from minutes to hours, dependent on how long it reasonably takes to evaluate the procedures, risks, potential benefits, and potential alternatives. 3. After allowing time for the participant to read the participants' information sheet, the researcher will answer any additional questions the participant may have and may obtain verbal agreement to participate in the research. 4. After obtaining the verbal consent, a written consent will be obtained through signing the consent form by the participant. Participants' information sheet and consent form are attached. Filled consent forms will be kept secure on a University of Portsmouth password protected computer. The identities of those involved will not be disclosed.
10.6 Organisational Consent
N/A
10.7 Participant Withdrawal
As a volunteer the participant can stop any participation in the interview at any time, or withdraw from the study at any time before, without giving a reason if he/she does not wish to. If the participant does withdraw from a study after some data have been collected, then the participant will be asked if he/she is content for the data collected thus far to be retained and included in the study. If participant prefer, the data collected can be destroyed and not included in the study. Once the research has been completed, and the data analysed, it will not be possible for participants to withdraw their data from the study.

Research Data Management

11.1 General
Research data and primary materials will be managed throughout the research lifecycle by addressing the issues of retention, storage and recordkeeping, ownership, security, confidentiality and re-use.
11.2 Data Collection and Analysis
The data will be collecting might include interview recordings, interview transcripts, video recordings, photographs. The researcher will video and/or Audio record the entire interviews as well as covert them into text based materials for future use then transcribe the text word for word. The transcribed text then becomes the data that are analyzed. The qualitative data collected in the interviews will be content analyzed by using NVivo software.
11.3 Data Storage
This data will be kept secure on a University of Portsmouth password protected computer. The data will be used solely for the purposes of academic research and the identities of those involved will not be disclosed.

11.4 Destruction, Retention and Reuse of Data
The original participants' consent forms will be retained securely by the researcher for 30 years from completion of the study then these forms will be destroyed. The research data will be retained for 10 years in accordance with the UoP Retention Schedule for Research Data. Paper records may be scanned and originals destroyed. School of Computing will be responsible for retaining the data when the PI leaves the University.
11.5 Personal Data – Confidentiality and Anonymization
We shall follow the legal framework for processing personal data in the UK which is set out in the Data Protection Act 1998 (DPA). Furthermore, the collected data in forms of hard copies will be kept secure in lockers and soft copies will be kept secure on a University of Portsmouth password protected computer, which can be accessed only by the researcher and supervisors using passwords. The researcher will obtain the participants' agreement on the level at which information could be made publicly, then the researcher will be careful while publishing any personal details or other information, which can disclose participants' name and details. Participants' privacy will be safeguarded by using code names such as interviewee A1, interviewee A2. Participants should be fully informed about the use of their personal information and researchers must respect participants' expectations of confidence and privacy Personal data cannot be used freely for further research if this research is not covered by the participants' original consent Questionnaire or consent form should ensures that you are complying with the Act. Sensitive personal data is: the racial or ethnic origin of the data participant participant's political opinions participant's religious beliefs participant's physical or mental health or condition participant's sexual life;
11.6 Organizational Data
Organizational data will be treated as the same as the personal data. And will be store in the same storage as the personal data, where no one other than me have access to this domain.
11.7 Security Sensitive Data
N/A

Risks

12.1 Risks to Participants
The special situation in Syria makes it risky to freely conduct an interview and obtain date, therefore, steps for ensuring confidentiality and anonymity of participants needed where we plan to have the Delphi panel members are anonymous from each other over all rounds. The Syrian participants will be interviewed with a special consideration about their safety, therefore, one way to conduct an interview

could be over the internet (for the safety of both participants and researcher). The participant will be asked, at the first glance, if he/she prefer to have the interview verbally, or if they would prefer a written questions, where they could answer them on their leisure time, furthermore, we will be very careful of adopting any methods that might jeopardize or endanger the safety of the researcher or the participants. On the other hand, no risks have been anticipated or concerned for conducting interviews of the non-Syrian participants.

12.2 Risks to Researchers

No potential risks to the safety of the researcher are anticipated throughout the project. However, the researcher will fill in the University of Portsmouth risk assessment form.

References

Alsaeed, A., Adams, C., & Boakes, R. (2014). Challenges to the successful implementation of e-government initiatives in middle-east Arabic countries and Syria: literature review. In tGov workshop 14 (Vol. 14, pp. 27–38). London.

Alsaeed, A., Adams, C., & Boakes, R. (2014). The Need for Policies to Overcome eGov Implementation Challenges. International Journal of Electronic Government Research, 10(3), 66–79.

Alsaeed, A., & Adams, C. (2015). E-service Adoption in Developing Countries with Instability Status: The Case of e-Government in Syria. In 15th European Conference on eGovernment (pp. 1–16). Portsmouth.

Alsaeed, A., & Adams, C. (2016). Conceptual Framework of eService in Developing Countries with Instability Status. Electronic Journal of E-Government.(under Review)

Alsaeed, A., & Adams, C. (2016). Comparative Study of eService Strategies amongst countries with different level of instability.(draft stage)

Alsaeed, A., & Adams, C. (2016). eServices Adoption in Countries under Pressures and the Impact on Displaced and Refugee People. Unpublished Poster Presentation at: Annual Research Conference, 7 June 2016, Portsmouth UK.

Rabaiah, A., & Vandijck, E. (2009). A Strategic Framework of e-Government : Generic and Best Practice. Journal of E-Government, 7(3), 241–258

Nations, U. (2013). Budget performance of the United Nations Supervision Mission in the Syrian Arab Republic for the period from 14 April to 30 June 2012 Report, 21028(January).

Okoli, C., & Schabram, K. 2010. 'A Guide to Con ducting a Systematic Literature Review of Informa- tion Systems Research'. Sprouts: Working Papers on Information Systems, 10(26)

Heeks, R. (2006). 'Understanding and measuring eGovernment : International Benchmarking Studies'. Development Informatics Group IDPM (pp. 27–28). UK: University of Manchester.

Jait, A. 2012. 'Government E-Services Delivery Requires Citizens Awareness: The Case of Brunei Darussalam'. Ph.D. thesis, Loughborough University.

Khan, G. F. et al. (2010). 'eGov Skills Identification and Development : Toward a Staged-Based User- Centric Approach for Developing Countries'. Asia Pacific Journal of Information Systems, 20(1), 1–31

SWEISI N. 2010. 'eGov Services an Exploration of the Main Factors that Contribute to Successful Implementation in Libya'.Ph.D Thesis, University of Portsmouth

Appendices

Study Title:		
Document	Date	Version No.
Application Form	Jan 2016	3.0
Participant Information Sheet(s) (list if necessary)	Jan 2016	2.0
Consent Form(s) (list if necessary)	Jan 2016	2.0
Invitation Letter	March 2016	1.0
Advertisement		
Peer / Independent Review		
Research Data Management Plan		
Supervisor Email Confirming Application		
Evidence From External Organisation Showing Support		
Terms of Reference for Steering / Advisory Group		
Survey Instrument		
Interview Questions / Topic List		
Focus Group Questions / Topic List		
Focus Group Ground Rules		
Script for Oral Consent		
Questionnaire		
Observational Data Collection Form		
Risk Assessment Form		
Principal Investigator's Response to the Ethics Committee		
Other – please describe		

Declaration

Declaration by Principal Investigator, and, if necessary, the Supervisor

1. The information in this form is accurate to the best of my/our knowledge and belief and I/we take full responsibility for it.

2. I/we undertake to conduct the research in compliance with the University of Portsmouth Ethics Policy, UUK Concordat to Support Research Integrity, the UKRIO Code of Practice and any other guidance I/we have referred to in this application.

3. If the research is given a favourable opinion I/we undertake to adhere to the study protocol, the terms of the full application as approved and any conditions set out by the Ethics Committee in giving its favourable opinion.

4. I/we undertake to notify the Ethics Committee of substantial amendments to the protocol or the terms of the approved application, and to seek a favourable opinion before implementing the amendment.

5. I/we undertake to submit annual progress reports (if the study is of more than a year's duration) setting out the progress of the research, as required by the Ethics Committee.

6. I/we undertake to inform the Ethics Committee when the study is complete and provide a declaration accordingly.

7. I/we am/are aware of my/our responsibility to be up to date and comply with the requirements of the law and relevant guidelines relating to security and confidentiality of personal data, including the need to register, when necessary, with the appropriate Data Protection Officer. I/we understand that I/we am/are not permitted to disclose identifiable data to third parties unless the disclosure has the consent of the data subject.

8. I/we undertake to comply with the University of Portsmouth Research Data Management Policy.

9. I /we understand that research records/data may be subject to inspection by internal and external bodies for audit purposes if required.

10. I/we understand that any personal data in this application will be held by the Ethics Committee, its Administrator and its operational managers and that this will be managed according to the principles established in the Data Protection Act 1998.

11. I understand that the information contained in this application, any supporting documentation and all

correspondence with the Ethics Committee and its Administrator relating to the application:

Will be held by the Ethics Committee until at least 3 years after the end of the study

Will be subject to the provisions of the Freedom of Information Acts and may be disclosed in response to requests made under the Acts except where statutory exemptions apply.

May be sent by email or other electronic distribution to Ethics Committee members.

Principal Investigator Abraheem Alsaeed. Date 25/04/2016

Supervisor Dr Carl Adams Date 25/04/2016

APPENDIX I: ETHICAL OPINION

Technology Faculty Ethics Committee

ethics-tech@port.ac.uk

Date 14/06/2016

Abraheem Alsaeed

School of Computing

Dear Abraheem,

Study Title:	**Evaluating eservice adoption factors including enablers and barriers that affecting eservice implementation in countries with different level of instabilities status.**
Ethics Committee reference:	**AA1**

The Ethics Committee reviewed the above application by an email discussion forum between the dates of 24/5/16 and 10/6/16.

Ethical opinion

The members of the Committee present gave a favourable ethical opinion of the above research on the basis described in the application form, protocol and supporting documentation, subject to the conditions specified below and also the general conditions set out in the attached document.

Conditions of the favourable opinion

The favourable opinion is subject to the following conditions being met prior to the start of the study:

1. The inconsistencies in the form (e.g. interview lengths, references to different countries at different parts Oman, Syria, UAE, Saudi Arabia) are rectified and the form is proof read for mistakes and language for approval by the supervisors.
2. It is made clear to participants on what basis they are responding, i.e. individual or on behalf of an organisation and that the anonymous nature of the study is clearly stated.

Recommendations: (You should give these due consideration but there is no obligation to comply or respond)

The Committee recommends that you rewrite the study summary to give a clearer overview of the project methodology and also make it clearer where and how the interviews will be carried out – e.g. face to face, Skype or methods as it is not explicit in all parts the application.

You need not provide evidence of compliance; the EC will assume that you will not commence your research until you have met the conditions stated above.

The favourable opinion of the EC does not grant permission or approval to undertake the research. Management permission or approval must be obtained from any host organisation, including University of Portsmouth, prior to the start of the study.

Summary of discussion at the meeting

This is a very interesting and topical study. The main discussion points concerned the safety of participants and the appropriateness of the methodology. The Study Summary did not give a full overview and the interview locations were not explicit. However as long as participant safety and anonymity can be safeguarded, and supervisors ensure that the final detailed methodology is robust we are happy to give a favourable opinion.

Documents reviewed

The documents reviewed at the meeting were:

Document	*Version*	*Date*
Application Form	2.0	
Participant Information Sheet(s)	2.0	
Consent Form(s)	2.0	
Invitation Letter	2.0	

Statement of compliance

The Committee is constituted in accordance with the Governance Arrangements set out by the University of Portsmouth

After ethical review

University of Portsmouth

Faculty of Technology

Reporting requirements

The attached document acts as a reminder that research should be conducted with integrity and gives detailed guidance on reporting requirements for studies with a favourable opinion, including:

- Notifying substantial amendments
- Notification of serious breaches of the protocol
- Progress reports
- Notifying the end of the study

Feedback

You are invited to give your view of the service that you have received from the Faculty Ethics Committee. If you wish to make your views known please contact the administrator

ethics-tech@port.ac.uk

Please quote this number on all correspondence: AA1

Yours sincerely and wishing you every success in your research

John Williams

Chair Technology FEC

Email: ethics-tech@port.ac.uk

APPENDIX J: ANNUAL REVIEW 2014

FORM UPR11

Annual Progress Review – Decision Report

University of Portsmouth

Postgraduate Research Student (PGRS) Information			Student ID:	675658
Student Name:	Abraheem Alsaeed			
First Supervisor Name:	Richard Boakes	First Supervisor Present?	YES ☒ NO ☐	
Independent Reviewer: (Panel Chair)	Penny Ross	Other Reviewer(s):	Jacek Kopecky	
Cohort: (Oct, Feb or June)	Oct	Thesis Deadline Date:	30/9/2019	
Course:	PHD in the School of Computing			
Date of Review Event:	24/7/2014			

Information considered by the Panel	
The UPR8A Student Progress Report	YES ☒ NO ☐
The UPR8B First Supervisor Progress Report	YES ☒ NO ☐
Copy of last year's decision report? (Annual or Major Review)	YES ☐ NO ☒
Evidence of research training and personal development undertaken during the period of review	YES ☒ NO ☐
Evidence of progress required for the PGRS as approved by the Faculty Research Degree (FRD) Committee in the form of: (please give details of evidence received, ie interview, chapter, presentation)	YES ☐ NO ☒

Summary & Quality of Evidence:

Presentation, Journal Paper, Development Summary

Progress and Engagement		
1	Has the PGRS satisfactorily completed the research and personal development training that was required?	YES ☒ NO ☐
	Approximate number of days training undertaken in the last year :	
2	Has the work been ethically reviewed by the Faculty Ethics Committee or relevant external body?	YES ☒ NO ☐ N/A ☐
	Ethical Review Reference:	

3	Have objectives and priority tasks for the year ahead arising from this review been agreed?	YES ☒ NO ☐
4	Is the PGRS developing skills in academic debate, are they able to defend their decisions and analysis?	YES ☐ NO ☒
5	Is the PGRS' level of written communication sufficient for writing a thesis? As necessary, please advise the PGRS to seek available support from EAP/ASK/GSDP, OR, include specific requirements in report of further work required (if applicable to Recommendation below)	YES ☐ NO ☒
5	Is the PGRS' level of oral communication sufficient for defending the thesis at a *viva voce*? As necessary, please advise the PGRS to seek available support from EAP/ASK/GSDP, OR, include specific requirements in report of further work required (if applicable to Recommendation below)	YES ☐ NO ☒
6	In the supervisors' view, or in the PGRS' own view, does the PGRS require any academic support that she/he is currently not receiving? (e.g. library resources, IT support, research method/skills training, research funds, conference participation, professional contacts). (If so, please provide details in the Recommendations below)	YES ☒ NO ☐
7	Have there been any personal or extenuating circumstances which have affected the PGRS' progress during the last year?	YES ☐ NO ☒
	If yes, has any action been taken? Please give summary below:	
	Has the Panel taken this into account before making their recommendation on the PGRS' progress?	YES ☐ NO ☒

Action to be taken by FRD Coordinator/Departmental Research Degrees Coordinator:

None.

Decision

Confirm Registration	☐
Confirm Registration with recommendations (with clear deadlines where appropriate)*	☒

	Recommendation	Who (To be completed by?)	Deadline
1	Undertake "SPECIALIST ACADEMIC ENGLISH FOR POSTGRADUATE STUDY" course to improve oral and written academic communication	Abraheem Alsaeed	ASAP
2			
3			
4			
5			

Final Review Meeting Required (The PGRS will submit further work as specified by the Panel within an agreed deadline prior to the Final Review Meeting. See below for Guidance.)	☐

Evidence Required for Final Review:
Please give details of the evidence required for the Final Review Meeting.

The Panel should tell the PGRS what further work is required for re-submission.

The time permitted for the preparation and submission of the work is **2 months**.

The candidate will receive written formal notification via email, with a copy of this form, from Research Section, QMD.

The First Supervisor will arrange the date for the Final Review Meeting with the panel and the PGRS in due course. The First Supervisor will then inform the Research Section at annualreview@port.ac.uk

*Where Recommendations are given these will be followed up at the next Annual/Major Review by the panel who will be given a copy of the decision form, unless alternative deadlines are appropriate and then agreement should be made as to who and how this is to be followed up. If so, an outcome of the follow up should be summarised and a copy sent to Research Section for inclusion in the Student File and assessment record.

Signatures		
Independent Reviewer: (Panel Chair)		**Date:** 25/07/14
Other Reviewer(s):		**Date:** 2014-7-24 **Date:**
First Supervisor:		**Date:** 2014/7/28

Please return the completed form to the Research Section, Quality Management Division, Academic Registry or annualreview@port.ac.uk

APPENDIX K: MAJOR REVIEW 2015

Memorandum

Date: 07 April 2015

To: Abraheem ALSAEED

CC: Dr Carl Adams
Angela Muscat

From: Cheryl Strong, Faculty Advisor (Research), Academic Registry

Re: Major Review

I am pleased to confirm the Faculty Research Degrees Committee approval of your application for Major Review, after the Review Meeting with your assessors. Your registration has been confirmed for the award of PhD.

Your mode of study is part-time and therefore submission will be expected by 30th September 2019. If your First Supervisor (Dr Carl Adams) agrees, you may submit your thesis at an earlier date to the Research Section, Academic Registry. These dates do not relate to any funding you may receive.

If, after you have completed the registration period to 30th September 2019, you require further time you will need to arrange an extension by completing form UPR12, *Application for Extension of Registration*, register and pay extension fees. The form is available at http://www.port.ac.uk/researchdegrees/forms/.

If you have any questions regarding the final examination process, (or any other regulatory or procedural issues which may arise) do contact me and I will be pleased to assist.

Best wishes,

Cheryl Strong

Faculty Advisor (Research)

APPENDIX L: ANNUAL REVIEW 2016

FORM UPR11

Annual Review – Decision Report

University of Portsmouth

Postgraduate Research Student (PGRS) Information		**Student ID:**	675658
PGRS Name:	Abraheem ALSAEED		
First Supervisor Name:	Dr Carl Adams	**First Supervisor Present?**	YES ☒ NO ☐
Independent Reviewer: (Panel Chair)	Dr Tineke Fitch	**Other Reviewer(s):**	Dr Carl Adams
Review Cohort: (Oct, Feb or June)	OCT	**Thesis Deadline Date:**	30/09/2019
Course:	PHD (SCHOOL OF COMPUTING)		
Date of Review Event:	31st May 2016		

Information considered by the Panel:	
The UPR8A Student Progress Report	YES ☒ NO ☐
The UPR8B First Supervisor Progress Report	YES ☒ NO ☐
Copy of last year's decision report? (Annual or Major Review)	YES ☒ NO ☐
Evidence of research training and personal development undertaken during the period of review	YES ☐ NO ☒
Evidence of progress required for the PGRS as approved by the Faculty Research Degree (FRD) Committee in the form of: (please give details of evidence received, ie interview, chapter, presentation) Comprehensive presentation	YES ☒ NO ☐

Summary & Quality of Evidence:

Presentation, thoughtful answers to the questions asked, has a clear plan and is aware of some of the challenges and has ideas for mitigation.
Although student has made strides in verbal and written communication, it would be useful if candidate continued his efforts to progress in this area.

Progression and Engagement		
1	All PGRS are expected to undertake ten days (full-time PGRS) and five days (part-time PGRS) of research development activity during each year of registration. In addition to sessions undertaken through the Graduate School Development Programme, this can include other personal and research development events.	
	Has the PGRS satisfactorily completed the research and personal development training that has been identified by the supervisory team and/or at the previous review?	YES ☒ NO ☐
	Approximate number of days training undertaken in the last year: Has done some, needs to do more and needs to keep a record of the activities (which is why answer to earlier question was no.)	

2	Has the work been ethically reviewed by the Faculty Ethics Committee or relevant external body?	YES ☐ NO ☐ N/A ☐
	Ethical Review Reference: In progress, awaiting final approval. Initial approval granted in year one. Undergoing updated review for his fieldwork.	
3	Is the PGRS developing skills in academic debate, are they able to defend their decisions and analysis?	YES ☒ NO ☐
4	Is the PGRS' level of written communication sufficient for writing a thesis? As necessary, please advise the PGRS to seek available support from EAP/ASK/GSDP, OR, include specific requirements in report of further work required (if applicable to Decision below)	YES ☒ NO ☐
5	Is the PGRS' level of oral communication sufficient for defending the thesis at a *viva voce*? As necessary, please advise the PGRS to seek available support from EAP/ASK/GSDP, OR, include specific requirements in report of further work required (if applicable to Decision below)	YES ☒ NO ☐
6	In the supervisors' view, or in the PGRS' own view, does the PGRS require any academic support that she/he is currently not receiving? (e.g. library resources, IT support, research method/skills training, research funds, conference participation, professional contacts). (If so, please provide details in the Decision below)	YES ☒ NO ☐
7	Have there been any personal or extenuating circumstances which have affected the PGRS' progress during the last year?	YES ☐ NO ☒
	If yes, has any action been taken? Please give summary below:	
	Has the Panel taken this into account before making their recommendation on the PGRS' progress?	YES ☐ NO ☐

Decision:
Research Regulation, Annual Review 1.2.1 – The purpose of the assessment procedure is to assess whether the student is actively engaged in the research programme and making satisfactory progress.
(Please indicate as appropriate)

Confirm Registration	☒
Confirm Registration with recommendations (with clear deadlines where appropriate)*	☐

	Recommendation	Who to take action (e.g., PGRS, First Supervisor, DRDC, FRDC, etc.)	Deadline (where appropriate)
1			
2			
3			
4			
5			

*Where Recommendations are given these will be followed up at the next Annual/Major Review by the panel who will be given a copy of the decision form, unless alternative deadlines are appropriate and then agreement should be made as to who and how this is to be followed up

Application Insufficient (Final Review Meeting Required) (The PGRS will submit further work as specified by the Panel within an agreed deadline prior to the Final Review Meeting. See below for Guidance.)	☐
Evidence Required for Final Review: Please give details of the evidence required for the Final Review Meeting.	

The Panel should tell the PGRS what further work is required for re-submission.

The time permitted for the preparation and submission of the work is **2 months**.

The PGRS will receive written formal notification via email, with a copy of this form, from Research Section, QMD.

In accordance with the regulations, an additional independent reviewer will be appointed to ensure that there is an odd number of reviewers on the panel. If there is already an odd number then an additional reviewer is not required.

The First Supervisor will arrange the date for the Final Review Meeting with the panel and the PGRS in due course. The First Supervisor will then inform the Research Section at annualreview@port.ac.uk

Signatures:		
Independent Reviewer: (Panel Chair)*	Received in RS by email	**Date:** 31 May 2016
Other Reviewer(s)*:	Received in RS by email	**Date:** 31 May 2016 **Date:**

*All Reviewers must see and acknowledge this UPR11 Form. This can be done either by signing the form (inserted (scanned) electronic signature at picture icon(s)) or forwarding an email to annualreview@port.ac.uk to confirm. Any forms without all necessary signatures will be returned.

Please return the completed form to annualreview@port.ac.uk. It will be forwarded to the PGRS and their First Supervisor for information.