2. Conceptual Framework of eService delivery system in Developing Countries with a high level of Instability

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Abstract:

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. In such countries, eService is still necessary and governments face extra challenges in their provision, however, academic literature that covers transformational eGov activity in periods of geopolitical instability is uncommon. Our aim is to address this gap in the literature by identifying factors that might affect the success of such implementation. We use the example of Syria and other developing countries facing similar challenges to tackle this problem. The paper draws upon Osborn and Gaebler's work, 'reinventing government', which identifies 10 principles of government transformation. This is used to examine eGov examples in the case of Syria along with previous work covering barriers and enablers to eGov activities within countries that have unstable status. The resulting derived conceptual framework provides a base to understand eGov activity for nations going through geopolitical uncertainty.

Keywords:

Instability, eGov, eService, barriers, enablers, framework.

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1. Introduction:

eGov is a transformative agent upon political and civic activity, where eService involves the provision and use of information by all stakeholders. eGov has the potential to increase civic efficiency and transparency to promote public service delivery (Alsaeed, Adams, & Boakes, 2014a). According to the 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*" . However, this implies reducing the paper based public service system and to be replaced with a digital one. This replacement requires managerial and organisational reform for the transformation to achieve its ultimate goal, especially in countries going through changes. Al-Azri, Al-Salti and Al-Karaghouli, (2010) suggest that during the last decade, the public sector worldwide has embarked on a wide range of reforms and has witnessed a steady growth in the number of E-government transformational projects. Understanding to what degree e-Service meets the user's expectation under the citizen-centric approach is a fundamental base for efficient and effective implementation and development of e-government services (Btoush, 2009). Moreover, eGov has been recognized as a change agent for public sector reform. Ebrahim, Irani and Al Shawi (2004) argue that through this change, eGov increasingly tries to build information-sharing and improve communication with other organizations as well with the public. In this context, several studies have discussed eGov methods of transforming public sector organisations from traditional paper-based systems to electronic delivery. Moreover Heeks (2001) states that increased efficiency, decentralization, increased accountability, improve resource management and marketization in the information age require more roles for information system and information technology in the process of changes, where IT is considered to be reinvention and reinvigoration of public administration. Rabaiah & Vandijck (2009) state that some governments are trying to lead this innovation some other countries seen it as an inevitable solution for public reform in better service delivery. Additionally, (Alsaeed, Adams, & Boakes, 2014b) argue that service delivery in countries that have instability may solve huge problems especially to those who are not be able to reach the government side easily such as displaced and refugee people. Such services must be available for 24 hours a day during the seven days of a week all year round (Heeks, 2006). Moreover, Citizens of any given country should have full access to government information at any time and everywhere. On the other hand, there are no guarantees of successfully implementing the

service, where (Heeks, 2002) states that e-government projects "*mainly end in failure; either partial or total*". Where successfulness depends on many factors which failure can be reduced.

The rest of this paper is organized as follows. Section 2 we discuss Research methodology; in Section 3 Literature Review; Section 4 finding and discussion; Section 5 we discuss our proposed contribution: the conceptual framework. Finally in Section 6 our conclusion.

2. Research methodology:

Desk research was adopted for this study, where a critical review of wide collection of existing literature on e-Government was established. We conducted a systematic review following guidelines suggested by Watson (2002). The process started by searching different databases and academic papers, then selecting 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. Initially, search services such as Google Scholar and Web of Science were used to gather articles related to keywords including for example "E-Government, Syria, developing countries, barriers, enablers, eService" and filtered articles to include those relevant to years 2000 to 2015. Snowball method was employed to group articles by comparing their reference lists and examining particular papers' bibliographies: the relevance result groups afforded the emergence of thematic classifications. Articles and themes identified in the Select phase were more formally organised in the collect phase. The ten principles that have been suggested by Osborne and Gaebler (1992), were used as a checklist or an analytical tool to be mapped to the found activities. Finally, we built the initial framework by combining the found enablers, barriers to be used as a base for a related future study.

3. Literature review:

3.1. Status of instability of the Context

Syria becomes unstable country after the Civil War started March 2011. According to the UNHCR (2012), more than two and a half millions of Syrian people have fled Syria, to neighbouring countries, in order to seek refuge. And about four million were internally displaced in the search for safe places. More than 30,000 children in Lebanon were born without registered citizenship (UNHCR, 2014), where the Lebanese government does not have the mechanism to issue any paper proof such as a birth certificate to the born Syrian Refugee children. UNICEF (2014) states that the concerns of the Syria's children to become a lost generation and called for immediate actions to prevent this disaster.

Many people from Syria face extra challenges of proving their identities in the housing countries. An online Service provided by the Syrian eGov could make a difference to those people. This is just an example of the importance of implementing eService. However, and despite the benefits that e-Gov may offer, the implementation of eGov initiatives in most developing countries resulted in failure as reported by Heeks (2002), where it shows that 35% of eGov projects in developing countries are total failures, 50% are partial failures, while the remaining 15% are successes. Therefore, crucial steps to investigate about all the factors that lead to successful implementation of the Syrian eGov initiative is needed.

3.2. eGov of the context

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 (2011-2015) and agreed with the United Nations Development Program (UNDP). (Syria Arab Republic, 2008) states that the goal of this project is: "to initiate the implementation phase of strategy through enhancing the operational capacity and the institutional framework for overall coordination of e-Gov initiative. Steps have been taken to initiate the implementation phase of the strategy which includes: comprising a consulting unit, a monitoring and evaluation unit, a development and standardization unit, a national eGov portal unit. All units are working under the provision of (and report directly to) the Syrian Prime Minister. The most important tasks to be delivered by those units are (a) to support and develop IT strategies, (b) to provide technical support, (c) to adopt eGov best practice, (d) to provide a monitoring service and (e) to implement a communication plan (Syria Arab Republic, 2008). Finally, the main components of the eServices provided are online payment of electricity water, and phone bills, civic, education, and properties registration. According to the United Nations (2012), Syrian eGov has reached its highest world eGov development ranking in 2012. Therefore, there was an improvement of the implementation which is due to the adoption of the eGov strategy mentioned earlier since last survey. (Table 1) below illustrates the Syrian and Middle East Arab Countries eGov ranking between 2010 and 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**
Yemen	0.2472	167	164	**-3**

Table 1: United Nation eGov development survey 2012

3.3. Enablers Investigation

Enablers motivate and encourage the e-service progress. They cause stakeholders to support e-government. E-government projects must have driving forces if they are to succeed (Heeks, 2001b). Therefore, they should be well identified and recognized. Many elements have been identified from literature as driving forces for successful implementation of e-government projects. The most important elements emphasized by literature are:

1. **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)
2. **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).
3. **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.
4. **Citizens' Demand:** It is a motivation for the government to implement an e-service project when there is citizens' demand and pressure for it (Helbig, Ramón Gil-García, & Ferro, 2009).
5. **Funding:** The availability of sufficient funding is a significant factor for a public organization to move towards e-service success (H. S. H. HASSAN, 2011).

Furthermore, adopting a real live implementation of a society's transformation works as a key motivation and a lesson to learn from. The following ten principles suggested by Osborne & Gaebler, (1992) are considered to be a guideline for politicians to improve service delivery and a way for society's transformation. The following are the principles suggested by Osborne and Gaebler (1992):

1. **Catalytic Government (steering rather than rowing):** its rules will not be to provide direct services but to create networks and leverage resources.
2. **Community Owned Government (Empowering rather than Serving):** communities to be the main players in service delivery to improve government performance.

3. **Competitive Government (Injecting Competition into Service Delivery):** competition rather than regulation to improve the quality and the effectiveness of the government services and ending the government's monopolies.
4. **Mission-Driven Government (Transforming Rule-Driven Organizations):** public organizations should be driven by their mission, not by their rules and their budgets.
5. **Results-Oriented Government (Funding Outcomes, Not Inputs):** focused on outcomes, and recommend new ways of measuring and rewarding outcomes.
6. **Customer-Driven Government (Meeting the Needs of the Customer, Not the Bureaucracy):** perceive the needs of customers and give them a choice of producers.
7. **Enterprising Government (Earning rather Than Spending**): earn money instead of taxes.
8. **Prevention rather Than Cure:** prevent problems rather than delivering services to correct them.
9. **Decentralized Government:** transfer decision-making authority to those individuals who are in the best position to develop effective and innovative solutions to problems
10. **Market-Oriented Government (Leveraging Change through the Market):** utilize a market mechanism instead of an administrative program to provide goods and services to the public.

3.4. Barriers Investigation

Our literature review investigation highlights a variety of elements that impede e-service development. Table 2 lists references from where barriers were found:

(Blakeley & Matsuura, 2001), (Qasimi et al., 2002), (Ndou, 2004), (Abanumy, Al-badi, & Mayhew, 2005),(Ciborra & Navarra, 2005),(Pons, 2005), (Al-Omari & Al-Omari, 2006),(Hassna & Ahmad, 2006), (Sallard & Alyousuf, 2007),(Awan, 2007), (Strachan, Wanous, & Mofleh, 2008),(Syria Arab Republic, 2008),(Gant, 2008),(Sethi & Sethi, 2008), (Almarabeh, Mohammad, & Abu Ali, 2009),(Azab, Kamel, & Dafoulas, 2009),(Chatfield & Alhujran, 2009), (Abu-shanab, Abu Al-rub, & Md Nor, 2010),(Almarabeh & Abu Ali, 2010),(Khan, Moon, Rhee, & Rho, 2010),(El-qawasmeh & Owais, 2010),(Al-Shboul & Alsmadi, 2010), (SWEISI, 2010), (Alsmadi, 2011), (Alanezi, Mahmood, & Basri, 2012),(Saudi Arabia government, 2012),(Jait, 2012),(Farzali, Kanaan, Kanaan, & Atieh, 2012),(Hadi & Nawafleh, 2012), (Abdul Rahim & Al Athmay, 2013),(Al-Khouri, 2012),(Altaany & Al-zoubi, 2013) ,(Kafaji, 2013)

Table 2: References of barriers found between (2000-2013).

3.5. Similar Models

This section shed light on a number of relevant frameworks to comprehend the contributions made towards governmental electronic services. Although our proposed framework (see figure 3) utilizes 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:

- **ITPOSMO Model (Heeks, 2003)- Figure 1**

In his ITOSMO model (information, technology, process, objectives, staffing, management, other resources) Heeks (2003) states that there are high rates of failure of e-government projects in developing countries 35% are total failures, 50% are partial failures, and only 15% are successes, and that the reasons for the failures are the gap between the current reality and the design of the future e-government system. The model represents the growing up of the gap whenever the relationship between the reality and design is mismatch. This model can be seen as a framework for failure of e-government in developing countries (Danish, 2006). The seven dimensions summarised by the ITPOSMO Model provide an understanding of design-reality gaps of the success and failure of e-government. Therefore, the design-reality gap model can be utilized as a useful guide to understand the success or failure of e-government projects.

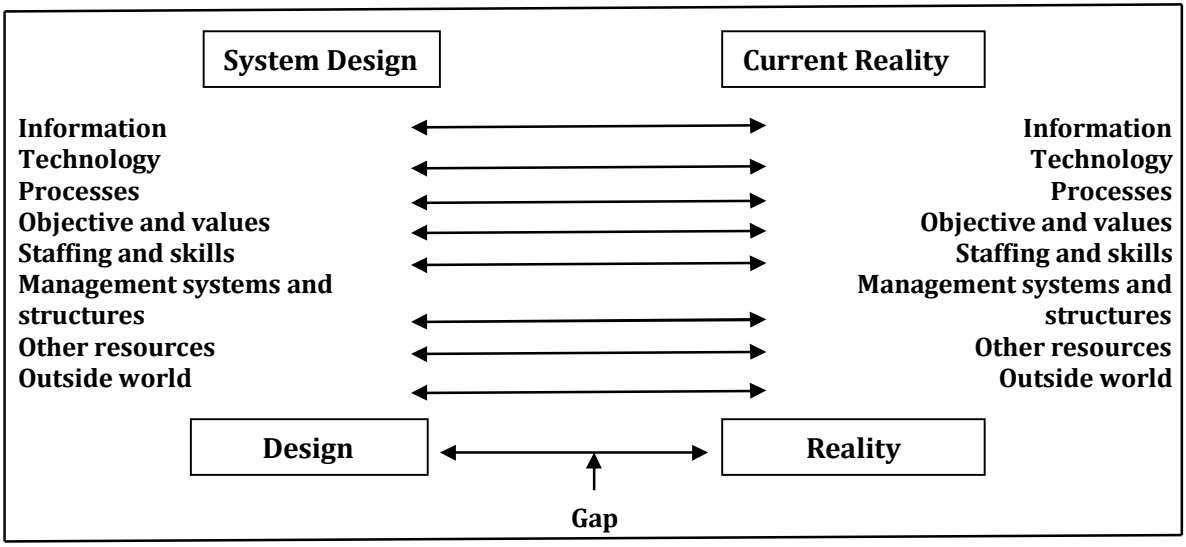

Figure 1: ITPOSMO Model (Heeks, 2003)

- **Factor Model (Heeks, 2004)- Figure 2**

The Factor Model by Heeks (2004) identifies a set of success/failure factors: external pressure, internal political desire, overall vision and strategy, project management, change management, politics, design, competencies and technological infrastructure. Heeks (2004) states that the presence or absence of these factors determine success or failure of the eGov implementation in developing countries.

Figure 2: Factor Model (Heeks, 2004)

- **eServices framework case study of Egypt (HASSAN, 2011)**

This framework aims to draw up the factors affecting the adoption of implementing eService in developing countries with the focus on the Egypt case. It examines e- Service and provides insights into how to successfully develop and implement them.

- **Strategic framework to eGov adoption (Ebrahim et al., 2004)**

The Strategic framework mainly incorporates three parts: 1-Stage of growth model, 2-Technology, Organization and Environment framework (originally proposed by Tornatzky and Fleischer 1990), 3-Benefits and Barriers factors. Ebrahim et al., (2004) argue that Benefits and Barriers are essential factors that influence the adoption of e-government projects.

- **Key Drivers and Barriers to E-Gov in Jordan (Khasawneh-Jalghoum, 2011)**

The main purpose of this framework is to investigate the key drivers and barriers that stimulate or impede the development of the e-government initiative within the context of a developing country with the focus on Jordan, and 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.

- **Conceptual Model for Omani e-government (Al-Busaidy, 2011)**

This model maps the relationships between e-government implementation and the success structure and process of organisation from the perspective of the Omani government. It explores economic, political, social and technological pressures facing governmental efforts and to explore various institutional pillars (coercive, normative and mimetic) and their effects on public organisation processes and structures.

- **Obstacles and Interoperability Framework in Syria.(Farzali et al., 2012)**

This Interoperability framework is designed to address effective Implementation of e-Government in developing countries. It investigates e-government activities in Syria where eGov barriers are utilizes Enterprise Integration Technologies to overcome barriers of policy, economics, administrative procedures, society, and technology.

4. Finding and discussion:

4.1. Enablers finding and discussion

The ten principles suggested by *Osborne and Gaebler* (1992) were tested against each activity that has been found in the given context in order to identify the driving elements in transforming government.

Table 3 below shows the ten principles for how to tackle common eGov problems in general and which one is supported in Syria.

Transformation Method Osborne & Gaebler	**Example of eGov problem**	**How the entrepreneurial government would tackle eGov problems.**	**Supported in Syria**
Catalytic Government	Availability of documentation (eGovernance) (eDemocracy)	The entrepreneurial government would encourage cooperation between departments and with the private sector in collecting, storing and utilizing data. Steering rules (Almarabeh & Abu Ali, 2010)	No
Community Owned Government	Public engagement (ePartisipation) (eRulemaking)	By interviews, surveys or questioners to consult with stakeholders to assess the existing laws and the impacts results required (Almarabeh & Abu Ali, 2010)	No
Competitive Government	Infrastructure development projects. (eProcurement)	Introduce telecom, public access kiosks and mobile centres competition and lift regulations on wireless and other digital technologies to accelerate their deployment. (Almarabeh & Abu Ali, 2010)	Yes
Mission-Driven Government	Mission development Framework	The entrepreneurial government would establish an action framework at the beginning of the process for a better view of the investment. (Almarabeh & Abu Ali, 2010)	Partially
Results-Oriented Government	(eProcurement)	Creation and standardization of meta-data is critical for conducting successful data searches across institutions and networks. (Almarabeh & Abu Ali, 2010)	Partially
Customer-Driven	(eVoting) (ePartisipation) (Cyberocracy)	Provide aides at access points who can train citizens in basic computer skills. Special attention should be given to groups that can be difficult to integrate (women, elderly) (Almarabeh & Abu Ali, 2010).	Yes
Enterprising Government	(eProcurement)	Avoid advertising-based or fee-based services. They have generally not been sustainable. Articulate functionalities, and try not to add details that will push budgets into deficit.Develop projects that are achievable with resources available. (Almarabeh & Abu Ali, 2010).	Partially

Anticipatory Government	(eProcurement)	Backup information regularly and store backups in a separate location. (Almarabeh & Abu Ali, 2010).	No
Decentralized Government	(eDemocracy)	Seek assistance and involvement from organizations that already have experience in providing services and information using the same or similar technologies(Almarabeh & Abu Ali, 2010).	Partially
Market Oriented	(eProcurement) (eRulemaking)	Develop publicity and training campaigns that will engage the public about E- government initiatives. Conduct research to ensure that online services respond to actual needs and that the implementation suits the target audience(Almarabeh & Abu Ali, 2010).	Partially

Table 3: Applying transformation methods on the Syrian eGov problems.

Table 4 illustrates the eServices provided by the Syrian Government tested against the ten government principles. The table shows that all eServices are Catalytic, Customer-Driven but does not support competitive system, mission driven, anticipatory and market oriented. The study of Decentralized Government found support for education registration and civic registration but not for travel document or property registration. Additionally evidence for Enterprising Government was found in relation to online payment, education registration and property registration but not for civic registration or travel document.

eServices / Type of government	Online Payment	Education Registration	Civic Registration	Property Registration	Travel Document
Catalytic Government (steering rather than rowing)	✓	✓	✓	✓	✓
Competitive Government: Injecting Competition into Service Delivery	×	×	×	×	×
Community Owned Government (Empowering rather than Serving)	×	×	×	×	×
Mission Driven Government: Transforming Rule-Driven Organizations	×	×	×	×	×
Results-Oriented Government: Funding Outcomes, Not Inputs	×	×	×	×	×
Customer-Driven Government: Meeting the Needs of Customer	✓	✓	✓	✓	✓
Enterprising Government: Earning Rather Than Spending	✓	✓	×	✓	×
Anticipatory Government: Prevention Rather Than Cure	×	×	×	×	×
Decentralized Government	✓	✓	✓	×	×
Market Oriented Government	×	×	×	×	×

Table 4: Metrix of applying methods of eGov on services provided by Syria.

4.2. Barriers finding and discussion

Our results have been categorized into seven main factors:

- Infrastructure
- Human
- Organisational
- Political
- Financial
- Socio-economic; and
- Instability.

(Listed in table 5 below)

1. **Syrian Civil war and Instability challenges:** The Syrian Civil War has impacted on all aspects of Syrian life, which could be added as a new challenge placed on top of each existing one. Table 5 shows the Challenges found between 2000 and 2013 and the Impact of the Syrian Civil war and instability challenges scaled L Low, H High and M Medium on the rest of the barriers. As the civil war started in March 2011 all life aspects of the Syrian people as well as the country's infrastructure has been affected(United Nations, 2012). The impact of the instability resulted in new challenges. By July 2013, the Syrian government was in control of approximately 30–40% of the country's territory and 60% of the Syrian population (Hubbard, 2013). At the end of August 2014, 35,000 refugees were awaiting registration, while estimates of several hundred thousand more were not included in official figures as they were unregistered(United Nations, 2013). The people of Syria start to find it difficult and dangerous to reach to the government sites anywhere in the country and this is where eGov could fit and serve the purpose.

2. **Political Challenges:** during the civil war political barriers are the most dominant where political situation, freedom of press, leadership and the political will have been affected severely. As an example of political barriers in Syria as Blakeley & Matsuura, (2001) highlighted "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 and Irani (2005) assert that some government officials, especially in developing countries such Middle East Countries, considered e-Gov as a threat to their power.

3. **Infrastructure Challenges:** 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 to 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. He also states the importance of the personal data that an e-Gov portal could contain and the need for security implementation in order to protect such information.

4. **Human Challenges :** In their study Khan et al., (2010) found that the level of *ICT literacy and skills of eGov users* in developing countries is very low. Khan *et al.,* (2010) suggested that citizens should be aware and must accept the eGov initiatives and e-service in particular to overcome this barrier. These researchers also argue that awareness is improved by using the e-services in a Knowledge Management perspective. "*Education and marketing of eGov services has become one of the ten most pertinent challenges for developing a successful eGov*" Khan et al., (2010).

5. **Organizational Challenges:** Sallard and Alyousuf (2007) argue that the widespread evaluation culture and experience in countries administrations is very important. In developing countries eGov initiatives are designed and implemented by individual units with loose institutional links with other agencies. "*This could prevent development of a common culture and experience of implementation and evaluation across government*" (Sallard and Alyousuf 2007). Dubai is an example where eGov faced several challenges from government departments regarding the quality of eservices (Sethi and Sethi, 2008). For example, some institutional departments exaggerated eservices offerings but their services were of little value to customers with focus on quantity rather than quality.

6. **Socio-economic challenges:** digital culture, corruption and poverty are the main socio-economic challenges.

7. **Financial challenges:** the cost of the eGov service is the highest under this category, especially as the wars has drained the economic resources and affect support for the eGov service.

Type		Challenges 2000-2013 Found Impact of instability (L) Low, (H) High, (M) Medium			
Civil war and Instability challenge	**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)**	
	Political challenges	Political situation**(H)**	data standards **(M)**	freedom of press**(H)**	leadership**(H)**
		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)**	
	Organizational challenges	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
	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)**	tele-density**(L)**
	Socio-economic challenges	Illiteracy**(L)**	economic development**(M)**	culture**(M)**	demography**()**
		digital culture**(M)**	competition environment	corruption**(M)**	Poverty**(M)**
		appreciation of IT value**(L)**	permanent availability **(M)**	language barriers**(L)**	benchmarking**(M)**
		communication	unemployment rate**(H)**	E-literacy	
	Financial challenges	Financial constraints**(M)**	Cost of eGov services. **(M)**	cost structure Internet cost**(M)**	

Table 5: Challenges found between 2000 and 2013 and the Impact of instability scaled L, M and H

4.3. Similar Models finding and discussion

As a summary Table2 below lists all reviewed frameworks and indicates gaps found in each one as following:

- Lack of academic evidence of eService implementation which target citizens in countries with stress (instable countries).
- Lack of exploration of the factors that contributes to the successful implementation of eGov initiative in countries during conflict.
- Lack of evidence of a clear relationship between barriers and drivers to overcome those barriers.
- The missing frameworks that suggest technology-related strategies that may assist in the effective implementation also showing the different components that are involved in the lifecycle of the implementation.
- The lack of a general model that any nation with a stress situation could adopt.

Framework	Reference	Main Proposed	Gap
Strategic framework to 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-Government Initiative in Jordan	(Khasawneh-Jalghoum, 2011)	Barriers & enablers / Jordanian context.	Lack of evidence of eService implementation in countries with instability.
Conceptual Model for e-government implementation from the perspective of Institutional Theory literature	(Al-Busaidy, 2011)	Barriers and enablers/ Omani public sector organisations.	Lack of showing organization going through changes in 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

Table 6: List of reviewed frameworks and gaps found.

5. Proposed contribution:

The framework builds on prior literature in the area of e-service development in government under stress and makes use of similar frameworks to facilitate a better understanding of the nature of the e-service development process, in particular to identify barriers and success factors.

From the above finding our proposed conceptual framework can be extracted and built.

Figure 3 presents the proposed Syrian eService conceptual framework.
Frameworks, in general, are useful because they allow us to organize and integrate the various elements of a problem in a simple and consistent way, assuring the attainment of the pursued outcomes (Montagna, 2005). Therefore, our proposed framework captures the main factors including enablers and barriers that contribute toward successful implementation of the eService in countries with stress, such as Syria.

The framework consists of the following components: Enablers Barriers, Vision, Strategy, Delivery Methods, Final Framework, Legal, Technical, Organisational and Implementation Frameworks, Guidelines (interoperability, Legislation, Taxation, Authentication) Standards.

We may see that the layout of figure 3 reflects the components (barriers and enablers, instability challenges) of the conceptual frameworks reviewed. The remaining parts of the framework are Vision, Strategy, Delivery Methods and Final Framework which is the final stage of implementing the eGov initiative and could be defined as the collection and successful incorporation and cooperation the rest of the components with each other. Rabaiah & Vandijck, (2009) state that vision comes at the start of any government strategy as with the political will are indispensable to launch the e-government project. Heeks, (2006) also argues that Vision is necessary, which is normally responsible for planning and spearheading implementation. The Strategy as Heeks, (2006) sees it, is the plan for eGov System supported by government infrastructure to achieve organisational objectives through maximizing the ability of management.

Therefore a robust strategy is a major factor in reaching a successful e-Government adoption, where goals and objectives are included. Figure 3 is our proposed Syrian eService conceptual framework.

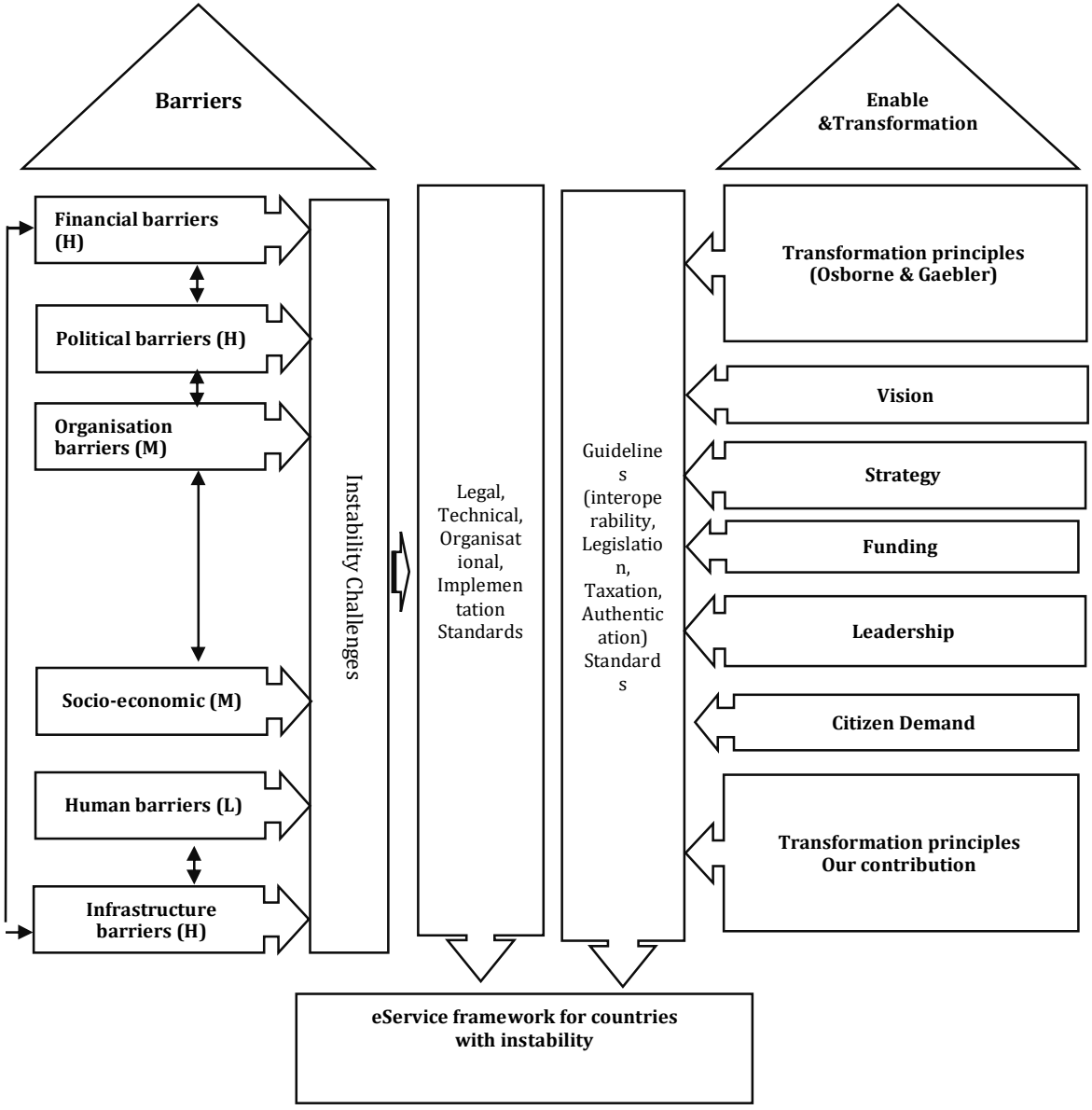

Figure 3: Syrian eService conceptual framework.

6. Conclusion

From conducting a 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. We have explored the specific geopolitical context of Syria and introduced the scaling effect this may have on generic barriers and issues. Based on our study, we can conclude that the most common factors that will affect the success of eGov initiative are:

1. The following components are forming the enabler's side of the framework: vision, mission, strategy objectives of the eGov initiative as well as following the ten principles suggested by Osborne and Gaebler (1992) that are based on the study of American society and government. The suggested principles work as a guideline for every politician who intends to reinvent a government and transform a society.
2. The challenges that form the barrier's side of the framework include the following : Lack of political will for adopting change, Political situation, leadership, freedom of press, political administrative system, e-government policy execution **,** Poor ICT infrastructure, Inexperience of implementers at all levels, Inflexible strategic frameworks, Absence of clear vision, Personal attitude among employees, Poor / limited implementations that harm perception, Absence of e-banking and legal frameworks, and Overwhelming bureaucracy. As a contribution to this research, we have built a conceptual framework (Syrian eService Conceptual Framework, figure 1) in which to evolve our analysis of eGov in Syria and have highlighted the extra challenges and opportunities of achieving eGov transformation 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.

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