An Investigation into E-Government Services

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Figure 1: Source: https://www.revesoft.com/products/e-governance-solutions

Contents

1 Abstract

What are the advantages and disadvantages of a government's reliance on computing and Internet access in the implementation of its business (e.g. delivery of social services, delivery and payment of tax and utility bills (water etc.), electronic voting)

This is going to be explored primarily in the context of security.

2 Introduction

The internet is a very new thing, it was first introduced at the start of the 1990's but it did not begin to take off until the 2000's with the dot com boom and with the later introduction of smart devices it has only gotten more popular in terms of everyday use. albeit most use is trivial, there is most certainly room for practical use and one of these uses is the idea of an E-Government system. Within this text I aspire to explore the pros and cons of E-Government services.

3 E-Government

As previously stated, with the advent of a more connected people, some governments from across the world felt it would be a good idea to implement some vital government services online to make it easier for the consumer and ultimately the government itself. There were several challenges in four key areas such as:

1. Information + Data

   - Inaccuracies in Data
   - Inconsistencies
   - Incompletedness of Data.
   - Lack of Data

2. IT Issues

   - usability
   - Security Issues
   - Technological incompatibility
   - Complexity

3. Legal

   - Laws and Regulations

4. Institutional

   - Privacy Concerns

Key Area	Strategy
Information and Data	Proper Data Structures
	Deal with Inconsistencies as they arise
IT	Ease of Use
	Practicality/Usefulness
legal	Good IT Implementation
Institutional	Law Changes

Table 1: Success Strategies (Gil-García and Pardo, 2005)

(Gil-García and Pardo, 2005)

Of these, Privacy was deemed very important. (Krishnan et al., 2013) (Gil-García and Pardo, 2005) (MacFeely and Dunne, 2014) (Teo et al., 2008)
Along with this, various strategies were also proposed to ensure success of the E-Government implementation
The strategies mentioned above will more than likely remain the primary strategies for the time yet to come as technology is a very fast moving industry and the government bodies mentioned will constantly have to update their software to keep up.

When it comes to Data protection and consistency initially when the E-Government was being prospected in Ireland, there was an issue with the the fact that the government was divided into three main areas, each with their own sub-groupings

1. Central Government

   - 17 Departments
   - 35 Agencies

2. Local Government

   - 46 Local Authorities

3. Health Boards

   - 10 Health Boards

(Hughes et al., 2006)
within the Years that followed there was a restructure of the Health Board system into the now centralized Health Service Executive (HSE) along with the introduction of several new departments. Within the 8 years that followed this report there was a few key changes within the Data structuring within Ireland. Digitisation was just around the corner where they could begin to centralise various facets of government records. Albeit services such as rent allowance were re-designated to local governments. Once the document published in 2006 was mostly fulfilled there was another stepping stone within the digitisation of

Irelands Government records/services set out in (MacFeely and Dunne, 2014). They recommended things such as the introduction of a permanent Identification system for peoples availing of Government services online, this has since been fulfilled but not without controversy. The aforementioned system is called MyGovID, this is an extension on the highly controversial Public Services Card which was introduced in 2011. MyGovID allows you to use a single account to perform tasks such as: Apply for Susi, Check Welfare payments, Submit Tax Returns, Register to vote, and Apply/Renew your drivers license. The centralisation of the documents of each person in the country makes interacting with E-Government services more efficient but at the same time it has not been without controversies. As a security measure it utilises a Two Factor Authentication system (2FA) where it sends the person using it a text to verify that it is indeed them trying to access the service. This text comes from a British phone number (+447781470659) this same number is used by various multinationals such as Microsoft and PayPal, but that is not without potential trust issues as the end user cannot be certain how much of their data is being held in another country where they entrusted it with the Irish Government. although this is a violation of the GDPR if it happens without your consent, the service has been using it since before the law was implemented so your data from as recently as a year ago could be used in another nation for marketing purposes.

Although there are some security risks and privacy concerns (MacFeely and Dunne, 2014), One great benefit of the E-Government system is the introduction of the Eircode. This assigns each house in Ireland a unique Alphanumeric identification tag, this could have not been achieved without the digitisation of government services. In the context of a medical emergency or ongoing crime it can be especially practical as the appropriate authorities can quickly respond to time critical emergencies. Another such benefit is how it has made it easier to stamp out fraud on all degrees as it's easier to reference whether or not your employees are in receipt of a welfare payment. But corruption is still an issue (Krishnan et al., 2013) and will potentially remain as such.

Returning to the issue of privacy and security, as the E-Government systems would constantly have to be updated to keep up with the evolution of technology, it can make it a lot more difficult to ensure that the data is safe as if there is any form of hindrance in the updating of the systems it could result in a compromise of the data and potential theft which could then be used to commit various acts of fraud or various other criminal activities. Another such issue with a centralised database is that the data could potentially be easily accessed by a lot of people through entirely legitimate means which in turn does also bring some trust issues, as the GDPR does exist this hopefully is being implemented in such a way that only departments with good reason to access your documents have the right to access them. As a given The HSE, An Garda Síochana and The Department of Social Protection will have permanent access to your documents but the rest should not where it does not apply. In turn, this centralised database does make the data easier to keep in check as there's

one rather than a series of records across various buildings in the country.

4   Conclusions

In Conclusion, there is a lot of benefits and negatives for the use of an E-Government system, The benefits outweigh the downfalls in terms of how many there are but when it comes to issues such as ones personal liberties and privacy it can be a potential risk.

Advantages	Disadvantages
Easier to provide Accurate information across all government departments	More difficult to ensure that the Information remains In the right hands
Centralised System of Records	Centralised System of Records
Uses a 2FA system to ensure only you can access your data	Uses a British Service, Causing security Concerns
Faster for the Consumer to access various government services	

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