eGovernment take-up in the city of Plymouth, UK

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Abstract

eGovernment presents new challenges to both central Government and local authorities in terms of service delivery and citizen engagement. In examining the socio-economic composition of Plymouth, we provide a baseline from which to measure take-up of local eGovernment in a specific region. Survey data collected through Plymouth City Council's citizen forum demonstrates good take up and good perception of the local authority site from its citizens. However, it does also raise some wide ranging issues regarding the methods of eGovernment engagement and how authorities can best go about getting best value from their web based service delivery channels to achieve the predicts savings eGovernment will bring.

Keywords

eGovernment, Engagement, Exclusion

1. Introduction

eGovernment is the electronic delivery of central and local government information / services by means of information and communication technology. In 1999 the UK government declared, "The information age should increase the choice of how citizens and businesses receive services, not restrict it … We will develop targeted strategies to ensure that all groups have proper access to information age government" (Cabinet Office, 1999).

The UK strategy fits within a European Union (EU) framework, most recently the "Information Strategy i2010" which builds on its predecessor, launched in 2002, the "eEurope 2005 Action Plan". The EU strategies and action plans ensure a common framework of eGovernment services across Europe. Indeed in March 2001 the council of the EU identified 12 key services for its citizens, each of the eGovernment services are intended to be "standard" to all EU states.

Given that UK strategy works within an EU framework, in 2002 the National Audit Office (NAO) produced a report, "Better Public Services Through eGovernment" which included identifying five key benefits of eGovernment, i.e.

- Greater choice – to provide users with a greater range of services and delivery channels
- Better accessibility – giving citizens greater access to the range of services
- More convenience – providing services in a way which suits citizens and businesses, e.g. 24 hours a day 7 days a week

- Faster delivery – providing faster more accurate service
- Improved efficiency – replacing manual processing of routine high volume work with IT system

(NAO, 2002)

However, the NAO report also identified 6 key risks regarding the "take-up" of eGovernment services, i.e.

- Familiarity: the Internet which has yet to become a normal established part of everyday life
- Expectation: low expectations about IT and what it can deliver
- Ease of use: unless new services are easy to use there is a risk take up will be low
- Benefits: the benefits for the public must be clear or take up will be low
- Social exclusion: citizens will not take up services if they do not have access to a computer
- Cost: if the cost of accessing services on-line is expensive people will not want to use it

In order to achieve the goal of e-enablement, considerable investment has been made in central & local government eGovernment projects, between 2001/02 and 2005/06 £7.4bn has been spent (£3bn – local government, £4.4bn - central government) (Rogers, 2003).

In order to prioritise and standardise the development of local government services, Implementing Electronic Government (IEG) statements were developed, i.e. corporate plans for the goal of 100% "e-enablement" of particular local government services / information. The IEG statements logically fit within the EU framework, e.g. "local planning applications".

The IEG statements have developed over time, i.e. IEG1 in 2001, … IEG6 in 2006, the end of the programme evaluation is planned for April 2006.

The result of the IEG programme has been to furnish a suite of services and information common to all local authorities, the software or the method of delivery conceivably being different, however, the objective of delivering a service / information has been achieved.

However, "The Oxford survey" (Dutton at al., 2005) reported that only 24% of UK Internet users and 15% of the population have ever used any eGovernment service, whereas, 70% of Internet users rate the Internet as either "important" or "very important" to their current way of life. The variance between usage of eGovernment services and perceived "importance" of the Internet raises concerns with respect to "take-up" and perceived value.

In this paper we investigate eGovernment take-up in the city of Plymouth, in the South West of the UK to determine whether social exclusion is being addresses

through eGovernment delivery. Initial some core demographic information is presented as a baseline for investigation. Following this information, the analysis is provided via survey data collected for Plymouth City Council (PCC) regarding Internet and eGovernment usage.

2. The City of Plymouth

Plymouth is located in the south west of England and is the largest city west of Bristol. The population of the city is 241,000 and increasing; traditionally Plymouth has had strong links with the military, in particular the Royal Navy. Since the reduction in the navy's surface and submarine fleet and the privatisation of the naval dockyard, Plymouth has sought to diversify its economy, e.g. electronics, medical / healthcare, advanced engineering and call centres

A brief review of the 2001 Census (Census, 2001) provides in insight into the socio-economic composition of the electoral wards in Plymouth. Although Plymouth is the 14th largest city in the UK its retail ranking is only 29th, with a potential total high street expenditure of £1,094 million only £600 million is spent in the city centre. The city fails to attract relatively affluent shoppers in the outlying areas. (PCC-Experian, 2006)

The Neighbourhood Renewal Unit (NRU), which is part of the "Department for Communities and Local Government", is responsible for overseeing the Government's neighbourhood renewal strategy. In 2004 the "Indices of Deprivation 2004" (ID2004) was published (revised June 2004), the ID2004 contains 7 key indices (income, employment, health deprivation and disability, education skills and training, barriers to housing and services, crime, living environment).

The indices are measured at local authority level and sub-areas - "Super Output Area" (SOA). The 32,482 low level SOA's each contain the seven indices of deprivation, thus allowing the SOA's to be ranked according to how deprived they are relative to each other. The base information has been collated to form the "Index of Multiple Deprivation 2004 (IMD2004)". The "Indices of Deprivation 2004" has therefore identified,

- Plymouth is ranked 76th out of England's 354 local authority districts for its average deprivation and the extent of that deprivation across the city.
- Overall, of the 160 Super Output Areas (SOA's) in Plymouth, 19 are amongst the top 10% most deprived in England.
- The top 10% SOA's (16 in total) with the worst index scores are largely clustered in the south western corner of Plymouth, the wards of "St. Peter and The Waterfront", "Devonport" and "Efford".
- The 'least deprived' ward of the city lies within "Plymstock Dunstone".

(PCC, 2006)

From the data presented above, we can conclude that Plymouth is a somewhat deprived city, compared to other cities of similar size, with higher rates of low skilled workers, lower levels of affluence, etc. than average. Therefore, we can

assume, based upon government literature (ODPM 2005) that a city such as Plymouth has a lot to gain from eGovernment. The following section considers both Internet usage and eGovernment engagement within the city, to test whether such claims can be demonstrated.

The remainder of this paper examines data collected from a survey carried out by PCC regarding Internet and eGovernment usage. It considers findings against the above discussion, and considers the state of eGovernment usage in the region compared to the national picture.

3. Usage Survey

In November 2002 PCC established a residents panel comprising of approximately 1,600 residents randomly selected to sit on a panel to complete surveys on various aspects of services supplied by PCC or affecting citizens of the city. Surveys are typically circulated 3 times a year, the scope of the surveys range from City Strategy to National Health Service (NHS) service provision.

In the June 2006 survey, a number of questions were posed to the panel regarding their Internet usage and use of the PCC website. The questionnaire resulted in 933 responses, indicating a response rate of 58%. Although the gender is nearly 50:50 upon further analysis age profile would appear skewed, whereby there are no female respondents aged 35~44 and no male respondents over 54:

	Respondents: Gender					
	Male		**Female**		**Did not answer**	
Age	**Number**	**%**	**Number**	**%**	**Number**	**%**
18 - 24	0	0%	27	3%	0	0%
25 - 34	85	9%	40	4%	0	0%
35 - 44	204	22%	0	0%	0	0%
45 - 54	114	12%	74	8%	0	0%
55 - 64	0	0%	169	18%	0	0%
65 - 74	0	0%	126	14%	0	0%
Over 75	0	0%	53	6%	0	0%
Did not answer	5	1%	5	1%	31	3%
Total	408	44%	494	53%	31	3%

Table 1 – Respondent demographic

The Office of National Statistics (ONS) estimate 13.9 million households (57%) in Great Britain could access the Internet from home (ONS, 2006). However, the percentage of respondents with Internet access at home was 71%. Similarly, the ONS estimates sixty nine per cent of households with Internet access have broadband connection (ONS, 2006). The proportion of respondents with broadband is 80%, however, a number still utilise “dial-up”.

The review identified a number of significant differences regarding the regularity of Internet usage, i.e., 67% of respondents said they used the Internet daily and 22% said they used it weekly.

Respondents who think it unlikely they will access the Internet cited a number of reasons, i.e.

- Not interested / prefer not to 35%
- Do not understand computers 25%
- Do not need to 20%
- Other 13%
- Too expensive 7%

When asked to detail "other", responses varied, for example "Do not have a computer or time", "Prefer face-to-face contact", "No time", "Dangerous place".

The group that did not use the Internet is of particular interest as this challenges popularly perceived views about Internet non-usage. While it is generally felt the it is the excluded who can not obtain access to the Internet (ODPM 2005) the indications from this survey are that non-use is more by means of personal choice than factors of exclusion. Only 32% of non-users presented exclusion factors (price and confidence) as reasons not to use it.

Following consideration of Internet connectedness, the questionnaire continued to examine the number of respondents who have accessed PCC's website in the previous 12 months has increased markedly, from 22% in 2004 (the last time the panel were surveyed about Internet usage) to 40% in 2006. Both of these figures are significantly higher

When asked about the frequency of visiting the website 3% of respondents replied at least daily, 10% at least weekly, there were minimal variances with respect to gender or age.

	Frequency of accessing PCC's website			
	At least daily	**At least weekly**	**At least monthly**	**Less often**
All respondents	3%	9%	28%	60%

Table 2 – Respondent Access to Plymouth City Council Website

A series of questions were then asked to assess usability of the website, to each question the users response would be on a scale (strongly agree, agree, neither agree nor disagree, disagree, strongly disagree).

The user assessment of the website was favourable, i.e.

- The website looks fresh and modern: only 9% "disagreed" or "strongly disagreed"
- The website is too cluttered: 31% "agreed" or "strongly agreed"
- It is difficult to navigate around the website: 28% "agreed" or "strongly agreed"
- Information on the website is current and up to date: 10% "disagreed" or "strongly disagreed"

- There is too much information on the website: 12% “agreed” or “strongly agreed”
- The website provides relevant information: 8% “disagreed” or “strongly disagreed”
- Overall, the website is good to use: 9% “disagreed” or “strongly disagreed”

The questionnaire asked “Have you used any of Plymouth City Council’s online services?”, i.e.

Have you used any of Plymouth City Council’s on-line services		
Yes	**No**	**Can not remember**
34%	63%	3%

Table 3 – Respondent Use of Plymouth City Council Online Services

The users were asked which on-line forms jthey had used, the intention being to identify the most widely used forms, i.e.

PCC On-line forms	Used	Not used
Refuse issues form	39%	61%
Bulky waste	32%	68%
Council tax	26%	74%
Have your say	18%	82%
Job application	14%	86%
School admissions	9%	91%
Street lighting fault	9%	91%
Benefits calculator	6%	94%
Other	32%	68%

Table 4 – Respondent Use of Online Services by Type

4. Further Discussion

From the data presented from our survey, we can conclude that the level of engagement regarding eGovernment is certainly ahead of those figures from the Oxford Study (Dutton at al., 2005). In addition, those that do engage with eGovernment services from Plymouth CC have a generally good opinion about the site and its services. The only criticisms levelled at this site are similar to those determined by other work examining citizen engagement in the UK (Lacohee et. al. 2006) – too much information that is difficult to locate. One might consider these to be problems imposed on the local authority from the IEG strategy, rather than problems with the specific local authority site.

The data does provide a couple of interesting statistics from the engagement viewpoint. Firstly, the frequency of usage is fairly low – the majority of people will use the site less than once a month. This reflects the general engagement with council services – the authority is not viewed as something with which an individual wishes to become familiar and regularly engage. However, the authority, and its website, do provide a valuable service which people will return to when they have an

information or service requirement. If we look at the types of services that are the most popular – they are all fairly mundane, but necessary aspects of everyday life. A local authority site is not something to which people will visit to find out community news, current affairs, etc. However, once they are aware that services exist, they will return to the site.

This leads us onto out second observation from the data – the people that do engage with the site tend to have a high satisfaction rating with the site. Therefore, if people find out about the site, they will tend to engage with it. So, the issue for the local authority is how to get people engaged. Work complementary to that presented here (PSF 2006) has shown that central government efforts to use mass media engagement have been largely ineffective, so questions remain regarding how to engage citizens with local eGovernment services.

Additionally, we wished to consider the issues of social exclusion and the potential of eGovernment to address this. We have certainly demonstrated that in a region without high levels of affluence and with high levels of low skilled workers take up of eGovernment is high compared with other statistics and well regarded. However, when considering the classic premises of social exclusion (lack of intellectual ability, low income, etc.) we cannot reflect this in our data. One of the most interesting findings from the respondents is that is seems that people are not using the Internet through choice, rather than barriers. This is a particularly interesting finding, and does challenge a lot of thinking in addressing issues of exclusion and perceived digital divides. It also has implications for the development of eGovernment – other service delivery channels must remain open, as it is unlikely that take up of eGovernment will reach 100%. Even with availability and intellectual ability, there will always be a minority that chose not to use the Internet because they prefer other approaches.

5. Conclusions

At the start of this paper we stated that we wished to investigate the take up of local eGovernment within a specific region, considering the socio-economic aspects of this region to determine the implications for eGovernment take up specific to that area. We have considered the rationale behind eGovernment, and the concerned voice by parts of the UK Government at the start of the eGovernment implementation process. Through data collected by Plymouth City Council we have demonstrated that take up is improving and the engagement and perception are both good, and that the original NAO concerns are not borne out in this region. However, we have also discovered a some of important aspects that merit further investigation:

1. Usage tends to be specific and low volume. This is not to say the site isn't popular, as we have data to demonstrate that it certainly is. However, local authorities should not view their sites in the same way that, for example, a commercial organisation might consider theirs (i.e. an advertising/marketing channel).
2. How does a local authority best approach engaging the disengaged aspects of their region?

3. Internet non-usage is perhaps not as simple as sometimes believed in social exclusion literature.

What this does demonstrate is the immaturity of grass roots eGovernment as a subject for study and evaluation, and there is still a considerable amount of work to do if take up will reach levels when predicted cost savings in service delivery can be achieved.

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