Using e-government to improve the quality of local authority services

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Abstract

UK government policy has been to exhort local authorities to expand and develop the role of e-government in their provision of services. One mechanism by which this is achieved is through the development of Implementing Electronic Government (IEG) statements annually to ODPM detailing past progress and future plans. This paper examines some IEG statements in one of the counties of the UK (Hampshire) to examine the progress made to date. The relationship between IEG statements and measures of quality is addressed.

Keywords IEG, e-government, electronic government, local government, quality, targets

Introduction

In 1997, a Labour Government was elected in the UK committed to an agenda of modernisation of the public sector. Two White Papers, in particular laid out the groundwork for modernisation of structures both at central government level (Cabinet Office, 1999) and also at local government level (ODPM, 1998). But a particular manifestation of the modernising agenda was a commitment to a process of e-government in which (in the original Modernising Government White Paper) the goal was the establishment of a target 100% of services being delivered online by 2008 (Cabinet Office, 1999). This target was subsequently speeded up to a revised target date of 2005 (Cabinet Office, 2000a). As Tony Blair elaborated in a press conference called to announce the new targets:

This will mean that people and businesses will be able to access Government services 24 hours a day, seven days a week. It is a challenging target, which will require joined up working between departments, less reliance upon paper trails, and the development of new ways of working.
(Source: Cabinet Office, 2000b)

The Office of the e-Envoy, as part of the Cabinet Office, is responsible for ensuring that the quality and efficiency of government services is transformed by the development of electronic delivery of services to make all government services accessible on-line by 2005 (NAO, 2002b, para1.8 p. 22). More specifically, it is charged with the responsibility to:

- develop the UK as the best environment for electronic business
- ensure that everyone who wants to can access the internet by 2005
- deliver electronically, and with key services achieving high levels of use, all government services by 2005
- co-ordinate the UK government's e-agenda across different departments
Whether this remit has been fully achieved by March, 2005, is a moot point. However, the Office has now been discontinued and its principal task taken over by an e-Government Unit also within the Cabinet Office. The e-Government Unit has an interesting new remit in that it is intended to 'work with departments to deliver efficiency savings while improving the delivery of public services by joining up electronic government services around the needs of customers' (e-Government Unit, 2005). This change of role would seem to indicate that the original aspirations of delivering higher quality, more accessible services mentioned in previous White Papers is now firmly yoked to an ideology of cost-cutting in the delivery of efficiency savings.

Progress in achieving national targets

The National Audit Office commissioned a study to undertake a comprehensive survey of the progress in implementing e-government in Britain and this reported in April, 2002 (Dunleavy et al., 2002) A summary of this large and complex report (Lake, 2002) concluded, in the manner of a school report, that:

[he was] making fitful progress in some areas, but so far failing to get to grips with the range and complexity of the issues, and may well miss the ambitious targets he’s set himself. He needs to challenge himself more, and not be content with taking the easy options

(Source: Lake, 2002)

Lake (2002) also reported comparatively large sums of money invested in e-government as, in addition to regular spending on IT, the government was intending to invest £1 billion between 2001-2004 on central government initiatives and another £350 million in local e-government projects (Lake, 2002) The National Audit Office themselves, however, strongly criticise the Office of the e-Envoy

The Office has relatively little up to date and good quality information about the development of central government on the Web. It has made limited progress on the recommendations of the Public Accounts Committee in 2000 that it should collect and publish systematic information on the development of government Web traffic, the take-up of electronic services, or the condition of government Web sites; and in developing a methodology for justifying expenditure on Web provision. A census of all central government sites undertaken for this study shows some area of considerable progress on basic features since 1999, and a few transactional capabilities developing. But there has been little progress yet on more sophisticated electronic publishing or interactive features. A second study undertaken of the usage of central departments’ Web sites shows that there are marked variations between departments in the extent to which their Web traffic has grown, assessed against the background expansion of Internet usage in the UK.

(Source: NAO (2002a) Government on the Web II, para 11, p.3)

The situation was similar in the case of local government. The same National Audit Office report conducted an in-depth ‘census’ of local government websites which revealed some interesting results:
Average percentage scores for the presence of Web features on the sites of different types of local authority, November 2001

<table>
<thead>
<tr>
<th>Type of Authority</th>
<th>All Features</th>
<th>General Revenue features</th>
<th>Education/libraries/leisure/social services features</th>
<th>Planning/housing/roads/transport/waste environmental health features</th>
</tr>
</thead>
<tbody>
<tr>
<td>County councils</td>
<td>38</td>
<td>42</td>
<td>42</td>
<td>18</td>
</tr>
<tr>
<td>London boroughs</td>
<td>34</td>
<td>39</td>
<td>36</td>
<td>23</td>
</tr>
<tr>
<td>Metropolitan boroughs</td>
<td>31</td>
<td>43</td>
<td>32</td>
<td>17</td>
</tr>
<tr>
<td>Unitary authorities</td>
<td>28</td>
<td>39</td>
<td>25</td>
<td>16</td>
</tr>
<tr>
<td>District councils</td>
<td>23</td>
<td>31</td>
<td>22</td>
<td>14</td>
</tr>
<tr>
<td><strong>All</strong></td>
<td><strong>27</strong></td>
<td><strong>35</strong></td>
<td><strong>30</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

*Number of features covered*

<table>
<thead>
<tr>
<th>All Features</th>
<th>General Revenue features</th>
<th>Education/libraries/leisure/social services features</th>
<th>Planning/housing/roads/transport/waste environmental health features</th>
</tr>
</thead>
<tbody>
<tr>
<td>165</td>
<td>76</td>
<td>38</td>
<td>52</td>
</tr>
</tbody>
</table>

**NOTES**

‘Cell entries show the mean percentage score (actual features as a percentage of features coded for) - achieved by local authorities in each type.’

‘We computed the score for each local authority for the presence of 166 Web features on their site, and then for three groups of these features. We then computed the average (mean) scores for all authorities within each type of local authority, for all the features and for each of the three sub-groups.’

(Source: NAO (2002a) Government on the Web II, Figure 14, p.40)

It is relevant to note that, as we would expect the largest authorities (county councils) showed the highest number of features in their websites (38%) compared with the smaller authorities (district councils) whose websites could only demonstrate 23% of features. There was also a clear gap in the types of services demonstrated on the websites with general features at 35%, followed by libraries, education and social services (the largest services) with a penetration of 30%. Planning, housing and related features demonstrated a figure of approximately half this value at 16%. A clear regional gradient was also evident in the responses with progress being fastest in London and the South East and lowest in the West Midlands and the North east (NAO, 2002a, Figure 16, p. 41).

The Society of Information Technology managers (SOCITIM) undertake a survey of local authorities’ e-provision each year under the title of Better Connected (SOCITIM, 2005). The following data is derived from the March, 2005 report and compares survey results for the years 2003 and 2004. The survey points to steady, if unspectacular progress, with it appearing likely that some local authorities will struggle to meet the ODPM’s accessibility priority service outcomes, particularly in the area of accessibility.

The sites are categorised as:

**Transactional** sites are accessible, complete, thoughtful and coherent. They have developed more than one type of online interaction (eg payment, applications, consultation, bookings) and also offer examples of customer recognition (eg ability to check outstanding Council Tax balance). They also provide specific email contacts for different service enquiries and make widespread use of databases, downloadable forms and online form filling (eg for service requests, appointments). They routinely utilise the potential of the Internet for joined-up government (eg OFSTED reports listed alongside schools listings) and offer unique examples of the application of the medium in a local government context.
**Content plus** sites provide very useful content and offer some examples of more advanced online self-service features. They allow individual users to define their own search criteria (eg search by postcode for service information, refine searches of local tourist accommodation by type and price), may include links to services such as Girobank for online payment and online databases for items such as library catalogues, planning applications, committee minutes. Service information is comprehensive and makes widespread use of e-mail, online feedback and even discussion forums. Such sites also typically host information on behalf of the wider local community.

**Content** sites provide useful content and encourage some interaction. They have more sophisticated promotional information (eg accommodation search, downloadable files) and include features such as What's New pages, A-Z service listings and keyword site search facilities. They usually include some basic user interaction (eg clicking on an area map to find details of local councillors) and make use of e-mail and online feedback on home pages.

**Promotional** sites provide basic promotional information about the organisation with very little scope for interaction. They might typically concentrate on tourism, economic development and basic departmental information, with limited information on individual services beyond an A-Z with telephone contact numbers. Little use will be made of e-mail or online feedback, although a few gateway links might be provided.

*Source:* SOCITIM (2005)

<table>
<thead>
<tr>
<th></th>
<th>2003</th>
<th>2004</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Percentage</td>
</tr>
<tr>
<td>Transactional sites</td>
<td>23</td>
<td>5%</td>
</tr>
<tr>
<td>‘Content Plus’ sites</td>
<td>177</td>
<td>38%</td>
</tr>
<tr>
<td>Content sites</td>
<td>209</td>
<td>45%</td>
</tr>
<tr>
<td>Promotional sites</td>
<td>57</td>
<td>12%</td>
</tr>
</tbody>
</table>

*Source:* derived from SOCITIM (2005)

In terms of progress between the relevant survey dates, there had been a net increase of 128 websites moving up a category (146 in 2003) but 175 councils (37%) have stayed at the same level over the past three years.

Comparing the progress made by central and by local government is rather like comparing ‘chalk with cheese’. Central government agencies are inherently ‘single function’ bodies and the typical citizen may visit them only infrequently. A classic example is provided by a passport application which may be completed on-line with the applicant returning only once in the next ten years. Some visitors may only need to make one visit to a website (a pension forecast for example). By contrast, citizens logging onto a local authority website may be searching for a vast variety of services – and they may have first hand knowledge about how things are organised at local level. The act of logging on may well lead to a pattern of serendipity in which the user in accessing information about one service finds information about several others. Judged by these criteria and the scale of resources available to small authorities, in particular, then the progress in achieving progress towards the 2005 year-end goal of 100% access looks far more creditable.
Monitoring of local authorities through IEG (Implementing Electronic Government) statements

The ODPM (Office of the Deputy Prime Minister) has now taken over the responsibility of requiring all local authorities to submit annual returns on strategies, plans and progress made in the implementation of e-government (ODPM, 2005). These annual statements required local authorities to submit returns as follows:

2001  IEG   Submission of plans for implementation of e-government
2002  IEG2  Evidence of progress in advancing the e-government agenda
2003  IEG3  A standardised pro-forma to allow self-assessment, benchmarking and measurement of progress on key deliverables
2004  IEG4  Evidence of progress in the delivery of priority services and transformation outcomes for local e-government. Local authorities are required to submit information via the esd-toolkit and to maintain data in real time from November, 2004 onwards

At first glance, this would appear to be an admirable planning progress in that first plans are articulated and then progress is made against standardised measures to enable progress to be compared from one year to the next. However, a study of a sample of IEG statements reveals a different story – examples will be drawn from the IEG statements from Winchester City Council, a large District Council in central southern England (WCC 2003; WCC 2004).

Guidance from the ODPM suggests that progress should be measured in one of the following four categories:

<table>
<thead>
<tr>
<th>Status</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>black</td>
<td>May include elements on the pro-forma that are not planned, or awaiting the outcome of ODPM National Project work or partnership activity, or areas on the pro-forma that are not applicable to particular types of authority. Limited areas of “black” are perfectly acceptable on this pro-forma as a reflection of local circumstances and prioritisation of e-government work and investment.</td>
</tr>
<tr>
<td>red</td>
<td>Should be applied to all elements on the pro-forma where work is at the research stage, being piloted before wider rollout across the authority/partnership, or planned but not yet approved for funding.</td>
</tr>
<tr>
<td>amber</td>
<td>Should be applied to all elements on the pro-forma where work has been approved for funding and is actively being implemented.</td>
</tr>
<tr>
<td>green</td>
<td>Should be applied to all elements on the pro-forma where projects have been actioned and implemented or particular standards achieved with plans for extended rollout on an enterprise-wide basis, i.e. across the authority/partnership.</td>
</tr>
</tbody>
</table>

Source: WCC, 2003 p. 9

An examination of the IEG3 and the IEG4 pro-formas indicates that information needed to be supplied as shown in the following table:
There are several features of this planning exercise which might cause some surprise. Here are some of the most noteworthy features:

- The 52 indicators tracked in IEG3 are not the same as the 54 indicators tracked in IEG4.
- Only two of the planning dates are comparable – surprisingly, the crucial date of end-2005 is only included in IEG4.
- 50 of the 52 indicators in IEG3 and 54 of the 54 indicators are coded as ‘Green’ in 31/03/06 making this column effectively redundant in planning terms.
- In the case of IEG3 two statements are ‘backward looking’ and the next forward statement is in 4 months time.
- In the case of IEG4, the most immediate forward statement is in 3 months time.

From the point of view of the investigator attempting to chart the progress of his local district council in achieving e-government objectives, these statements are not helpful. The fact that indicators are first selected in IEG3 which do not reappear in IEG4 is confusing and perplexing. Is one to infer that IEG3 targets have been dropped? If so, then the planning process appears chaotic – but if not, then local authorities are faced with a doubling of the number of targets with some to be met in only 3 months time. The differing time periods make for a lack of comparability in any case. The use of target indicators illustrated here and their impact upon quality will now receive a more detailed examination.

The ‘planning by targets’ culture.

The use of targets as a tool to secure the improvement of the quality of public services is widespread. However, doubts are now increasingly voiced that the overuse of targets may well prove dangerous. As the Select Committee on Public Administration-Second Report for 2004 indicates:

We called for fewer national targets with more focus placed upon local delivery and greater involvement of front line staff and for independent validation of the performance of government targets to reduce the extent to which targets had become a political and media football.

(Source: House of Commons, 2004, para. 14)
Governments of all political persuasions have made increasing use of targets, not least in areas such as health and education and, correctly used, they can be powerful tools in providing a steer in the intended policy direction. But as Peter Blau pointed out in a classic study half a century ago, it is possible that recording systems can be ‘dysfunctional’ in that systems installed for the purpose of counting that which is important end up as defining as important that which can be counted (Blau, 1955). The discipline of public administration is often faced with the problem of perverse incentives and their role in the failure for public services to achieve excellence (ESRC, 2004). Some would go even further and argue that all incentives become ‘perverse’ in that the measurements always become an ends in themselves and come to be substituted for the practices they are designed to measure. As the Office of Government Commerce itself argues, it is important to select measures which:

Avoid.. perverse incentives: that is, those that encourage behaviour that exists to meet a target rather than to improve. For example, measuring the quantity of letters answered but not the usefulness of the responses may not produce a better service.
(Source: OGC, 2004)

The point is also well-made by more recent commentators that there is a danger of the overuse of quantitative data with the ‘measurable driving out the non-measurable’ (Bovaird, cited in Gaster, 1995) and in which only those aspects of a service susceptible of measurement are, in practice, measured.

Whilst also submitting IEG statements, local authorities also need to comply with the Best Value indicator for e-government, BV 157.

BV 157 provides a measure of the number of types of interactions (or contact) between the citizen and the council that are enabled for electronic delivery as a percentage of those that are available. Essentially, this means that it is necessary to ensure that we allow citizens to get information, apply and pay for services and receive payment electronically whether using the web site, phoning, emailing or visiting us.
**BV 157**

The number of types of interactions that are enabled for electronic delivery as a percentage of the types of interactions that are legally permissible for electronic delivery.

'Types of interactions' means any contact between the citizen and the council including:
- providing information;
- collecting revenue;
- providing benefits and grants;
- consultation;
- regulation (such as issuing licences);
- applications for services;
- booking venues, resources and courses;
- paying for goods and services; and
- providing access to community, professional or business networks; and procurement.

This is not an exhaustive list as there will be others, depending on local circumstances.

100%: should be defined within the authority’s e-government strategy to take account of local circumstances based on the full list of services for which the authority is responsible and the types of interactions relevant to each service.

**Enabled:** this presumes that all services are capable of being enabled for electronic delivery unless there is a legal or operational reason why this cannot be done.

**Electronic:** means delivery through internet protocols and other ICT methods and includes delivery by telephone if the transaction carried out is electronically enabled ie, the officer receiving the call can access electronic information and/or update records on-line there and then.

**Target setting:** Local. National target is 100% by 2005. All local authorities are expected to achieve this level.

**Scope:** Metropolitan Authorities, London Boroughs, Unitary Authorities, County Councils, District

**Source:** ODPM (2003)

As can be seen, this performance indicator can potentially cover a vast range of transactions between the local authority and the citizen – and also indicates dramatically the target-driven culture which pervades the *Best Value* regime.

Under the circumstances of having to comply with IEG and BV 157 regimes, it would come as no surprise if many local authorities were to approach the task with a ‘tick in the box’ approach to service delivery. This statement does not, in any way, impugn the integrity or professionalism of the local authority staff who work diligently to fulfil the requirements demanded of them by the Whitehall machine. However, the fundamental question has to be raised whether the range and multiplicity of performance indicators and targets is the best way of achieving the long-term vision which is to deliver ‘high quality services which are accessible, convenient and secure’ (Cabinet Office, 2000a, p.1)

**Improvements in the quality of local authority services**

The term ‘quality’ is, indeed, a contested concept but a clear line of affiliation can be drawn with the classic concerns of the Total Quality Management movement. Gaster (1995) makes an important distinction echoed by other writers such as Donabedian (1980) and Parasuraman, Zeithaml and Berry (1988). Gaster (1995) delineates what is termed:
*Technical quality*  
‘does a service do what it is intended to do’  
The concept is clearly related to the classic definitions of quality such as *fitness for purpose, fitness for use and conformance to specifications.*  

*Non-technical*  
the service relationship between producer and consumer, covering issues such as quality of interaction (professionalism, assurance, empathy) as well as the quality of the informal relationships between internal producers and consumers.

The point is well made that there is an intimate connection between these two aspects of quality as *non-technical* quality can have very positive, or negative, effects upon the perceptions of the transaction as a whole (Gaster, 1995, p.40). This distinction is also echoed by Pollitt and Bouckaert (1995, p.16) when they draw a distinction between:

*producer quality*  
the intrinsic features of the goods or services themselves, as seen by those producing them

*consumer quality*  
the quality of the goods or services as perceived by the consumer

Finally, other authors (e.g. Martin, 1993; Parasuraman, Zeithaml and Berry, 1988) indicate that that in the human services we should consider issues such as accessibility, timeliness, durability, consistency, humaneness as well as outcomes.

It is evident from the foregoing discussion that the indicators of quality derived from the IEG and BVI157 statements are direct reflections of *technical quality* (Gaster, 1995) or *producer quality* (Pollitt and Bouckaert, 1995). In order to arrive at a more complete assessment of the extent to which advances in e-government can be held responsible for driving up the perceptions of services provided to the citizenry, it will be necessary to incorporate conceptions of *non-technical* or of *consumer quality* into the overall metric.

At this point, we run into a paradox which is well-known in quality circles – the revolution of rising expectations. It is quite possible that the quality of services provided might be increasing year on year (as the IEG statements indicate) but if expectations of the quality of service are rising at an even faster rate, then a metric of perceived quality may apparently show a decrease over time. Some measures may indeed have to be interpreted with a great deal of care. For example, making it easier for members of the public to complain about the quality of locally provided services by putting a prominent and easily accessible complaints form/procedure on the website may result in statistics that would appear to show increasing levels of dissatisfaction with the service, *even though technical levels of quality were increasing!*

This case may be illustrated by some simple modelling. Let us assume the following, very basic scenario:

<table>
<thead>
<tr>
<th>Technical quality (e.g. measured by IEG indicators)</th>
<th>60-100%</th>
<th>is scored 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>10-50%</td>
<td>is scored 2</td>
<td></td>
</tr>
</tbody>
</table>

| Non-technical quality (e.g. measured by customer satisfaction surveys) | Completely satisfied | is scored 2 |
| Satisfied | is scored 1 |

Now let us imagine two county councils—Blankshire (located in the prosperous South East) Flankshire (located in the North East)

Both authorities, after sampling their consumers of services, could receive total scores of 6,5,4 or 2 (derived from adding each combination of *technical* and *non-technical* quality).

We are also going to make the assumption that the level of expectation of service, as well as the actual provision of e-government in Flankshire (in the North East) is comparatively low. There are
some indirect pieces of evidence that lay behind this reasoning—

(a) the low levels of expected level of service reported by Dalrymple, Donnelly, Wisniewski and Curry (1995) from a Scottish sample

(b) the ‘gradient’ reported in NAO (2002a) in which the average score for the presence of web features was 29% for the South East but 23% for the North East.

Then it quite possible that Blankshire in the South East could score a 5 (4 for technical quality but only a 1 for non-technical quality) whilst Flankshire (in the North East) could score a 4 (2 for technical quality and 2 for non-technical quality). If we were to conduct customer satisfaction surveys, though, it would be quite possible that a score of ‘5’ could actually generate less satisfaction than a score of ‘4’. The argument here is that a more consumerist culture and a hinterland with a higher penetration of IT usage occasioned by the predominance of professional groups in the South East could lead to a higher level of expectation for e-government provision. It is not intended to suggest here that lower levels of provision should be tolerated in different regions of the country – rather, it is suggested that this very simple modelling can demonstrate some of the effects of ignoring altogether the non-technical dimensions of the quality metric. In particular, an attempt should be made to more systematically capture dimensions of non-technical quality rather than adding to (and frequently amending) a plethora of more technical performance indicators.

A simple scheme to capture non-technical quality would concentrate upon the following:

When
(i) initial response rate
(ii) time to completion of episode

What
Customer Satisfaction measures in which the customer is:
(i) completely satisfied (ii) satisfied (iii) not particularly satisfied (iv) dissatisfied

How
Customer Satisfaction measures in which the quality of service is perceived as being:
(i) higher than expected (ii) as expected (iii) lower than expected

Conclusion

The evident desire of Whitehall to advance the e-government agenda is understandable but may have led to a policy mess in which ‘the radical improvement of complex systems [such as the NHS] is only possible through decentralised reform, and not the centralised target-setting approach favoured by the government.’ (DEMOS, 2001). The IEG statements represent a level of complexity which may not, in the long term, achieve the government’s longer term policy objectives. It is suggested that the measures of quality utilised to analyse the quality of local authority services are deficient if they concentrate solely upon technical measures of quality and that they need to be supplemented by non-technical measures in which the perceptions and reactions of consumers are systematically captured.
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