

Evaluating the Transition of E-Government: A review of Local Authorities in England

Evaluating the transition of e-Government: A review of local authorities in England

Rana Tassabehji*

School of Management

Bradford University

Emm Lane

Bradford

West Yorkshire, BD9 4JL, UK

R.Tassabehji@bradford.ac.uk

Amir M. Sharif

Brunel Business School

Brunel University

Uxbridge, UB8 3PH, UK

amir.sharif@brunel.ac.uk

Justin Wilkinson

JSW Consulting

Manchester House

Manchester, M1 6NG, UK

justin@jswconsulting.biz

*corresponding author

TRACK:

E-Business and E-Government

Word Count: 4,563

Evaluating the Transition of E-Government: A review of Local Authorities in England

Abstract

The goal of e-Government is seen as a panacea for governmental authorities. The emerging needs of citizens, their inclusion and engagement in policy development, political and participatory processes have meant new perspectives on e-Government are required. This paper seeks to identify and evaluate the preparedness of 10 UK-based local authorities to transition from basic e-Government to a more sophisticated and integrated e-Government. A categorical assessment of e-Government characteristics is made and these authorities are ranked accordingly. Our findings reveal the majority of local authorities sampled had reached a high percentage of informational and transactional e-Government but few had reached the interactional level and none had achieved assimilation. This suggests that local authorities seem to have focused on basic e-Government services. There is a need now to forge ahead to integration and assimilation of e-Government in order to address the critical objectives of citizen inclusion and engagement, and alignment of institutional processes to provide an infrastructure for the transition to e-governance and e-knowledge.

Keywords: E-Government, transition, Local Authority, citizen engagement, evaluation

1. Introduction

Governments across the world are now using Internet technology to improve and leverage public services delivered to their citizens. Despite the widespread implementation of e-government in various forms, reports reveal that governments' use of the full potential of the Web and the Internet has not been optimised, remaining largely underutilised, with inconsistent and imbalanced citizen participation in the majority of countries around the globe (Mahrer and Krimmer, 2005). In the UK, a recent report evaluating the state of e-government found that *"the challenge ahead is not just to 'do IT better' in the context of the past models for delivery of public services. It is also about 'doing IT differently' to support the next phase of public service reform"* (Cabinet Office, 2005, p.6). E-government is no longer seen as an experiment but is now a permanent and effective part of the governing process. The European Commission's view on the development of e-Government in 2005, highlighted concerns that future e-Government issues should centre on participation, integrated information systems, citizen identification and stakeholder integration and involvement (European Commission, 2005). In a study by Socitm (2002) they identified 3 categories in which key distinguishing features of local government across the world included: e-services the provision of government services electronically; e-

governance, linking citizens and other stakeholders with their government representatives for participation in governance of communities and finally, e-knowledge, developing skills and infrastructure to exploit knowledge for competitive advantage.

The majority of current e-Government research has focused on national and state-level e-Government practices and few investigations have focused on local government's efforts and even fewer have been studied from an external perspective (Huang, 2007). This paper will explore the development of local e-Government in the context of the UK. The UK is a particularly interesting case, as despite its consistent ranking in the top 5 global countries based on the key UN index of E-Government Readiness; in 2008 it fell to 10th position. More ominously the UK plummeted to 27th position in the E-participation index (UN E-Gov, 2008) having occupied the top global position for this index in all previous reports. In this study, e-participation is the provision of new channels of influence by government to improve transparency and public participation on decision making. This is broken down into e-information (provision of information about elected officials, policies, meeting documents and other information of public interest; e-consultation (provision of interface to interact with government representatives and receive feedback); and e-decision making (citizen inclusion in decision making and feedback on their input)

Although many arguments could be presented disputing the accuracy and fairness of such indices (Shaheen et al., 2007), and all of the previously noted supra-national and vendor based assessments of the state of e-Government, the overall view of e-Government transition is an extremely interesting context for exploration. Hence, this paper addresses this gap by firstly exploring the status of e-Government in local authorities in the UK and its degree of transition from a basic to a more integrated, participative, and citizen-centric state. It takes an external and objective perspective by examining the websites of these local authorities for evidence of transition.

2. e-Government Transition

Public institutions across the globe are undergoing fundamental and transformational change as a result of electronic government (McLoughlin and Cornford, 2006). The literature shows that many definitions abound (Shaheen et al., 2007). Definitions from different organisations and perspectives can be placed along a continuum where at the one extreme, Internet technology is seen merely as a means of delivering more efficient and effective government services and on the other extreme, it is seen as a means of transforming government and governance (West, 2004; Tassabehji, 2008).

In previous work, the progress of government to e-government has been deemed to track that of business to e-business/e-commerce (Clark, 2003; Grant and Chau, 2005; Tassabehji, 2008). That is, a progression through a basic informational stage, followed by transactional and integration stages and ultimately reaching a stage where there is a complete assimilation of e-business and management processes within the organisation and between its stakeholders to yield competitive advantage, strategic re-structuring and value creation (Earl 2000; Tassabehji 2003). Stage Model theory underpins this, and although a number of practitioners and academics, trace the development of e-government through a similar pattern of functionality, systems integration and re-structuring of the government, the degree to which new ICTs are having an impact on government is debated by both academics and practitioners. On the one hand, there are those that believe e-government is transformational in the sense that it challenges the very notion of government bureaucracy, governance and its structures (Clark 2003; Turban et al. 2004; Grant and Chau 2005). On the other hand there is the view that e-government is simply another information technology that is being adapted to governmental use, and that the claims about e-government being a “mechanism for radically redesigning” government, is a phenomenon that is repeated with every wave of new technology (Bretschneider 2003; West 2004; Norris and Moon 2005). There is a general consensus of opinion that, in theory at least, the implementation of Internet based ICTs can transform governments, but that the process is multifaceted and involves the complex interaction of a range of other soft socio-political factors

In a study, Cornford et al. (2004) found that overall, the local e-government focus in England tended to be in the middle of the e-government perspectives continuum i.e. service provision, rather than a narrow IT perspective, or a broader community development perspective. The Socitm report (2002) also found that the majority of countries they reviewed were in the e-services category (Australia, Canada, Germany, new Zealand, Spain, Sweden, USA, Hong Kong, Japan, Singapore and UK) with few in the e-governance category (Brazil, Italy Netherlands, Norway) and even fewer in the e-knowledge category (Finland, Ireland).

The UK government's annual report on Transformational Government for 2006 outlined a string of successes, which ultimately centered on an audit and decommissioning of approximately 500+ websites and the improvement and streamlining of data sharing across 100+ government services (HM Government, 2007). Still, it is not clear from this review if the level of citizen uptake occurring is in sufficient numbers to warrant the level of success that has been mentioned. More importantly, these efforts still very much centre around IT/IS-driven change, as opposed to the wider remit suggested by IBM, the European Commission and other research which suggests cultural and managerial perceptions of information sharing are also at play (Gil-Garcia et al., 2007).

Transformational Government is therefore concerned with a step change in providing effective citizen-centric services through an improvement to internal process and procedures, and a greater involvement of individuals and communities in political and policy making processes (CIO,

2005; McLoughlin and Cornford, 2006). Only by considering the wider involvement of individuals, communities, policy makers and service providers can e-Government be deemed to be able to be delivered in its fullest form.

Hence, the future of e-Government should include an integrated approach to developing an ecology of services and strategies, underpinned by an e-Government infrastructure. The VIEGO report (Irani and Elliman, 2007) highlighted the lack of clarity regarding the definition of fundamental e-Government concepts amongst government, citizens and its stakeholders. Subsequent reports (Irani *et al.*, 2007; Elliman *et al.*, 2007) highlighted 3 areas which include the requirement to integrate horizontal and vertical stakeholder communities; a need to improve participation and engagement by the citizen with Government; and a need to provide systems and processes that adapt to change within the public sector at large.

Here, we explore the state of e-Government in a sample of local authorities in the UK, to evaluate the state of e-Government and whether there is any evidence of transition along the continuum. Building on previous work based on a consolidation of the e-government literature (Tassabehji, 2008), and a meta-analysis revealed a broad consensus of the functional sophistication and stages of e-government services (Tassabehji, 2008). We operationalise the framework developed by Tassabehji (2008) and illustrated in Figure 1, detailed in the next section.

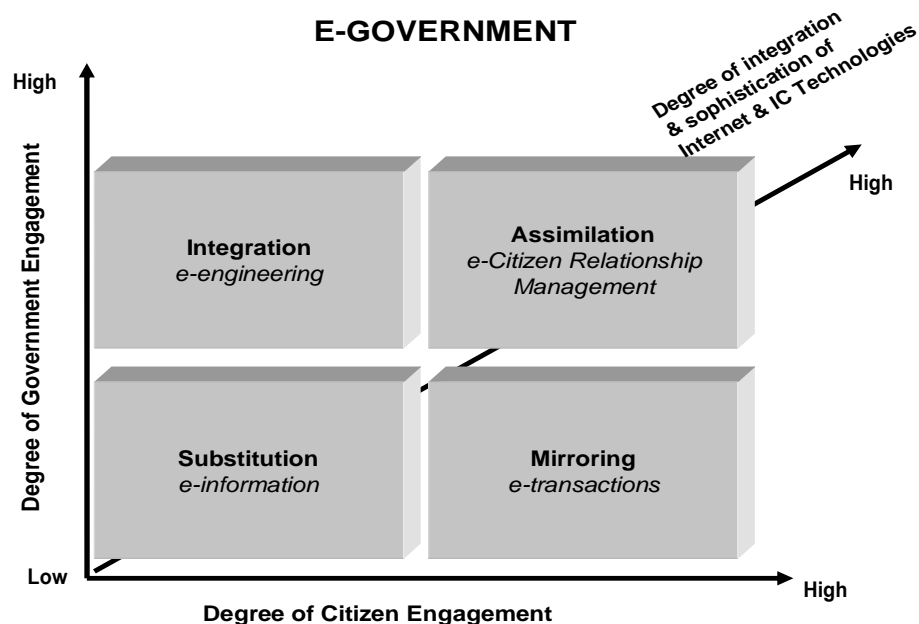


Figure 1. E-government Classification Framework (Source: Tassabehji, 2008)

3. Research Methodology and design

The aim of this research was to evaluate the state of e-Government within local government authorities in the UK and the degree of transition being made between the stages of e-government. A total of ten local authorities in England representing the largest populations were selected for this study (see Table 1). We also included the City of Westminster as this was the council within which the seat of central government was situated and we also randomly included Sunderland and Medway to ensure a geographic spread of councils along the length and breadth of England.

Rank by Pop ⁿ .size	District	Population	Type	Region
1	Birmingham	1,010,200	Metropolitan borough, City (1889)	Midlands
2	Leeds	761,100	Metropolitan borough, City (1893)	Yorkshire
4	Bradford	497,400	Metropolitan borough, City (1897)	Yorkshire
5	Manchester	458,100	Metropolitan borough, City (1853)	Lancashire
6	Liverpool	435,500	Metropolitan borough, City (1880)	Merseyside
7	Bristol	416,400	Unitary Authority, City (1542)	Bristol
9	Croydon	339,500	London borough	Gtr. London
14	Sunderland	280807	Metropolitan Borough of Sunderland	Tyne & Wear
40	Medway	252,200	Unitary Authority	Kent
47	Westminster	234,100	London borough	Gtr. London
Source: National Office of Statistics www.statistics.gov.uk				

Table 1: Sample of English Local Authorities

3.1 Research Instrument

In order to operationalise the framework presented in Figure 1, the four major categories are defined in more detail. The first 2 categories – information and transaction – are the basic and fundamental offerings and provision of e-Government. These can be seen to be similar to the e-

services identified by the Socitm (2002) study and e-information (UN E-Gov, 2008). These categories provide online information and transactional facilities for the citizen to interact with their local authority. The integration and assimilation categories are the more advanced stages of e-Government which are essential to developing an infrastructure for the provision of more integrated and “joined-up” e-Government services across different service providers, enabling the provision of e-governance (Socitm, 2002), e-consultation and e-decision making (UN E-Gov, 2008).

As well as evaluating the status of local e-government provision as it currently stands, part of this study was also to assess the degree of transition being made from the basic service provision, to the respective authority’s ability to be able to offer a more transformational type of e-government provision articulated in the Government’s Transformational Government for 2006 document mentioned earlier. This framework enables us to practically apply the criteria determined above as e-Government to each of the local authorities and also to assess their transitional progress towards complete e-Government. We have categorised the factors into i) the fundamental stage of e-Government (information and transaction) ii) the transitional stage of e-Government (integration and assimilation).

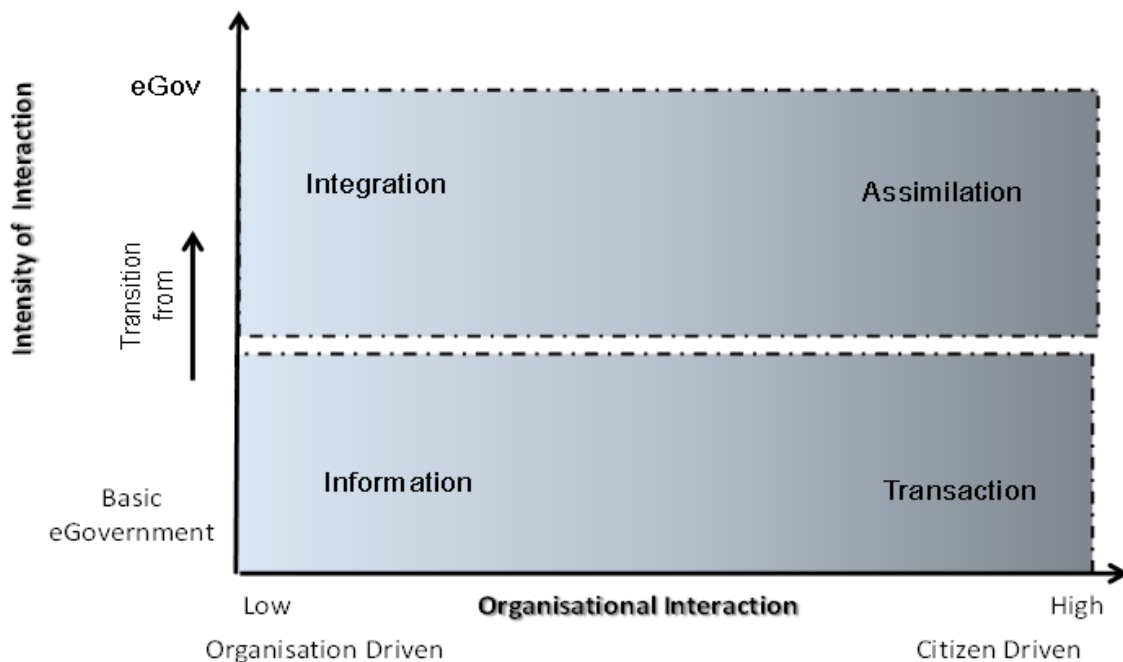


Figure 2. Analytical Framework for e-Government

Evaluating the Transition of E-Government: A review of Local Authorities in England

In order to be able to evaluate the e-government service provision across our selected councils, an example of the services that fitted into each category were selected and summarised in Table 2. A more detailed discussion of the e-government service selection process is presented in following section.

Aspect	E-government Category	Description	E-government service provision evidenced from
eGovernment	Information (G-C)	Information based services mainly information provided by government to citizens.	Website for example: One stop direct access to contact information for all local authority services. Comprehensive and dedicated information related to educational support services, care and benefit services Online service availability, Multimedia resources on local policy Geographic Information Systems (GIS) for map-based data on the region GIS-based information on daily road works Access to reports, minutes and agendas from past council meetings, including future meetings diary updated daily Councillor details
	Transaction (C-G)	Transactional services: transactions involving interaction between citizens and government. These include online application for services; online payment	Website & Strategy documentation for example: Online application for school places Public reporting/applications, procurement and tracking of environmental services, planning and building control applications Renewal and reservations of library books and catalogue search facilities Booking of sports and leisure facilities, Empowering and supporting local organisations, community groups and clubs to create and maintain their own information online Registration for e-billing and e-payment E-forms for “parking contravention mitigation” (online payment and mobile payment) Adoption of smart cards as standard for stored payments (e.g. replacing swipe cards)
Transitional eGovernment	Integration	Integration of systems to provide “joined up” e-	Website & Strategy documentation for example: Co-ordination of agencies to co-ordinate

Evaluating the Transition of E-Government: A review of Local Authorities in England

		government services	<p>the secure sending, sharing and access to information</p> <p>Delivery of ‘added value’ around online payment facilities,</p> <p>‘live’ systems for interactive journey planning</p> <p>E-enabled “one stop” resolution of Housing & Council Tax Benefit enquiries including other eligible entitlements and relevant forms</p> <p>Citizens or their agents to check and calculate entitlement for Benefits</p> <p>School Admissions Portal</p> <p>Citizen participation and response to forthcoming consultations and decisions on matters of public interest (e-consultation), including facility for citizens to sign up for email and/or SMS text alerts on nominated topics</p> <p>Integration of planning, regulation and licensing functions to improve policy and decision-making processes around the prevention of anti-social behaviour</p> <p>Integrated ICT infrastructure and support to ensure the consistent delivery of services across all access channels</p> <p>Mobile office service to support citizens directly from their homes</p> <p>Integration of CRM with back office systems to create complete automation of business process management</p> <p>Facilities to support the single notification of a citizen change of address</p>
	Assimilation	Customised services seamlessly tailored to citizens’ needs	<p>Website:</p> <p>Ability to personalise and customise e-government services to individuals</p>

Table 2: Summary of Assessment Matrix for e-Government

3.2 Research Design

Figure 3 illustrates the research approach undertaken. The first stage of this research involved an environmental scan of a number of local government websites to evaluate the information available and the potential for its interpretation into a measure for assessing the status of e-government and the readiness for its transition. The first iteration in the process, led to selecting specific services and applying our framework. However, it was decided that this was too subjective and any assessment of internal systems and processes could not be made. After multiple iterations of searching information available on the participants' Websites, reviewing this information and applying the framework again, it was decided that the Implementing Electronic Government (IEG) returns required from each English local authority would be a good reference point for organising a structured review of e-Government services provision (see ODPM 2004, as an example) in the different areas of local government. This document was used as a guideline to inform the development of the structure of the criteria for our analysis matrix (Table 2), strategy documents and other internal documents available on the local authority's respective were also used. However, as our major focus was to assess the actual rather than professed service provision, we used the website as the major source of our information, as this not only replicated what the citizens themselves would have access to but also enabled an independent assessment that could also be verified and checked by the research team, providing some validity and reliability to the findings (presented in the matrix in Appendix 1).

The data was gathered during July-August 2008 and reflects the status of the respective local authority as it stood during that period. Each of the categories was weighted equally as the purpose of this analysis was purely to evaluate the status of each of the local authorities in terms of looking at the existing e-government infrastructure and its potential readiness for transition. The gathered evidence was evaluated carefully according to the categories identified and a basic scoring system was applied for comparative purposes only. The scoring system was not absolute but a notional, interpretative qualitative measure where scores for each category were awarded based on whether key eservices were: available and operational (3); available but not yet operational (1); or whether they were unavailable (0) and whether the respective components of the category (for instance assimilation) were present or absent. The researchers evaluated all the selected local authority websites using this matrix. Once the evaluation had been completed, the results collated by the team were compared. Where discrepancies arose, a further discussion ensued to ensure consistency of assessment and agreement on the final scores awarded.

Summary of Research Approach

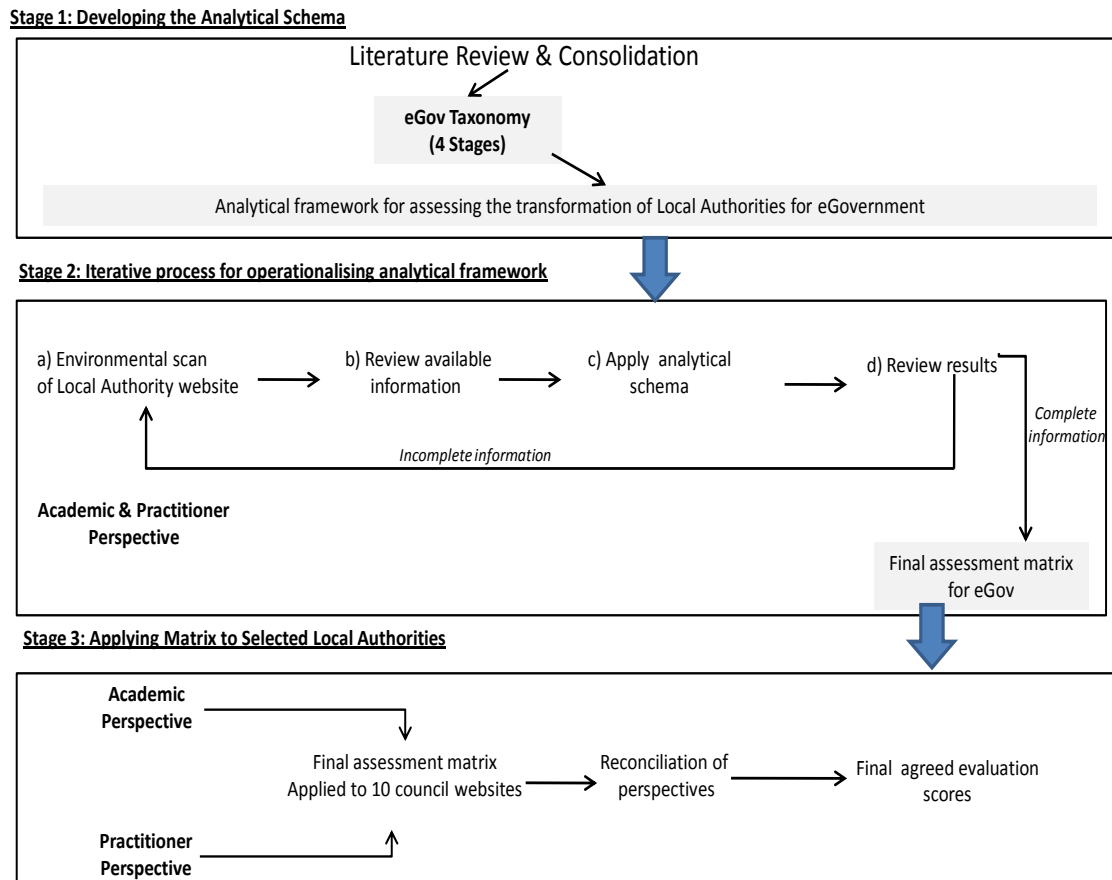


Figure 3. Research Approach

4. Findings and Discussion

The results of the evaluation for each of the respective Local Authority are presented as a notional percentage of presence for each of the respective categories, based on the evaluation of the evidence collected (Appendix 1). This was computed as the total score for a given Local Authority divided by the maximum total score that a Local Authority could receive for a given

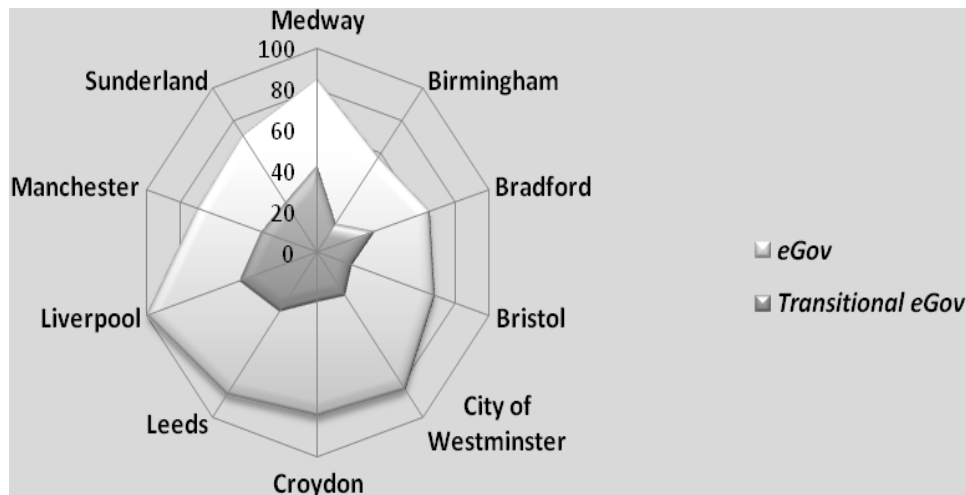
Evaluating the Transition of E-Government: A review of Local Authorities in England

category of e-Government service provision. For example in the case of Medway council, the total score it received for the Information component was 26 out of a maximum score of 30, leading to a figure of 87%. An overall view of the performance of each of the 10 sampled local authorities based on each type of government category is presented in Table 3 and full details in Appendix 1.

The scores were plotted on a radar diagram to demonstrate the relative progress and transition readiness of each of the selected local authorities e-Government provision. These are presented in Figure 4.

Type of Govemt	Category	Resulting Scores from Evaluation of Local Authorities (% presence of the category)									
		Medway	Birmingham	Bradford	Bristol	City of Westminster	Croydon	Leeds	Liverpool	Manchester	Sunderland
eGovernment	Information	87	60	73	70	93	93	90	100	70	80
eGovernment	Transaction	82	55	58	67	73	67	82	100	70	61
Transitional eGOV	Integration	85	35	67	40	52	48	71	90	65	60
Transitional eGOV	Assimilation	0	0	0	0	0	0	0	0	0	0

Table 3: Summary of Local Authority Evaluations



**Figure 4. Comparative Progress of Local Authorities from an e-Government Perspective:
e-Government to transitional e-Government**

As we can see, from Figure 4 and Table 3, only Liverpool Council was judged to have a selection of services that demonstrated its achievement of the fundamental levels of e-Government (Information and Transaction). Other councils performed relatively well, however Birmingham Council scored least on this axis. For the transition of e-Government, the overall trajectory was assessed to be relatively slow, with only Liverpool Council being more advanced than the others, and Bristol, Birmingham, Manchester and Sunderland performing particularly poorly in terms of their transitional progress.

This might be attributed to the lack of completion of the e-Government foundational stages of information and transaction. A more detailed picture of the overall results can be achieved by examining the breakdown of the scores in each category (see Appendix 1). The results will be discussed and analysed according to the major factors underpinning i) Fundamental e-Government, ii) Transitional e-Government.

i) Fundamental e-Government

Information: Overall, a very good level of e-information was provided by all local councils, with Liverpool making available all the e-information listed in our assessment matrix. Of those that did not achieve full e-information provision, in particular Birmingham and Bradford, these tended to be multi-media resources for information relating to democratic renewal, GIS facilities to access local and transport information and also transparency related to internet service standards and commitment to on-line service availability. Although the scores were relatively high for information, at this stage of e-Government maturity, we would have expected all the councils to have scored on all the informational areas listed.

Transaction: Overall, the majority of councils provided a good degree of the online transactions in our assessment matrix. Liverpool again made available all the e-transactions listed, while Bradford and Birmingham had the least. Of the online transactions that were not available, these largely related to services linked to new technology, such as SMS and Smartcards for council payments. The majority of our councils had not implemented the latter service. Other areas of weakness for online transactions related to e-booking of leisure facilities, e-billing and e-appeals.

ii) Transitional e-Government

Integration: There was a mixed outcome relating to integration, with some councils performing very well and other performing very poorly. Liverpool again provided evidence of the majority of examples of integration in our assessment matrix, with Birmingham and Bristol the least. Interestingly, those local authorities that had performed weakly on Information and Transaction, such as Bradford and Manchester, performed comparatively better on Integration. Of those

examples of integration in our assessment matrix, the main areas which tended not to have been implemented are seamless sharing of information, for instance pre-qualification for benefits claimants and pre-filling of forms, integration of CRM systems and local government services. As with Transactions, for services that relied on new technology, such as integrated mobile office services, these had not been in evidence in particular at Bristol, Croydon and City of Westminster.

Assimilation: There was no evidence of assimilation in any of our sampled local authorities. This can be explained as a result of incomplete Integration, Transaction and Information as these are the foundations on which e-Government services are customized and seamlessly tailored to citizens' needs across the whole range of government departments.

5. Summary and Conclusions

Out of all the local authorities selected in our sample, Liverpool emerges as the one that has completed the basic e-Government stage and is on a strong trajectory towards transitioning from e-Government to transformational e-Government. Liverpool is an interesting case in point as it is hosting the Capital of Culture 2008 and as such seems to have had an added incentive and most likely funding injection which has been concentrated on enhancing online services provision and internal administration improvements.

From the findings, there seems to be evidence of a stepped approach to e-Government implementation, where in particular the major categories identified for e-Government (Information and Transaction) need to be established before local authorities can effectively embark on the transitional stage. For instance, integration seems to be a pre-requisite for assimilation. Interestingly, new technologies seem to be barriers for advancement of e-Government services. For instance where implementation of relatively new technologies such as mobile, GIS and smartcards were recommended to improve quality of citizen centric services and processes, few of the local authorities had demonstrated the uptake of these new technologies.

Most disappointingly, engagement and participation of citizens in e-Government seems to have been overlooked. On completion of the data collection stage, the researchers were surprised by the extent of eservices that local authorities provided and disappointed by the lack of dissemination of this information. Although it is true that online transactions and information have made local government processes more transparent there does not appear to be any evidence to suggest that this has increased citizen uptake and involvement in services any further. Shared services provision i.e. integration, is and has been a core objective of e-

Government as evidenced in the literature over many years (Sauer and Willcocks, 2007). Our research shows this is a healthy component of the transition of e-Government via the relatively strong scores attributed to the Information and Integration components of our framework. However, looking closely at the results, the scores based on the accessibility of services that enable engagement and participation in the governance process are comparatively poor. In this case, the fact that there is no real provision of an infrastructure to enable this engagement in the governance process is obviously a contributing factor to a lack of engagement. It could be naively summarized that those local authorities who excel at information and transaction based services may have an opportunity to improve their transition phase (as in the case of Liverpool and vice-versa for Birmingham). The argument here, is that they have an established platform by which they can become transitional. There may even be a case for investigating cultural and social cohesion which enables and underpins the success of these drivers at authority and/ or citizenry levels (for example, are those in heavily populated metropolitan areas more likely to demand e-Government services and vice versa in low population centres). This paper does show that in fact a large city like Birmingham performs worse than a “medium”-sized city such as Liverpool.

Hence in summary, this paper has highlighted that there is a move by some local authorities in the UK (albeit within a very small indicative sample set) to transition from e-Government initiatives. From the data analysed those authorities which have a smaller population of citizens appear to be able to communicate and potentially provide ICT and other government services to the populace better than those metropolitan authorities which have a larger population. However, there does need to be further investigation into these correlative factors, and further research in this area might focus on developing relationships between population size, citizen needs, local politics and adaptability and flexibility of authorities to fully engage citizens in government.

The authors suggest seeking to extend the scope and breadth of this research in terms of increasing the sample size across other unitary authorities in the UK (including devolved regions in Scotland, Wales and Northern Ireland). The key risks of resourcing, supplier capacity, public trust, leadership, pace of change and management of project failure are not entirely evidenced in these local authorities surveyed here. Indeed, given the dimensions of e-Government research, there needs to be further work done to integrate these risks as part of ongoing research agendas. A cross-comparison with global e-Government initiatives in other countries and legislatures with these points in mind would also provide a natural extension to the research highlighted with an overarching objective to relate the underlying drivers for e-Government. The authors propose that there is still a long way to go before full transition to integrated e-Government is achieved. Contrary to the findings of the Socitm (2002) report which reported that there is “growing evidence that e-government is being viewed strategically by local authorities as a [means of] transformation ... doing existing things differently and doing new things” they also acknowledge

that the move from “automation to transformation may be possible for more enlightened leaders for the majority it is likely to be more chaotic”(Socitim, 2002:35 and 36) . Our findings show that the picture is still one of automation to government e-services. There is little evidence of transformation or the potential trajectory to transformation. The evaluation of the websites is based purely on the information available to the average user, if there is more transformation within local government then they have failed in duty to promote these and engage the citizens with this transitional stage. There is a need to therefore include components of effective ICT management; on-going evaluation of e-Government initiatives at the authority level; an awareness and desire to increase citizen participation and uptake in services provision and political decision-making processes at the local level.

References

- Bretschneider S. (2003). Information technology, e-government, and institutional change. *Public Administration Review* **63** (6):738 -741
- CIO (2005). *Chief Information Officer: Transformational Government Enabled by Technology*. Cabinet Office. Available [on-line]. (Accessed Sept. 2008) <http://www.cio.gov.uk/documents/pdf/transgov/transgov-strategy.pdf>..
- Clark, E. 2003. Managing the transformation to e-government: An Australian Perspective. *Thunderbird International Business Review* , **45** (4): 377-397.
- Cornford,T., Wessels, B., Richardson, R., Gillespie, A., McLoughlin, I, Kohannejad, J., Belt, V, Martin, M. (2004). *Local E-Government: Process Evaluation of Electronic Local Government in England*. London: Office of the Deputy Prime Minister.
- Earl, M. (2000). Evolving the E-business. *Business Strategy Review*, **11** (2) : 33-38.
- Elliman T, Irani Z and Jackson P. (2007). Establishing a framework for e-Government Research: Project VIEGO. *Transforming Government: People, Process and Policy*, **1** (4): 364-376.
- European Commission (2005). *Transforming Government*. European Commission, Information Society and Media, Factsheet 10, November 2005.
- Fountain J.E. (2001). *Building The Virtual State: Information Technology and Institutional Change*. Washington DC: Brookings Institution. 251pp
- Gil-Garcia, J.R., Chengalur-Smith, I., and Duchesi, P. (2007). Collaborative e-Government: impediments and benefits of information sharing projects in the public sector. *European Journal of Information Systems*, **16** : 121 – 133.
- Grant G., and Chau D. (2005). Developing a Generic Framework for e-Government. *Journal of Global Information Management*, **13** (1): 1-30.

- HM Government (2007). *Transformational Government: Enabled by Technology*. Annual Report 2006. HMSO. Available. [on-line]. (Accessed August 2008) http://www.cio.gov.uk/documents/annual_report2006/trans_gov2006.pdf.
- Huang Z (2007) A comprehensive analysis of U.S. counties' e-Government portals: development status and functionalities *European Journal of Information Systems* **16** : 149–164.
- Irani Z, Elliman T and Jackson P. (2007). Electronic Transformation of Government in the UK, *European Journal of Information Systems*, **16** (3) : 327-335.
- Irani, Z. and Elliman, T. (2007). *Project VIEGO: Towards a Virtual Institute for Research Into eGovernment*. London, Brunel University.
- Ke W., and Wei K.K. (2004). Successful e-government in Singapore. *Communications of the ACM*, **47** (6) : 95 - 99.
- Mahrer, H. and Krimmer, R. (2005). Towards the enhancement of e-democracy: identifying the notion of the 'middleman paradox'. *Information Systems Journal*, **15** (1) : 27 – 42.
- McLoughlin, I. and Cornford, J. (2006). Enacting the local state: e-Government in English local authorities. *Journal of Management and Organization*, **12** (3) : 195 - 208.
- Nolan, R. (1979). Managing the Crisis in Data Processing. *Harvard Business Review*, **57** (2) : 115 - 126.
- Norris D.F., and Moon, M.J. (2005). Advancing e-government at the grassroots: Tortoise or Hare?. *Public Administration Review* , **65** (1) : 64 - 75.
- ODPM (2004). *Implementing Electronic Government – Return 2004*, Office of the Deputy Prime Minister. Available. [on-line]. <http://www.london.gov.uk/gla/publications/e-london/ieg-statement2004.pdf>
- Orlikowski, W.J. and Baroudi, J.J. (1991). Studying Information Technology in Organizations: Research Approaches and Assumptions, *Information Systems Research* (2) 1991, pp. 1-28.
- Sauer, C., and Willcocks, L. 2007. Unreasonable expectations – NHS IT, Greek choruses and the games institutions play around mega-programmes. *Journal of Information Technology*, **22** : 195 – 201.
- Shaheen, A., Tassabehji, and R., Wallace, J. (2007). Measuring E-Government: Challenges and Opportunities for the Developing World. BAM-10488 in *British Academy of Management Conference Proceedings*, Warwick 9th – 11th September, 2007.
- Socitm (2002) Local e-government now: a worldwide view. Socitm and IDEa
- Tassabehji, R. (2008) e-Government, Transformation and e-Governance: an analytical review BAM-10278 in *British Academy of Management Conference Proceedings*, Harrogate 9-11th September, 2008.
- Tassabehji, R. (2003). *Applying E-commerce to Business*. Sage Publications.
- Turban, E., King D., Lee J., Viehland D. (2004). *Electronic Commerce : A managerial perspective*. Pearson Education International.
- UN E-Gov (2008). *UN Global E-government Survey 2008*. Available. [on-line]. http://www2.unpan.org/egovkb/global_reports/08report.htm

Evaluating the Transition of E-Government: A review of Local Authorities in England

West, D.M. (2004). E-government and the transformation of service delivery and citizen attitudes. *Public Administration Review*, **64** (1) : 15 - 27.

--

Government Type	Description	Category being Evaluated	Nominal Scores for Absence or Presence of the Category in Local Authority (0= Not present 1=Present but not operational 3= Present and operational)									
			Medway	Birmingham	Bradford	Bristol	City of Westminster	Croydon	Leeds	Liverpool	Manchester	Sunderland
eGov	Schools	Information	3	3	3	3	3	3	3	3	3	3
	Community Information	Information	3	3	3	3	3	3	3	3	3	3
	Democratic Renewal	Information	3	3	1	3	3	3	3	3	3	3
	Democratic Renewal	Information	3	3	3	3	3	3	3	3	1	3
	Support for Vulnerable people	Information	3	3	3	3	3	3	3	3	3	3
	Support for Vulnerable people	Information	3	3	3	0	3	1	3	3	3	3
	High take up of web-based transactional services	Information	3	0	3	0	3	3	3	3	3	0
	Democratic Renewal	Information	1	0	0	3	1	3	0	3	1	3
	Local Environment	Information	3	0	3	3	3	3	3	3	1	3
	Transport	Information	1	0	0	0	3	3	3	3	0	0
% Presence of Information			87	60	73	70	93	93	90	100	70	80
eGov	Schools	Transaction:eApplication	3	3	1	1	3	1	3	3	3	1
	Local Environment	Transaction:eApplication	3	3	3	3	3	3	3	3	3	3
	Local Environment	Transaction:eApplication	3	3	3	3	3	3	3	3	3	3
	Library, Sports & Leisure	Transaction:eApplication	3	3	3	3	3	3	3	3	3	3
	Library, Sports & Leisure	Transaction:eApplication	3	3	0	0	0	3	3	3	1	0
	Community Information	Transaction:eApplication	3	0	3	3	3	3	3	3	3	3
	Payments	Transaction:eApplication	0	0	3	3	0	3	3	3	1	1
	Transport	Transaction:eApplication	3	0	0	0	3	0	3	3	3	3
	Payments	Transaction: epayment	3	3	3	3	3	3	3	3	3	3
	Payments	Transaction: epayment	3	0	0	3	0	0	0	3	0	0
	Payments	Transaction: epayment	0	0	0	0	3	0	0	3	0	0
% Completion of Transaction			82	55	58	67	73	67	82	100	70	61
eGOV--> in transition	Community Information	Integration	3	3	3	0	3	3	3	3	3	3
	Payments	Integration	3	0	3	3	3	3	3	3	3	0
	Transport	Integration	3	3	3	3	3	3	3	3	1	3
	Benefits	Integration	3	0	3	3	3	3	3	3	3	3
	Benefits	Integration	3	0	1	3	3	3	3	3	3	3
	Schools	Integration	3	3	3	1	3	1	0	3	3	3
	Democratic Renewal	Integration	1	3	0	3	0	1	3	3	1	1
	Local Environment	Integration	3	0	3	0	3	1	3	3	3	3
	Local Environment	Integration	3	0	1	0	0	0	3	3	3	3
	Library, Sports & Leisure	Integration	3	1	1	0	3	1	3	3	0	3
	Benefits	Integration	1	0	3	0	0	0	1	0	1	1
	Support for Vulnerable people	Integration	3	1	3	0	0	0	3	3	3	0

Evaluating the Transition of E-Government: A review of Local Authorities in England

	Support for Vulnerable people	Integration	3	3	1	0	0	0	0	1	1	3
	Making it easy for citizens to do business with the council	Integration	3	0	1	0	1	1	3	3	0	0
	Making it easy for citizens to do business with the council	Integration	3	0	0	3	0	3	0	3	0	0
	Benefits	Integration	0	0	3	0	0	0	0	3	3	0
	% Presence of Integration Category		85	35	67	40	52	48	71	90	65	60
eGOV--> in transition	Customised services seamlessly tailored to citizens' needs	Assimilation	0	0	0	0	0	0	0	0	0	0
	% Presence of Assimilation		0	0	0	0	0	0	0	0	0	0