

<b>Institution: BRUNEL UNIVERSITY (H0113)</b>
<b>Unit of Assessment: 19 – Business and Management Studies</b>
<b>Title of case study: Electronic Government Research in the UK – A roadmap towards implementation of e-Governments</b>
<p><b>1. Summary of the impact</b> (indicative maximum 100 words)</p> <p>In a drive to improve efficiency and to increase user participation, local authorities have been set eGovernment targets and priorities by central Government. However, limited resources, conflicting priorities and internal political pressure have resulted in a lack of focus when it comes to implementing such changes and progress towards achieving e-Government has a) been slower than expected and b) had less impact than anticipated.</p> <p>Research undertaken at Brunel broadened knowledge of e-Government and delivered these benefits:</p> <ul style="list-style-type: none"> <li>• A stakeholder-agreed structure/framework defining all relevant e-Government issues</li> <li>• Defined and agreed details of e-Government terminology</li> <li>• Full recommendations for an integrated e-Government programme</li> <li>• Priorities for e-Government research</li> </ul> <p>The research created a body of knowledge that enabled delivery of novel and effective change and is contributing to making the UK a world leader on e-Government.</p>
<p><b>2. Underpinning research</b> (indicative maximum 500 words)</p> <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <p>“Profound changes [are needed] to the way Government works... Electronic service delivery [eGovernment] will be a key source of innovation”</p> <p style="text-align: right;"><i>Rt Hon Tony Blair MP, Prime Minister (2000)</i></p> </div> <p>Widely perceived as fundamental to the reform, modernisation and improvement of public services, e-Government is concerned with how a government employs digital technology to communicate with the citizens, businesses, organisations and its own employees.</p> <p>Two Engineering and Physical Science Research Council (EPSRC) funded projects were instrumental in identifying and further developing a multi-disciplinary research agenda for e-Government in the UK. The research focussed on stakeholders’ needs and motivation; analysed and classified the requirements, drivers, benefits, drawbacks and obstacles and thus provided a sound basis for the evolution of the e-Government eco-system. The projects used a workshop-based approach followed by a combination of qualitative and quantitative analysis.</p> <p>The first project, <i>Network for eGovernment Integration and Systems Evaluation (e-GISE, a Global Uncertainties accredited research award)</i>, started on 1<sup>st</sup> November 2004 and formally ended on 31<sup>st</sup> Oct 2007. A follow-on project, “<i>Virtual Institute for Electronic Government Research (VIEGO)</i>”, started on 1<sup>st</sup> January 2006 and formally ended on 28<sup>th</sup> February 2007. Prof. Zahir Irani (Head of Business School, Brunel University) was the Principal Investigator on both projects and Dr. Tony Elliman (then Professor at Department of Information Systems, Brunel University) was the Co-Investigator.</p> <p>The focus of the first project <b>e-GISE</b> was to promote national debate and highlight the research strategies needed to increase understanding of e-Government and the processes involved in evaluating decisions surrounding human, organisational and technical components of information society technologies (IST) implemented as part of the Government’s electronic agenda. e-GISE organised and ran over a 3-year period a series of national workshops in conjunction with the Chartered Institute of Public Finance and Accountancy (CIPFA) that helped to establish and maintain a dialogue with local authorities and government agencies, whilst keeping the research planning realistic and relevant to both the practitioner and academic communities. Findings highlighted the absence of a comprehensive framework for measuring the outcomes of e-Government services - a key research gap facing the future. These research outcomes provided the rationale and motivations for VIEGO. There was an overlap between the two funded projects</p>

## Impact case study (REF3b)

with the e-GISE infrastructure supported by the broader activities of VIEGO.

The **VIEGO** project consisted of five workshops held in 2006 in four cities (London, Cardiff, Manchester and Edinburgh) in the UK. Each workshop targeted a different non-academic stakeholder group - acting as the main research tool that engaged with stakeholder communities. Workshops resulted in the identification of key themes and future research challenges of e-Government. Themes included technological e-Government research, social e-Government research and organisational or managerial e-Government research. The research showed that a multi-disciplinary, holistic approach is required involving deep understanding and management of systems, information, policies, processes, security and change.

VIEGO departed from previous e-Government research by focussing on the views of stakeholders at grass-root-level (i.e. those charged with delivering the eGovernment agenda) and on the issues they considered to be important for its future administration.

### 3. References to the research (indicative maximum of six references)

- Sharif A.M., Irani Z. and Weerakkody V. 2010 'Evaluating and Modelling Constructs for E-Government Decision Making'. *Journal of the Operational Research Society*, **61**(6): 928-952. - (Impact factor: 1.565) <http://dx.doi.org/10.1057/jors.2010.11>
- Irani Z. and Elliman A. (2008) 'Creating social entrepreneurship in local Government: Research Note'. *European Journal of Information Systems*, **17**(4): 336-342. (Impact factor: 1.202) <http://dx.doi.org/10.1057/ejis.2008.35>
- Irani Z., Elliman T. and Jackson P. (2007) 'Electronic Transformation of Government in the UK'. *European Journal of Information Systems*, **16**(3): 327-335. (Impact factor: 1.202) <http://dx.doi.org/10.1057/palgrave.ejis.3000698>
- Elliman T., Irani Z., Jackson P. (2007) 'Establishing Framework for eGovernment Research: Project VIEGO', *Transforming Government: People Process & Policy*, **1**(4): 364-376 <http://dx.doi.org/10.1108/17506160710839187>
- Mantzana V., Themistocleous M., Irani Z. and Morabito V. (2007). 'Identifying Healthcare Actors involved in the Adoption of Information Systems', *European Journal of Information Systems*, **16**(1): 91-102. (Impact factor: 1.202) <http://dx.doi.org/10.1057/palgrave.ejis.3000660>

#### Relevant Foundation Grants:

1/01/2006 – 28/02/2007: 'Towards a virtual Institute for Research into eGovernment (VIAGO)'.

EPSRC Ref: [EP/D043840/1].

Principal Investigator: Prof Zahir Irani, Co-Investigator: Tony Elliman.

Grant total £34,000

1/11/2004 – 31/10/2007: 'e-Government Integration and Systems Evaluation (e-GISE)'.

EPSRC Ref: [GR/T27020/01].

Principal Investigator: Prof Zahir Irani, Co-Investigator: Tony Elliman.

Grant total £58,011

### 4. Details of the impact (indicative maximum 750 words)

The beneficiaries of the VIEGO research have been local authorities, NGOs, IT professionals and citizens who, as public sector users, have benefited from enhanced service delivery. Direct involvement in the research process helped the public sector better utilise resources and improve their position vis-à-vis central Government targets. The research has been highly significant, helping to accelerate the implementation of e-Government in the UK and with a nation-wide impact on public policy and services. The results of VIEGO have also attracted international interest from aspirational Governments such as the Kingdom of Bahrain, Turkey and Lebanon, leading to further research collaboration.

## Impact case study (REF3b)

A key output from the research was a White Paper report '*Project VIEGO - Electronic Transformation of Government in the UK: A Research Agenda*' ISBN 978-1-902316-53-6 that has been printed and circulated to 500 UK local authorities and non-Government organisations. This white paper created interest among a collection of local authorities including London Borough of Havering, London Borough of Hillingdon, Anglesey County Council, Denbigshire County Council and Flintshire County Council.

Others included central and local government such as the Office of Deputy Prime Minister, the Cabinet Office (e-Government Group), Society of IT Managers, the British Computer Society (eDemocracy Group) and the Chartered Institute of Public Finance.

The research led to 10 articles in practitioner trade journals including PublicNet News, Public Servant Daily and Computing.

### Senior Public Sector Managers

The *organisational/managerial* research themes identified by VIEGO supported public sector senior managers in better understanding the challenges of managing participation or, as it has subsequently become known, 'eParticipation'. Senior managers were better able to identify *drivers of change* and *cope with potential resistance to change* when implementing e-Government.

### Public Sector Employees

The *social e-Government research themes* were relevant to public sector employees. Most public sector employees are front-line staff, who directly interact with citizens and other stakeholders. These employees also engage with Government in its numerous electronic forms. As a result issues of *how* to engage with stakeholders and manage social interactions and communication covered by the *social e-Government research themes* enabled public sector employees to recognize the importance of building trust with citizens and other stakeholders. This has led to more positive citizen-Government interactions. Mr Ashaye, team manager from the Housing and Options Team in the London Borough of Hillingdon has written:

*"Research grants such as eGise, VIEGO and CEES have helped to move the community towards technological advancement and to build citizen trust in e-government".*

### Local Government Elected Representatives

The *social e-Government research and organisational/managerial e-Government research themes* were relevant to the local Government representatives. Issues such as political and policy-making helped the local Government elected representatives to realise *how* e-inclusion and participation could influence the decision making process and, the impact this has on e-Government.

### Local Government Managers

The *organisational/managerial e-Government research themes* were particularly relevant to the local government managers. These themes enabled the local government managers to realise the challenges of evaluating and measuring actual benefits arising from the application of e-Government services and applying these measurements to improve the type and level of services provided. Several managers have provided letters of evidence that articulate how the research has benefitted their organisations in terms of service delivery. For example, Dr. Stephen Jones, Head of Information, Communications and Technology, CONWY County Borough Council has this to say about the research:

*"CONWY County Borough Council's association and involvement with the research work undertaken by Brunel University has helped enormously with attaining practical improvements to complex IT and eGovernment service delivery. A recent example is improvement to the Authority's website and content management system, in which CONWY County Borough Council was independently adjudged to be the best website in Wales and one of the best websites in the UK (SOCITM, 2012). This is a significant achievement which has major internal and external impact, including efficiencies, cost savings and citizen channel shift."*

### IT professionals

## Impact case study (REF3b)

The *technological e-Government themes* were particularly relevant to the IT professionals. The main issues such as: (1) need for flexible and scalable technology; (2) privacy and security; (3) shared services; and (4) technical standards, enabled IT professionals to understand the multiple facets of problems related to these issues which range from purely technical to organisational. As a result *organisational/managerial government research themes* were also relevant to the IT professionals. These two themes permitted the IT professionals to realise the complexities of e-Government implementation and look at the problems associated with e-Government from technical as well as organisational perspectives. Barry Eaton, ICT service manager has written:

*“Having knowledge and access to this academic and practitioner working group has helped improve the way that Anglesey has deployed information systems and e-Government initiatives”*

This research led to two funded projects at the European level:

2010-2013: ‘Ubiquitous Participation Platform for Policy Making’. Call: EU FP7 ICT Programme – Call 4, EU Reference Number: 248010. Principal Investigator: Prof Zahir Irani, [Brunel] Grant Total €410,000.

2009-2013: ‘Citizen oriented Evaluation of E-government Services - A reference process model (CEES)’. Call: EU FP7 People Programme - Industry-Academia Partnerships and Pathways EU Reference Number: 28012009. Principal Investigator: Prof Zahir Irani, [Brunel] Grant Total €201,115.

### 5. Sources to corroborate the impact (indicative maximum of 10 references)

- White paper report: Project VIEGO- Electronic Transformation of Government in the UK: A Research Agenda ISBN 978-1-902316-53-6. Available at: <http://www.iseing.org/iseing/VIEGO.htm>
- **Letters of support have been provided from the following individuals to support the claim that Brunel research has benefitted service delivery:**
- Governor, Central Bank of Sudan.
- ICT Service Manager, Isle of Anglesey County Council.
- Business Transformation and ICT Manager, Denbighshire County Council.
- Head of Information, Communications and Technology, CONWY County Borough Council.
- Homelessness Assessment Team Manager, London Borough of Hillingdon.
- Head of ICT and Customer Services, Flintshire County Council