

e-Government in Scotland

Ticking the Box or Delivering Meaningful Services to the Citizen?

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SUMMARY

In March 1999 the UK government published a Modernising Government white paper recognising the need for forward looking policy making; more responsive services to the citizen and business; quality public services; information age government, and valuing public service. To ensure delivery against this policy, the UK government set both central and local governments a number of e-business targets, including:

- 90% of low value procurement transactions should take place electronically by 2001;
- 100% of filing should be available electronically by 2004; and
- 100% of services should be available electronically by 2005.

This paper will review the progress of local and central government organisations in Scotland in meeting these targets and, through the lessons learned, will explore the reasons why more complex service delivery requiring cross departmental co-operation has been so difficult. Finally, the paper will highlight new e-government services where spatial information management has been fundamental to the successful service delivery.

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1. INTRODUCTION

Information Technologies (IT) are being applied vigorously by governmental bodies around the world at national, regional and local levels. The application of IT to government service is often termed 'e-government' and the larger concept of government that depends upon IT to achieve basic missions is termed 'digital government' (Marchionini G. et al, 2003). Many governments are pursuing aggressive e-government programmes and are setting specific targets for this significant change management process within all levels of government. The incentive is three fold: to provide more cohesive, effective and meaningful services to the citizen and business; to reduce the public costs of delivering these services; and to facilitate the joining up of government by eliminating the pervasive silo structure of government.

Governments are keen to advertise their successes in this e-government agenda, but just how successful are governments in launching meaningful, e-government services? Are they meeting the expectations of the citizen? Are they delivering the expected benefits to all stakeholders? What role does a National Spatial Data Infrastructure (NSDI) have in supporting these services? Are governments just ticking boxes? This paper reviews the e-government activities in Scotland as an example to answer these questions.

The paper initially defines what is meant by e-government, explores the e-government targets set by the Scottish government then reviews the range of e-government services currently being delivered against these targets. Finally, through a lessons learned analysis, the paper identifies key success factors in designing and delivering e-government services, including the use of a NSDI.

2. WHAT IS e-GOVERNMENT?

The frustrations of the citizen in dealing with their governments is typified through the current complex process of buying and selling a property. This process involves transactions with a large number of public and private organisations, including: the Land Registry to obtain ownership and rights information; Local Government to obtain development constraint information; utility companies to determine connection to basic utilities; financial services to obtain mortgages; environmental agencies to identify environmental constraints; and legal services to support the legal aspects of the transaction. This is a very fragmented and prolonged process involving the citizen or their representative contacting a large number of different organisations who reference their information in different ways. It is not a cohesive process and leads to considerable time delays and expense in the property transactions. It highlights the non-transparent, highly fragmented and non-joined-up nature of government from a citizens perspective.

However, the converging forces of ICT, the internet and e-business have provided the platform upon which governments can now radically rethink how they deliver services to the citizen. These new e-based services should have the following advantages:

- Single point of entry to government services;
- 24/7 access to the services;
- Integration of services to provide a cohesive process instead of a fragmented one across several government departments;
- On-line transactions reducing the time and costs of processing the transactions;
- Easier access to government held information leading to greater transparency and accountability in decision making;
- Opportunities for citizens to participate in decision making / e-democracy; and
- Opportunities to leverage finance and know-how through partnerships with the private sector in delivering services.

There are 3 basic forms of e-government that are described in the following sections:

- Access to information;
- Transaction services; and
- Citizen participation.

The significant role of spatial information in supporting the delivery of e-government services has been recognised and is increasing. Spatial information is perceived as a key integrator of disparate datasets across government and provides the 'joined-up' aspect of e-government. This fundamental aspect of integration of services can be achieved through a National Spatial Data Infrastructure that provides each government department with a definitive, national, spatial data framework, especially including postal address based information. Spatial information is also a significant communication tool in the delivery of services and is essential in supporting a consultation process, for example in proposed policies for development control.

2.1 Access to Information

This is the most common form of e-government and in its simplest form involves the exposure of government information on web sites. There are 1,000s of government web sites in the USA, for example. These web sites provide citizens with access to government documents that are in the public domain. In most countries, these web sites will not conform to national standards and there will be little attempt to integrate the wide range of information into a more cohesive and easily searchable set of government knowledge base. However, there are trends to provide citizens with single portals, for example, with www.ukonline.gov.uk the government gateway in the UK.

Not all government information is free and users may have to pay for the privilege to access the government information, e.g. access to land ownership and rights information to support activity in the land market.

2.2 Transaction Services

This type of e-government service provides citizens and business the opportunity to complete transactions government departments through web based services. These transactions can either be on-line, with some form of pre-subscription or electronic transaction based charging, or off-line where users can order forms or services to be delivered off-line. Typical examples of this type of service are filing a tax form, applying for a driver's license and submitting a planning application. These examples are simple examples where existing processes are replicated in e-government and the interaction is normally with a single government department. However, greater benefits are achieved for both government and the citizen where more complex e-government transactions, involving a number of levels of local / regional / central government, are provided. A good example of this type of transaction is the support of the buying and selling of properties.

2.3 Citizen Participation

Perhaps the most controversial and certainly the least developed application in government is direct citizen participation in government decision making. At one end this participation spectrum is e-mail lobby, in the middle is comment and debate on government rule making and at the other end of the spectrum is e-voting that could eventually challenge and replace representative democracy with direct democracy (Manasian D., 2003). The growing expectations of an educated public, for whom individual choice is an important value, combined with the technology of an increasingly pervasive internet, will challenge the structures of all western governments based on representative models of democracy.

In modern society, the public is now accustomed to being consulted regularly, and when most people get the chance, they like expressing their view on anything under the sun. Although representative democracy is the basic structure of all western governments, it is accompanied today by a penumbra of direct popular control. Opinion polls in America and Europe suggest that large majorities are in favor of referendums. Once reliable methods for validating electronic votes have been found and internet penetration rates approach saturation, the internet will remove the biggest single obstacle to direct democracy.

Financial corruption and lobbying by special interests that plague all democracies today are much harder to stamp out in a representative system than they would be in a system with more direct voter involvement.

3. UK / SCOTLAND TARGETS SET BY GOVERNMENT

E-Government ambitions in the UK can trace their roots back to the Modernising Government White Paper (March 1999). It set out the government's vision for modernising public services and the government's commitment to exploit new technology to offer opportunities and choice in the delivery of public services. It also included the original target for all services to be made available electronically by 2008. This has since been advanced to 2005.

The Office of the e-Envoy (OeE) and the Office of Government Commerce (OGC) are leading this e-government agenda to focus on accessibility and meeting the needs of citizens and business. It will ensure wider choice on how public services are provided and will encourage competition by reducing barriers to the government market. The government's use of ICT - to improve efficiency, access and service - involves both business and ICT strategy and procurement issues

Despite Scotland now having its own parliament, e-government intentions here are in concert with the remainder of the UK.

3.1 Governance set up by government

In order to monitor and measure the progress towards e-enablement of the UK the government established the UK online programme. Since its inception this programme has been underpinned and motivated by challenging targets in the key areas of Business, Government, and People. Progress towards targets in all these areas is reported on a monthly and annual basis. This has not only allowed the government to ensure physical advances and improvements are made but also enabled the overarching strategy to be continually re-focused. In essence an evolution of policy on how e-Government will contribute towards the transformation of public service delivery and the efficiency

Specifically the present progress against the foregoing commitments can be summarised as follows: -

3.1.1 Transforming Business

Clearly British business needs to recognise and fully utilise ICT if they hope to compete both in the home or world markets. Increasingly this can be the difference between staying in business or not. The government cannot realistically set any targets here as they have no direct control on how the commercial sector go about heir business.

Instead the government aims to provide the necessary transition support to e-business through the UK online strategy, encouraging the expansion of the broadband market, and modernising the regulatory, legal and fiscal framework in the UK.

3.1.2 Transforming Government

The UK government is committed to a fundamental reform of public services. The citizen and business customer must increasingly be able to deal with both local and central government when they want, where they want and how they want through a range of highly reliable service channels. Already over 54 % of existing services are now available electronically. One notable example of this is the National Health Direct Online, which receives some half a million, visits each month.

In addition to improving front line services, ICT is also being used to improve general efficiency of the public sector machine. Many examples exist where traditional processes are being radically re-thought and improved.

3.1.3 Transforming Opportunity

Obviously if everyone is to benefit from new improved e-government service delivery then they need to have access to the underpinning technologies through which they are delivered. Accordingly the goal here is to ensure everyone who wants it has access to the internet by 2005. Presently some 45% UK households are on-line with 47% of UK adults being regular internet users. Take up in the most disadvantaged groups, the elderly, low incomes, disabled etc., is somewhat lower.

More recently another important milestone was achieved in the drive to ensure the UK becomes the best environment for e-commerce. During 2002 an independent International Benchmarking Study was commissioned to confirm the level of the UK's e-economy. The study returned some interesting results. Areas ranging from innovation capability to ICT educational infrastructure that effect the ability of government, business and citizens to maximise the benefits of the internet were identified. Around 30 performance indicators were then developed to assess progress. The results proved extremely encouraging and indicated that the UK was the second best environment in the world – behind only the US. This outcome is viewed positively and suggests significant progress and an excellent basis for continued growth and development.

3.2 Funding / Programmes Initiated by government

The outcome of the UK Government Spending Review 2002 reflects the commitment to development of e-service delivery having allocated approximately £6bn over the next three years. Access to this sizeable financial windfall is gained through open competitions under the banner of a Modernising Government Fund. Public sector bodies have to bid for cash to support innovative projects or new service applications. The merits of each individual bid is assessed on service improvement aspirations and fit with the overarching e-strategy. Increasingly, bids have to promote a more holistic approach to conjoining 'silo' services and re-engineering conventional practices and process. An overarching theme is clearly to promote a citizen-focused approach to all such activities.

4. WHAT HAS BEEN DELIVERED IN SCOTLAND?

4.1 A Review of e-nabling Government Initiatives

What progress has been made in delivering this ambitious e-government agenda in Scotland? This section reviews the major e-government initiatives.

4.1.1 Openscotland

Openscotland is a distinctive brand identifying Scottish Executive activities which aim to:

- provide the people of Scotland with better access to public services and help improve the delivery of these services; and

- ensure the people of Scotland have the access, skills and awareness to enable them to make beneficial use of computers and the web in their day to day lives

Latest figures in Scotland suggest that upwards of 80% of public services delivered by the Scottish Executive and associated bodies are now largely available electronically.

However rather than placing too much emphasis on on-line delivery alone the Executive fully recognises the need for a multi channel approach. Choice is paramount here and various channels of delivery will be actively supported and encouraged. The rationale behind this position essentially reflects the geography and demographic spread within the country. Although physical contact and telephone services are likely to remain central, greater choice will be provided through interactive DTV, mobile phones, kiosks and the internet.

The Executive is keen to ensure that new services mediums are process and user driven as opposed to being designed around the technology or provider. There can be little doubt that ICT can play a pivotal role in the introduction of new services however it felt equally important to attend to corresponding the cultural changes and service quality improvements as part of the overall modernisation agenda.

In order to assist the advancement of the foregoing aspirations the Modernisation Government Fund has recently been extended for a further two years. This current round of the fund in Scotland has been allocated around £40m. In contrast from the original competition this latest round specifically set out to attract and encourage greater levels of collaboration across the public sector. Consequently a wide range of fairly radical proposals were put forward and evaluated, to reflect the citizen- focused approach, against the following strategic criteria:

- To improve the way in which services are delivered to the public, in particular developing the concept of an integrated customer record or 'Citizen's Account' that can be supported by a citizen's smartcard;
- To promote secure data sharing across the public sector;
- To promote the data standards that can deliver interoperability across the public sector – (Information Age Government Framework); and
- To support e-procurement and help maximise the purchasing power of the public sector.

The following three projects have successfully won funding the tune of £16m and initial planning activity is already underway.

- A Citizen's Account and Citizen's Account Card - this incorporates a Customer Relationship Management project, a smartcard project and the Dialogue Youth project;
- A Land and Property Management project – to help establish a national land and property database for Scotland

- ECare – to support the National Health Service in Scotland and local authorities to develop a national e-care programme for children and elderly focusing on data standards and single shared assessments.

Other complementary Openscotland strategies, which are already in train, include:

4.1.2 Digital Inclusion in Scotland

This seeks to bridge the digital divide and provide universal access to the internet for all, whether at home, work or public sites. The Executive seeks to ensure the web can be accessed within a 5 mile radius in rural communities and 1 mile in urban areas.

4.1.3 e-Commerce

The main mechanism for delivery of e-commerce assistance to business is provided through Enterprise Networks. This assistance takes the form of locally delivered awareness raising, workshops, demonstrations, and advice along with centrally managed resources, events and consultancy. The Enterprise Networks continue to work towards a ‘Smart Successful Scotland’ agenda.

4.1.4 Broadband

Local access and cost are the two main issues of concern for the Executive. This strategy aims to promote affordable access and prevent a digital divide between the rural and urban environments. The approach here is threefold, viz., aggregation of public sector demand, consideration of direct intervention and UK regulatory liaison.

4.2 A Review of e-government Projects

A great many examples of e-services provided by Government already exist in Scotland. In the majority of cases these offer the citizen and business user innovative, reliable and efficient means of gaining access to information and associated services previously only available through conventional means.

One notable example of a fairly simple, but hugely popular service is the genealogical service through offered by the General Registrar's Office for Scotland <http://www.scotlandspeople.gov.uk/> . Customers can trace their family roots and gain access to census outputs and corresponding analysis. This is an extremely busy site and responds to inquiries from all over the globe.

The screenshot shows the homepage of the General Register Office for Scotland's genealogical website. The header includes the logo and the URL www.scotlandspeople.gov.uk. A navigation menu on the left lists various site features. The main content area is divided into several sections: a user login section for registered users, a registration section for new users, a free surname search tool, and a 'Did you know?' section featuring historical facts. At the bottom, there are promotional boxes for 'In This Week', 'Famous Scots', and 'Trace Your Roots', along with a 'Help Assistant' icon and footer information.

A slightly more interactive offering, Digital Communities, has been developed through Openscotland. This service aims to connect rural communities and make them all much more socially inclusive in society. Through central funding, small localities throughout Scotland have been encouraged to develop their own web sites. These are then used as a conduit to discuss local issues, offer training /learning opportunities and develop local business and tourism. Despite the remoteness of many local communities throughout Scotland this on-line gateway allows everyone to actively participate and feel involved in local matters irrespective of their personal geographic location. <http://www.scotlandinter.net/CommunityWebs.htm>



Home Page | Where to Stay | See & Do | Walks | Phototour | Natural History | Human History

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Ardnamurchan Peninsula



Where the sun sets later and the pace seems easier

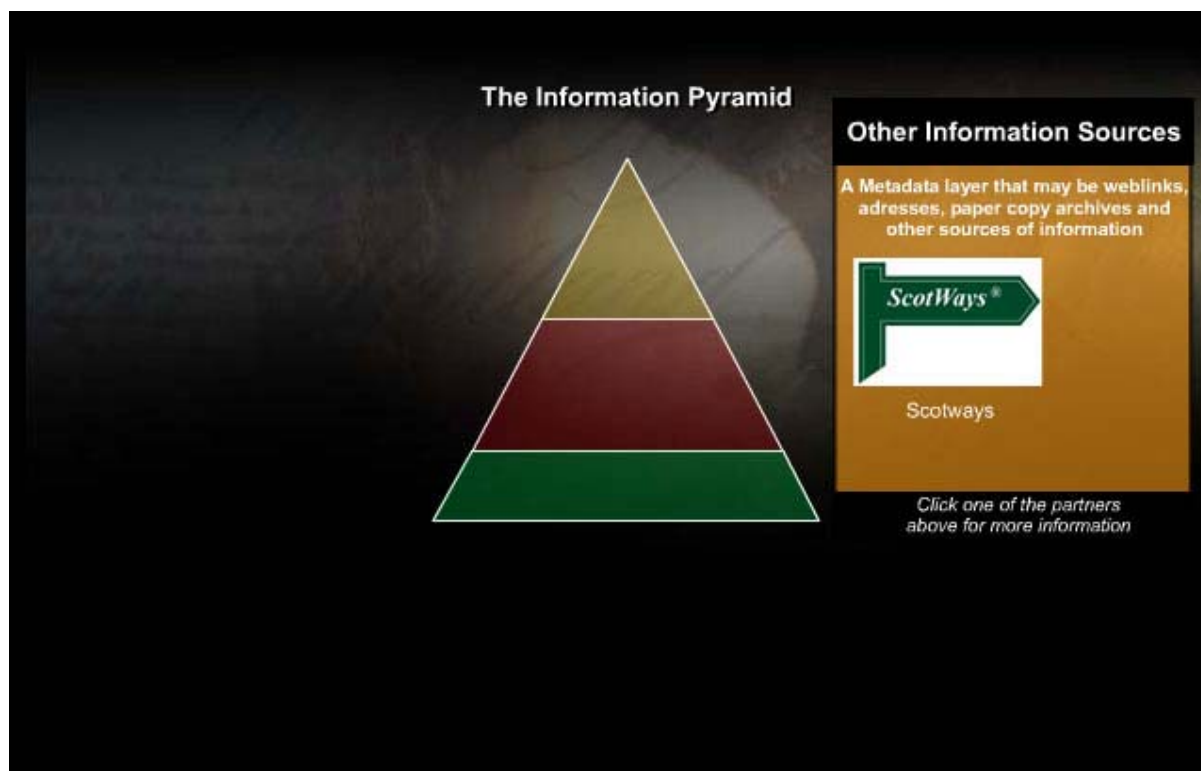
Telephone **01972 510222** for our information pack (00 44 972 510222 from abroad), see our [shop](#) for books and videos you can buy or you are welcome to [email us](#).

This site is best viewed in full screen (press F11) and 800x600 screen size setting (control panels, display)

Wired West Lothian perhaps demonstrates a leading edge approach to on-line service provision. In addition to usual information provision on a whole host of matters the local authority has developed an integrated way of supporting their customers. Whether using the telephone, the web or by personal call the citizen can now not only determine the range of services on offer, but can equally make a formal request for the provision of them through one point of contact. This one stop shop therefore allows people to choose there preferred medium to pay taxes, claim housing benefit, seek employment, etc., without being frustrated by need to make multiple contacts. In essence this service is more than a simple information source it illustrates a good example of two – way traffic between the citizen and service provider. It underpins real life improvements using technology to smarten the process as opposed to simply using technology to mirror traditional practice with no obvious return. www.wlonline.org



In order to provide a balanced view of e- service delivery it is important to not only reflect on the success stories, but also to take note of some of the less successful attempts. Conceptually the Scottish Land information Service <http://www.scotlis.com> was an attempt to develop a 'portal' through which a user could obtain information about land and property from a variety of sources. Through employing common unique identifiers and subscribing to data standards it had been hoped to allow many disparate sources of information to be queried about any one particular property. Whilst the site as it exists certainly offers the benefit of accessing a group of data sources from one central point it lacks the seamless search capability vision. This situation has arisen due to the absence of a co-ordinated strategy to re-engineer data and subscribe to universal data standard conventions.



5. ROUTEMAP FOR SUCCESSFUL E-GOVERNMENT DELIVERY

There can be little doubt that many in Scotland can identify with truly groundbreaking opportunities for e-service delivery. To some extent many might argue that these sorts of services are in fact already in existence. This of course is a slight contradiction in terms as many are little more than window dressing and simply serve to smarten up the existing service operation. This is evidenced by the tendency to concentrate on supporting only uni-directional data traffic more often from the service provider to the customer with little reciprocal facility.

If we really are to develop groundbreaking e-services these must be much more interactive and capable of allowing multi channel on-line citizen / business oriented transactions. Although attempts have been made within the public sector to support this kind of activity these applications have often sought to support so-called 'grudge' services, e.g., tax returns, applications for licenses, planning permission etc. As a result, and largely due to the limited incentive (technical problems are not unknown) few have met with a resounding success. Frontline interactions especially on-line are still viewed with some understandable suspicion. It is this cultural issue, not simply the technical solution, that we need to overcome. We need to identify 'killer' applications, which will not only engage the general public, but help overcome the sensitivities attached to many forms of connect with government. Solutions cannot be imposed on the citizen; they themselves must be able to clearly identify with the benefits to them and therefore freely embrace such service change for the better.

At an organisational level, institutional barriers are often evident when attempting to introduce truly innovative approaches to public service delivery. All too often despite the existence of a sound business proposition for collaboration and a more joined up approach, difficulties are invariably encountered. Much of this can be attributed to the lack of a robust, holistic strategy for service development in the public sector and of course a much more commercially focused approach to individual business activities. There is a lack of direct imperative from Government to break down these obstacles and promote a recipe for a more efficient future. Joined up government is more than simply sharing and integration of data. It is more about a radical re-think of how we all do business in future – doing things better not differently. We need to focus concerns on eradicating the huge duplication in effort, which often exists, but is well hidden, and achieving corresponding economies in scale. Only then will we bring about smarter ways of working and be able to respond to an increasingly expectant and demanding taxpayer.

On the technical front our rationale for improved service delivery cannot be clouded by cutting edge technology. Every endeavor must be made to focus on overhauling and re-designing the process first and essentially with the customer requirements in mind. Only then must the technical solution be considered. It may seem an obvious way forward. However, there are many examples where technology has often been a solution looking for a problem rather than the other way about.

Progress in delivering more integrated e-services in Scotland has been curtailed by the lack of a National Spatial Data Infrastructure (NSDI) strategy endorsed and implemented across government. This has resulted in confusion of the roles and responsibilities of the stakeholders involved and led to a landscape of fragmented spatial information and related services. A key missing element of the NSDI is definitive national address dataset that could be instrumental in integrating and joining up e-services. Fortunately, the Scottish Executive is currently funding an initiative to solve the fundamental problem.

The ambitious set of e-government targets will only be met if there are successful business partnerships forged between the public and private sectors. This requires new business models to be formulated by government to allow the finance and know-how from the private sector to be successfully leveraged. In addition, significant cultural change is required within

the public sector to successfully manage these partnerships through the role as intelligent customer. The success of these partnerships, usually over a 7 to 10 year timeframe, will be significant in shaping the future of e-government in Scotland.

The most successful e-government services delivered in Scotland are not just replications of existing services, but are services that provide the citizen with a basket of e-services, community and business support and the value add of e-democracy, e.g. . <http://www.scotlandinter.net/CommunityWebs.htm>. If the Scottish people are to more fully embrace e-government then they have to be enticed through these value added services that engage them in supporting improvements to their quality of life and environment. Simple e-government services are insufficient. e-democracy will have a fundamental role in facilitating this wider use of e-government across all sections of the Scottish community. Once reliable methods for validating electronic votes have been found and internet penetration rates approach saturation, the internet will remove the biggest single obstacle to e-voting and potentially direct democracy.

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BIOGRAPHICAL NOTES

Mike Traynor is director of Customer relations and Business Development of Registers of Scotland, Executive Agency. The Agency is the statutory body responsible for creating and maintaining a range of public registers. The principal registers hold information about ownership of land and property in Scotland. Mike has played a key role in advancing the electronic map element of the registration of title system introduced in 1981. The entire operation is now fully supported by ICT and this has allowed the Agency to develop a host of e-information services. He continues to participate in the advancing plans for full e-business services between the customer, the Agency and other arms of Government.

Robin McLaren is director of Know Edge Ltd a UK based, independent management consulting company formed in 1986 specialising in optimising the business benefits of land & property related information through the strategic design and implementation of Information Systems and Services. Robin has been at the forefront of the GIS revolution and is recognised as a world expert in Land Information Management and has worked extensively in Eastern Europe and world-wide to strengthen land tenure to support economic reforms.

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