New York Sister City's conference: technology transforming city services

Implementing electronic government in London – a report on progress, draft, May 2004

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This paper considers the progress London has made in delivering the UK national e-government programme to Londoners' advantage, and highlights some of the areas where London is leading the UK. It also describes how the Mayor of London has sought to bring greater co-ordination to e-government in London, using his strategic city-wide role to encourage integration of technology programmes at local, city-wide and national levels.

Introduction

Compared to the way government in New York City is organised, public services in London are delivered by a complex web of agencies and semi-autonomous authorities. Although its population is similar to New York, London has 33 local borough councils responsible for a wide range of services: from refuse collection and disposal through to personal social services (for older people, disabled people, vulnerable children) as well as major social housing, education and environmental responsibilities (environmental health inspection or administering building permits and planning regulation). The tier above the boroughs is the Greater London Authority, controlled by the Mayor of London. This is responsible for strategic planning, transportation, economic development and the setting of fire and police service budgets for semi-autonomous fire and police authorities. Finally, many public services in the UK are directly provided by the National government or its agencies – examples include the National Health Service; the welfare benefits system and post 16 education services.

This complex administrative structure gives London a particular set of challenges to deliver some of the innovations in public services that New York City is achieving. Nonetheless, since the establishment of the Greater London Authority in 2000 significant progress has been made at local borough, city-wide and national government levels. In several areas London has begun to join up services across the administrative and geographical boundaries that cut across the city, to the benefit of Londoners, visitors to the city, and businesses.

In the United Kingdom the national government has far greater control over local and regional affairs than is the case in the USA. In 1997 Tony Blair's Labour administration took office persuaded that new technology could help it deliver more responsive, efficient

and citizen focussed public services; technology was and is seen as one of the main tools that will revolutionise the way public services are delivered. The UK Government believes that if public service authorities embrace technology, and implement the radical cultural and organisational change it permits, then public service quality will rise, and, at the same time, significant efficiency gains should be made, ultimately including hard cash reductions in budget requirements. These cash savings can then be either given back to citizens in the form of reduced taxation, or invested in front line services. This is the promise underlying the UK's e-government agenda, a promise that the corporate ICT sector has done everything it can to bolster, with case studies and sponsored research.

Since 1997 UK Government has developed a major e-government programme. Significant investment has been made available for nationally administered services, such as the National Health Service; and a steady stream of capital grants have been given to UK local and regional bodies. The suite of ICT projects now been implemented in the UK National Health Service, with over £6.3 billion investment, are by far the largest technology projects currently under way in Western Europe.

The national e-government targets

The UK Government has set out a series of high level targets for e-government, all to be achieved by the end of 2005. The most often quoted is that all public services are to be available electronically by that date. This target has been applied to all levels of public services in the UK and has been backed up significant funding and detailed programme documents, including the oxymoronic 'National Local e-government Strategy', setting more detailed targets for local and regional government and governing the allocation of 'implementing e-government' grants to local and regional government. The national strategy identified a set of core 'building blocks' for e-government under the headings:

- interactions
- access channels
- trust and connections
- enablers
- core systems
- people

A series of national projects, involving local and regional government partners from across the country, have been funded to develop standard approaches, and in some cases products, under each of these headings. London is well represented in the work on the main national projects, with several London boroughs considered to be leaders in the e-government field.

A key stream of national work in the UK has been to develop common technology standards. The adoption of common standards is rightly seen as a key enabler of service integration across and between different agencies. The national Government has

sponsored a significant volume of work on standards for public services. The UK e-government interoperability framework (known as e-GIF) sets out an increasing number of data management and technology standards. Compliance with the e-GIF is now mandatory for national government agencies, and strongly advised for local and regional governments. The e-GIF has been commended by the European Union as a model for other European nation states to follow.

There are two other main targets in this field. First, that by 2005, everyone who wants to, should have access to the Internet. This has led to the establishment of over 6,000 branded 'UK On-line Centres' across England and Wales – with over 600 in London alone. UK On-line Centres may be in libraries, community centres or other places and must offer free walk-in access to the internet with limited support or training. Second, that by 2005 the UK should have 'the most extensive and competitive broadband market in the Group of 7 most industrialised nations (G7)'. A variety of national initiatives have been put in place to achieve this – including, most recently, the establishment of so-called 'Regional Aggregation Bodies', intended to pool public sector spend on connectivity to exert a positive influence on the supply of broadband in the mass market – levering e-government expenditure to achieve this wider economic objective. London is just completing a nationally funded Regional Grid for Learning, providing broadband connections of at least two megabits per second for all 3,000 schools in London.

The London context

The Mayor of London published a policy statement on Information and communications technology in London in January 2004. This sets out the Mayor of London's position on a series of questions, all linked together by the thread of technology. On infrastructure it identifies the importance of broadband for London's economic success, and sets out the actions the Mayor is supporting to ensure that strategic investment is made in core and last mile infrastructure provision. It also highlights the mandatory policies the Mayor has set out in his new 'London Plan', requiring all new buildings in the City to be 'e-enabled' to a high standard; and ensuring that the work of London's 'Regional Aggregation Body' for broadband purchasing, works alongside LondonConnects, London's e-government partnership agency (of which more below). The Mayor's policy statement sets out his position on the so called 'digital divide', supporting the UK On-line Centres in London, but pointing out that accessing the Internet in a community centre or library is significantly less empowering than having broadband access in your own home, and further, that Londoners' propensity to be connected at home correlates very closely with levels of household income (nearly 90 percent of 'high income' Londoners have home internet access compared to around 20 percent of 'low income' Londoners). Finally the statement sets out the Mayor's high level priorities for e-government in London.

London implementing e-government

The London boroughs, the Greater London Authority and its regional agencies are making good progress towards meeting the Government's 2005 target, although the Mayor criticised the overly target driven nature of the national programme. UK Government focussed efforts initially on a few relatively simplistic targets. This had the effect of simply pushing agencies to get things on to web sites regardless of the take-up and value of these web facilities. In the face of this criticism from the Mayor of London and others, Government refined its approach. It has recognised that getting every public service on-line in its existing format on an un-visited '.gov' domain web site will not deliver either benefits to citizens or efficiency savings. The programme has therefore been re-focussed to concentrate on high volume transactional public services, and on areas where the re-engineering or transformation of services enabled by technology will have the most impact.

Accessing all channels

The world wide web has obviously become a key channel for information and service provision, and web services can revolutionise information handling in all areas, but all public facing organisations must recognised that a good web site is only one part of information and service provision. The telephone remains one of the most popular routes for citizens to access detailed information from public service providers in the UK. Print media and face-to-face are also important. So the web is not the only route through which citizens expect or wish to interact with the public sector. Digital TV has significant penetration in London; and the cable based digital TV providers can provide a return path so content can interactive. The UK, and London in particular, has one of the highest levels of mobile phone penetration in the world, so for the right services this should be an important channel; street based electronic information kiosks are also becoming commonplace. In short, London's government recognises that it has to support and maintain a wide range of channels, old and new. Of course, properly implemented the technology will enable organisations to do this in an efficient, cost effective manner.

Web sites – the public face of e-government

London's key regional public service agencies, notably Transport for London (TFL), but also the police and fire services, have built significant web presence. The TFL web site (www.tfl.gov.uk) in particular offers an ever increasing range and depth of transactions and transport information content. Londoners can buy tickets, pay their congestion charge (and register for payment by cell phone) or use the Journey Planner to work how best to get across town. www.VisitLondon.com is a new tourist and visitor web site, now consistently ranked among the top ten most visited web sites in the UK and offering hotel and accommodation booking, tickets for theatres and other attractions and a wealth of other information for visitors to the city. All 33 boroughs have richly functional web sites, with increasing numbers of transactions available. As highlighted above, in the last 18 months the focus has shifted to get high volume transactional services on-line – such as parking permit applications or council tax payments. www.camden.gov.uk is an

example of an award winning inner London borough web site recently re-launched using a bespoke Open Source content management system developed by the UK local government community (see http://www.laws-project.org.uk/ for more information).

Face to face and telephone based service delivery

Many public sector agencies in the UK, particularly local authorities, but some national government agencies also, have been developing 'One Stop Shops' or integrated local customer service centres during the last few years. Corporate extranets, Customer Relationship Management systems and other technology tools are now widely deployed to improve the quality of first line response to citizens' service inquiries. Many boroughs aim to enable their first line operators or One Stop Shop counter staff to be able to deal with at least 80 percent of citizen inquiries or service requests without the need to refer the customer on to someone else. In London several local authorities have signed strategic partnerships to outsource a set of their first line customer responses, often including the establishment of authority wide call centres and staffing in One Stop Shops in local neighbourhoods. The London borough of Newham were one of the first authorities to set up integrated service centres across their borough providing a single first point of contact for all their services, and in many cases co-locating with healthcare or other community facilities (www.newham.gov.uk).

Another London borough, the City of Westminster has completely overhauled their customer service strategy signing a major outsource agreement which includes establishment of an integrated call centre (www.westminster.gov.uk/).

This integration of frontline customer/citizen response services is where the potential for both cost savings and service improvements may be most obvious. However, without transforming the underlying services a call centre or One Stop Shop may simply expose poorly managed or under-resourced services. For example, a citizen may quickly find their way through to an un-answered telephone extension, or speedily complete an electronic form requesting a parking permit that never actually arrives. And to realise the cost savings in back office administrative staff requires the consolidation of resources from previously separate departments, departments that in many organisations value their autonomy.

Work is now under way to explore the further potential for the physical co-location of public services in London. With all public services on-line, the network of UK On-line centres referred to earlier could in some places also provide a first route into public services. Some of our key voluntary and independent sector partners, most notably the network of Citizens' Advice Bureaux, are beginning to use the ease of access that e-government gives their advisors to public service information, to expand their role as intermediaries between citizens (and their clients are often some of the most deprived members of our communities) and government. As is so often the case with technology, this new capacity for independent advisors to play a fuller role in delivering public

services, for example completing application forms or permit requests on-line with their clients, raises questions about the respective roles of public sector, private companies or third sector/ not-for-profit workers. From the citizens point of view e-government can blur the boundaries between agencies – some citizens will welcome this, others may transfer their lack of trust in one agency to the other agencies now operating alongside.

Street based information devices

Many authorities in London have worked with providers of electronic information kiosks – now becoming an increasingly common sight across London. The GLA has experimented with a range of content on such kiosks, including information for rough sleepers and for victims of domestic violence. Transport for London is trialling the provision of location specific travel information with kiosk providers in London.

Transport for London have also recently signed an agreement with a major mobile phone company to provide real time travel information to their customers building on an SMS based travel alert system already in place. Discussions have begun about the best ways to make more sophisticated services available on 3G phones as their take up increases. Several London local authorities are equipping their community based staff with wireless enabled mobile devices; so for example, the care workers can complete a home assessment while with a citizen in their own home. In theory of course the technology should permit immediate assessment of a citizen's entitlement and trigger the provision of the service there and then, but achieving this end-to-end service integration is hard. It also challenges the way many public services are funded. In many parts of the public sector the amount of service available in a single year (for example adapting the homes of older people with disabilities to enable them to go on living independently) is limited by the amount of budget available. Making it easier to assess entitlement to a service can mean that all available budgets are used up in the first six months of the year.

As can be seen many London organisations have put in place a wide variety of new technologies to support their service delivery. Less progress has been made on the more painful organisational transformations, breaking down internal departmental barriers and integrating back office services.

Local innovation

London's public service agencies have also become leading innovators in the application of new technology. The central London congestion charge is a famous example of this, in its use of video cameras for enforcement and the inclusion from day one of a mobile phone based payment service; Transport for London's 'Oyster' smart card based integrated ticketing service is another at the city scale; but there are many smaller local examples of innovation.

Five technology innovations in London

The Employment Café is a small publicly funded job and employment support agency based in Brixton. It aims to get local people into work, particularly the long term unemployed and people from ethnic minorities. The Café identifies training options for clients but also acts as an employment agency. Clients' details, including their skills and experience, are logged onto a database, but the key breakthrough came when staff noticed that over ninety percent of the contact numbers they were given were cell phone numbers. Using their database they now send SMS text message alerts to clients when a relevant and appropriate job opportunity for that individual comes in. Work is now under way to see if this simple application can be shared city wide.

The local police division in Southwark, an inner city borough in South London with significant levels of deprivation, won a small amount of Government funding to develop a reward scheme for local young people. The 'Karrot' Card is issued and administered by the local police. Teenagers use the smart card to register at school and are awarded points for good attendance and completing their school work. The reward points can be redeemed for cinema tickets, entrance to the local football club and sports centres, discounts on clothes and music from local retailers and a range of other activities. One class achieved a 100% attendance record and elected to pool all their reward points to send a disabled class mate and his family to Paris for a weekend break. The police and local schools report a significant decrease in levels of truancy in the neighbourhood.

Westminster City Council, the local borough for Soho, the West End and London's Theatreland, has recently launched 'Wireless Westminster'. This is a council owned wi-fi network in Soho. Soho is the heart of London's night time economy and the City Council deploys very significant resources to manage the area. The wireless network has reduced the costs of deploying CCTV in any individual spot to a fraction of previous levels. The network will be used for remote noise level monitoring and to provide city council staff and local police with wireless access on the street to office based systems – for example to look up a premises license details or monitor street cleansing contract compliance.

Carpenters Connect is a 'wired-up communities' project. The local authority developed a bespoke system to connect up 750 households on a public housing project –Carpenters Estate. Residents get a TV, set top box and keyboard that convert their TV into a broadband enabled PC including internet access and word processing and other common PC applications. The project created an ICT and TV. skills training suite in the local community centre and training residents to make their own video content, downloadable across the network. This is one of a number of projects aiming to provide ubiquitous access to ICT in London's more deprived neighbourhoods.

E-democracy: The Greater London Authority has been working with academics at the Centre for Advanced Spatial Analysis at University College London to develop and then test the use of interactive, photo realistic 3D virtual reality models of London. The underlying premise is that 3D virtual reality content could be better at engaging some citizens in thinking about the issues facing their city than text based public consultation documents on web sites or in public libraries. Accessible through a 512K broadband connection, a pilot 3D London virtual gallery will be launched shortly.

These are just a few examples of the innovations taking place in local public services across London. The question confronting the Mayor when he assumed office was how best to spread and share successful local innovations like these; and how to achieve the inter-agency back office integration that joined-up city-wide public services require.

The case for integration

London's population is more mobile than anywhere else in the UK: workers, school children, students and tourists all routinely cross administrative and geographic boundaries in their daily lives. The promise of e-government is that public services can be integrated across organisational and geographic boundaries so that service users get a consistently high quality service however, wherever and whenever they access it. If a South Londoner is on a bus in North London and wants to report an abandoned car from her mobile phone, she should not be required to know the difference between a Transport for London road and a borough road, nor know whether she is in the borough of Camden, Islington or Haringey. Services such as child protection, mental health or trading standards will only overcome some of their biggest challenges if they are able securely and safely to share case data and information between themselves and with other agencies.

Responding to this obvious need, the Mayor and the London boroughs set up a new partnership agency in autumn 2000. LondonConnects operates at the city level and is charged with the task of supporting and encouraging the adoption of new technology throughout the public sector; with sharing experience and good practice in service innovations; and with delivering key inter-agency strategic projects, joining-up and integrating public services to the benefit of Londoners, tourists or businesses. It is a not-for-profit company jointly owned by the Mayor and the London boroughs.

LondonConnects was so named because the founding partners recognised that while new technology is a powerful tool, real value and real public service improvements will come through connecting the way services are delivered in a more coherent way, not from simply throwing technology at the problems. Technology should be used where it can help, and not adopted for its own sake. In London, the economies of scale that some

technology innovations make possible, or require, support the view that some of the improvements to public services that London needs can only be delivered by agencies working across their organisational and geographic boundaries. LondonConnects acts as a catalyst, identifying realistic projects or opportunities, developing high level business cases and specifications, and bringing partners to the table to deliver.

Through LondonConnects local service improvements or innovations can be shared, and agreed city-wide protocols (on security or data sharing for example) or projects can be rolled out to all. However, without significant ongoing support from all key public sector players, the expected service quality and efficiency improvements that integrated e-government can deliver will not be achieved. This year the London boroughs agreed to increase their backing for LondonConnect, leading to the commissioning of three strategic projects:

A public services portal for London

A Google search will bring back more pages referring to London (37.5 million) than for any other major world city, but there is not currently an obvious official starting point for e-public services. This position is a reflection of the complex, not so say confusing way in which public services are organised in London and the multiple organisations responsible for delivering different bits of them.

Through LondonConnects, and in partnership with the boroughs and other key agencies, the Mayor is supporting the development of a city-wide public services portal for London, bringing integrated web access to all public sector services in London from a single starting point. From the public's point of view this should start to overcome at least some of the issues about knowing where to go or who to ask about a specific public service. Learning from other UK cities and international partners like New York, the portal will bring content together from multiple sources in a meaningful way, presenting it to the user in a coherent and consistent way.

A capital card

London has a great opportunity to lead the world in the adoption of a 'Londoner's card' - a city smart card, controlled by individual citizens, that provides a range of services and benefits. Transport for London's Oyster Card is already proving extremely popular with the travelling public, and the opportunity to offer appropriate non-transport services on a single card is compelling.

Pilots in schools in have shown that using smartcards for payment of school meals considerably increases the numbers of children taking up free school meals, perhaps because it reduces the stigma attached; card based 'reward schemes' like 'Karrot' have improved school attendance and reduced anti-social behaviour; a London university has made very significant cash savings through the introduction of a single smart card to control access to university buildings and library books. Some London boroughs working with Transport for London and supported by LondonConnects are beginning to issue smart cards that combine on one card Oyster travel ticketing with access to local library and leisure services. LondonConnects is working on the detailed technical and legal arrangements that are needed to spread these pilots London-wide, and identifying new applications for the card.

LondonConnections – a common infrastructure for data sharing

E-government investment in the UK has been dominated by the national Government's targets, and this has tended to lead to great efforts to deliver things immediately visible to citizens (and politicians). It has proved difficult to take investment from these business focussed projects to put in place a common infrastructure, though most ICT professionals in London recognise that such a common network would make delivering many other projects much easier. A secure infrastructure linking up different agencies helps every other project but to date individual agencies have not pooled the necessary investment to put such a network in place in London. However, the co-incidence of a number of events, and the changing technologies available, mean that London now has the opportunity to create such a public services network.

This major LondonConnects project will deliver the optimum sustainable long term model for London Boroughs and other London based agencies to deliver e-Government services to the public and to exchange information securely between them. This requires secure broadband connections across Borough boundaries to permit the sharing of and access to confidential data. The LondonConnects project will address a range of issues including:

- Network infrastructure
- Data Exchange protocols and agreements
- Guidance on data protection issues
- Audit and security.

Conclusions

Some high profile strategic projects in London, such as congestion charging and the Oyster Card, have already demonstrated the power of technology to enable or improve

services. Across the public sector, there is a feeling that many of the 'quick wins' of e-government have already been taken. The more signficant service transformations challenge organisations internal and external boundaries and are proving much harder to put in place, particularly in the face of London's complex administrative arrangements.

The next twelve months will be a crucial time for e-government in London. All agencies are struggling to comply with the national e-government targets in time for the 2005 deadline. National Government is hinting that those who do not deliver may face financial penalties. LondonConnects has committed to delivering some high profile strategic projects, and it must do this while maintaining broad ongoing political support for its activities. Politicians at the national and city level know that a lot of investment has been going into technology for public service delivery. It is vital that tangible returns on that investment emerge so that the promise of e-government is not broken.

Web references

www.london.gov.uk - The web site of the Mayor and London Assembly, links to the 33 London borough web sites
www.london.gov.uk/gla/publications/elondon.jsp - E-London policy and research publications
www.londonconnects.org.uk - London's regional e-government partnership, contains detailed information on LondonConnects strategic projects and much else on e-government in London
www.localegov.gov.uk/ - Web site of the UK national local e-government strategy
www.e-envoy.gov.uk/Home/Homepage/fs/en - Web site of the UK 'e-envoy', charged with co-ordinating the UK e-government programme

www.tfl.gov.uk - web site of Transport for London
www.VisitLondon.com - London's official visitor web site

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