

Cover feature



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All wired up

The public sector must overcome its fear of IT failure and embrace technology-enabled reform. Owen Barder argues that creating systems of shared services offers a wide range of potential efficiencies

New technologies have transformed consumers' lives. Ways of buying airline tickets, booking a hotel room, buying a book or CD, getting cash, renting a flat – even finding a boyfriend or girlfriend – have changed dramatically in the past decade. Many businesses have used technology to offer more convenient, personalised, joined-up and effective services, generally at a lower cost.

But if a time traveller from 20 years ago arrived in a job centre today or in a hospital or school, or applied for a passport or driving licence they would feel at home immediately. While some public services have made noticeable progress, many have hardly changed. The contrast with customer service in the private sector is beginning to look stark.

One cause of this gap is that the government has been paralysed by the fear of failure. Although most government IT systems work as intended, high-profile disasters have diminished the appetite of public service managers for anything regarded as a risky investment in new technology.

Public service incentives reinforce this aversion to risk, as does parliamentary and public scrutiny.

Senior managers chosen on the basis of traditional civil service competencies are rarely well equipped to oversee complex business transformation programmes, or manage IT-enabled change.

Businesses that miss opportunities to provide better services at a lower cost will rapidly lose out. But in the public sector, there are fewer incentives to motivate change: managers who are prepared to bet their future on the successful implementation of a huge IT project are rare.

In the light of a number of well-publicised IT failures, the government decided to tighten up the management of large procurements. The introduction of Gateway Reviews in 2001 reduced the risk, but it might also have reinforced conservatism in IT-enabled change, because it emphasised the causes of failure and encouraged managers to avoid them by abandoning – or never even starting – projects.

The slow pace of change is perplexing, because so much of what the UK government does is ripe for improvement, as the government itself acknowledges.

Technology can transform cheaply the way services are delivered and, in some cases, their very nature. For

example, NHS Direct, which did not exist eight years ago, is now the world's largest provider of telephone health care advice.

Transformational government, the strategy launched by the government in November 2005 to jump-start the shared services agenda, set out an ambitious vision of technology-enabled reform of government. The idea was that public services would be designed around the citizen, built around shared services and overseen by a new breed of IT professionals in government. These are the right objectives. The challenge is to find a way to implement them.

The strategy promises a new approach to building citizen-centred services. There will be standards for government consumer research, and 'customer directors' for groups such as farmers and older people, to represent their interests. A new committee will issue guidelines and co-ordinate work across government.

But this alone will not deliver citizen-centred services. The public wants seamless services orientated around their everyday lives, not divided into bureaucratic government silos.

Ten years ago the government tried to set up a change of address service which only needed people to fill in a single, web-based form. Every part of government was then to respond appropriately, including the national and local tax authorities, vehicle licensing and voter registration. But this was beyond us then – and now.

However, the constraints are not technical: they are failures of leadership and policy. Citizen-centred services will flow



Transformational government: this strategy, launched in 2005, was intended to jump-start the shared services agenda

High-profile disasters have diminished the appetite of managers for a risky investment in new technology



Chilean lessons: the government there has set up an infrastructure that allows new services for citizens to be added to it

from the ability of services to introduce processes that use information held elsewhere in government. A common framework of shared security, data and message-reporting is required so that every service can use common data and shared processes efficiently and securely, within the constraints of privacy laws.

The government has called for shared services, such as human resources, finance and customer service call centres. The aim is to reduce waste and avoid inefficiency by reusing and sharing technology investment. A new, pan-government, Shared Services Board has been established and nine separate sectors have each been asked to develop plans.

With a bit of squeezing and a lot of pressure, it might be possible to impose arranged marriages of public sector corporate services, and establish joint data processing centres for functions such as HR and finance. This could bring some efficiency savings for government agencies and mean that senior managers are less distracted from running their core business.

But there is a significant risk that these functional silos will, in time, become new obstacles to the service improvements we want and need.

Once functions are embedded in these centres, the opportunities for designing new, flexible ways to deliver services will be reduced by the need to agree and make changes across all the organisations that share the service. The cost, complexity and risk of building citizen-orientated services will rise exponentially.

For example, suppose that a department that uses many consultants wants to build an on-line tender service. Contractors would register their interests and skills and reduce costs by entering corporate information just once, and bidding for contracts on-line. This could streamline administration by linking on-line transactions to back-office systems for budgeting, authorising payments, and performance management of projects.

But what would happen if the department had joined its finance system with three other public serv-



High-profile IT problems: Customs & Excise spent more than £100m on an e-VAT system to improve efficiency, only to find that it was beset with technological problems and low take-up

ices? It would not control components of the financial system – budgeting, accounts payable, expenses – to which it would link. Agreeing changes across functions within a single organisation is hard enough: it would be almost impossible to get agreement between organisations, especially if the benefits were limited to a single stakeholder.

Few managers would take the risk of approving changes to a shared financial system on which several government services depended, just so one department could build a portal for contractors.

The goal of shared services is the right one. But instead of building grand new data-processing monoliths, the private sector is today increasingly concentrating on developing a more flexible grouping of loosely coupled services.

The priority for government should be an IT strategy that organises the individual functions in government applications into interoperable, standards-based services that can be shared, combined and reused quickly to meet business needs.

For example, once the government has developed a procurement system or a payroll module, these should be used and adapted by other business units.

This would catalyse significant changes:

- Public services would organise services to correspond to citizen experiences, such as starting a business or moving house, rather than the functions of government
- The frontline service, not the IT department, would design and create applications directly
- Organisations would not bet their future on a single, long-term IT development – instead they would implement change in smaller steps using small, reusable, interlinked modules
- Systems would be designed to change to meet future needs rather than being tightly coupled to today's processes, and
- Instead of settling on a single, homogenous technology, the government would adopt a variety of different technologies appropriate to the needs of the services.

A common, government-wide structure, based on components, applications and data that could be reused and shared, would reduce development time, cost and risk. Frontline services would control their own processes, which would allow them to respond flexibly to changing needs and develop increasingly customer-centric services.

We should learn from the Treasury in Chile. It has implemented a taxpayer portal that allows the government to add new services and reuse the infrastructure. Building blocks now include facilities for citizens to make payments by credit card or wire transfers and an identity-authentication module.

The first phase of the project, which enables citizens to pay property taxes, was completed in only three months. The tax credits for rural business development were added to the system: the time it took to process them dropped from 60 days to just four. The system is now used for services such as licences, permits, registrations and fees.

Improvements in government services do not have to rely on huge, mission-critical IT projects, managed



Getting there: IT might be playing a more important role in the NHS, but more could still be achieved

by an army of highly paid business and IT consultants. Instead, they can be designed and implemented on a smaller scale. There is no need for make-or-break investments, organisational upheavals or demanding change management programmes, all of which have been poorly managed in the public sector.

The benefits of shared services described in *Transformational government* can be achieved. Software development and integration costs across functions would be reduced, and there would be savings from the elimination of redundant data and processing.

However, it is vital to protect citizens' privacy – there is little public appetite for a system that gives the whole of government access to someone's personal information. A decentralised system responds to that concern by storing data in separate systems and restricting the information that is shared. While the user can see all the information that relates to them, government employees would only have access to information relevant to their particular function.

Decentralised services would enable Parliament

and the public to make case-by-case decisions on the right balance between the convenience and efficiency of joined-up government and the disadvantages to personal privacy of sharing data.

This approach would build a platform for responsive and adaptive, joined-up government services. But imaginative leadership from the centre of government is essential to achieve it.

A service-orientated architecture for the whole of government would require the central imposition of standards and infrastructure, and the establishment of a single message broker, data service layer and security layer. All new government systems would have to be based on open standards and a common infrastructure, and comply with transparent, centrally determined and audited security and privacy restrictions.

Transformational government nods in this direction. The government has established a board of experts to 'provide information and assistance on delivering best practice for common infrastructure in the public sector' and identify opportunities for collaborative working.

But this is not enough. Ministers and senior officials need to understand and embrace the opportunity that a service-orientated structure would bring, and then use political authority to ensure that change happens across the whole of central and local government.

The imposition of information standards would doubtless be denounced by some as an intolerable assault on their constitutional autonomy.

But there are obvious precedents. Nobody questions the right of the Treasury to impose financial management and accounting standards, while the Civil Service Commission imposes and monitors standards of fair and open selection and oversees standards of propriety in the civil service.

Far from restricting the autonomy of government agencies, the imposition of cross-government standards for the management of information would create a common framework, within which departments would be free to innovate, adapt, share and build genuinely transformative services.

Only the centre of government – the Cabinet Office and Treasury – can manage this change. In the long run, the benefits of a shared infrastructure with common standards would far exceed any short-term gains from combining corporate services.

In the absence of strong central leadership, some *de facto* standards may emerge naturally as government information systems evolve, and some co-operation and co-ordination will be put into effect from the bottom up.

But rapid and substantial changes in government will not be possible unless steps are taken to put a unifying architecture in place. This would liberate government providers, and enable them to develop efficient services that meet the needs of citizens. Then we could let a thousand flowers bloom.

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