

Government cathedrals, government bazaars

Essay 7

Vast data processing warehouses will not create more efficient and customer-oriented public services. Smaller and more flexible shared service modules based on a common, cross-government IT architecture are required instead.

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New technologies have transformed consumers' lives. 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 last decade. Many businesses have used technology to offer more convenient, personalised, joined-up and effective services, generally at 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 immediately at home. 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 fear of failure. Although most government IT systems work as intended, high-profile IT disasters have diminished the appetite of public service managers for anything seen as a risky investment in new technology. Public service incentives reinforce this risk aversion, as do parliamentary and public oversight. In addition, 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 lower cost will rapidly lose out. In the public sector, there are fewer incentives to motivate change: managers who will bet their future on the successful implementation of a huge IT project are rare.

The slow pace of change is perplexing because so much of what the UK government does is ripe for improvement, as the *Transformational Government* strategy acknowledges. Technology can cheaply transform how services are delivered, and in some cases their very nature. For example, NHS Direct, which did not exist just eight years ago, is now the world's largest provider of telephone health care advice.

In the light of well-publicised IT failures, the government decided to tighten up the management of large procurements. The introduction of 'Gateway® reviews' in 2001 has reduced the risk of IT failures, but it may 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 starting – IT projects.

Transformational Government sets out an ambitious vision of technology-enabled reform of government. Public services will be designed around the citizen, built on a culture of shared services, overseen by a new breed of IT professionals in government. These are the right objectives. The challenge is to find a way to implement this vision.

Citizen-centred services

Transformational Government promises a new approach to building citizen-centred services. There will be new standards for government consumer research, and 'customer directors' for groups such as farmers and older people, to ask them what they want and 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 government services

oriented around their day-to-day experiences, not divided into bureaucratic silos of government. Estonia, for example, has had the advantage of building new government institutions from scratch. So when you register the birth of a baby in the population register, the government automatically starts to pay your child allowance entitlement into your bank account. There are no forms to complete. It saves you time, and the government work. Registering a birth also automatically adjusts your tax code and arranges visits from your local health worker (even though this is a service provided by a different tier of government). This works because Estonia has developed a common architecture linking all government services together.

Ten years ago the UK government tried to set up a single service for citizens to notify a change of address by filling in a single web-based form. Every part of government would then respond appropriately, including the national and local tax authorities, vehicle licensing, and voter registration. But even this was beyond us, and remains so today. The constraints are not technical: they are failures of leadership and policy.

Citizen-centred services will flow from the ability of government services to introduce processes that use information held elsewhere in government. A common architecture 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.

Shared services in the 21st century

Transformational Government calls on the public sector to standardise and share commodity services such as human resources, finance and customer service call centres. The aim is to reduce waste and avoid ineffi-

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ciency 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 for shared services.

With a bit of squeezing and a lot of pressure, it may be possible to impose arranged marriages of public sector corporate services, establishing joint data processing centres for functions such as HR and finance. This could bring 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 necessary service improvements. Once functions are embedded in these centres, the opportunities for designing new and 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-oriented services will rise exponentially.

For example, suppose that a government department that uses many consultants wants to build a citizen-centred service to facilitate bidding for contracts. This might enable contractors to register their interests and skills, to reduce bidding costs by enabling them to enter corporate information only once, and to bid for contracts online. The systems would be used by the department to manage a supplier database, track project implementation, make electronic payments and monitor and compare contractors' results. This could streamline administration by linking online transactions to back-office systems for budgeting, authorising payments, performance management of projects and knowledge-sharing.

Now consider what would happen if the department had joined its finance system with

three other public service organisations. It would not control components of the financial system – budgeting, accounts payable, expenses, overseas transfers – 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 departments 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 cathedrals, the private sector is today increasingly concentrating on developing a more flexible bazaar of loosely coupled services.

A shared architecture for government

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 an authentication module, a procurement system or a payroll module, these should be used and adapted by other business units sharing the same information architecture. This would require a significant change in mindset:

- Public services would organise services to correspond to citizen experiences (starting a business, moving house) rather than the functions of government (tax, benefits, voter registration).
- The front-line service, not their IT departments, 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 agile and designed to change to meet future needs rather than being tightly coupled to today's processes.
- Instead of settling on a single, homogeneous technology, the government would be able to adopt a variety of different technologies appropriate to the needs of the services, linked by shared standards and message-orientated processes.

A common, government-wide architecture would reduce development time, cost and risk, based on reusable, sharable components, applications and data. Front-line services would control their processes, enabling them to respond flexibly to changing needs and develop increasingly customer-centric services.

Take the example of the Treasury in Chile. It has implemented a taxpayer portal which allows the government to add new services continuously and reuse the infrastructure to serve multiple purposes. Building blocks include facilities for citizens to make payments by credit card or wire transfers and an identity-authentication module: these reusable components



have since been shared repeatedly across other applications. The first phase of the project, enabling citizens to pay property taxes, was completed in just 90 days. When rural business-development tax credits were added, processing time for citizens dropped from 60 days to just four. The system is now used for services as diverse as tracking election expenditure, customs payments and all types of licenses, permits, registrations and fees. Thousands of private-sector businesses are also adopting this approach to join up processes across the value chain – from Virgin Mobile to BT Global, from Standard Life to Wachovia.

Improvements in government services do not have to rely on huge, mission-critical IT projects, managed by an army of highly paid business process and IT consultants. Instead they can be designed and implemented on a smaller scale, reusing existing components and built on – and contributing to – the shared platform. 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: integration costs across functions would be reduced, and there would be savings from the elimination of redundant data and processing. Software development costs would be reduced by shared, reusable modules. But this approach also builds a platform for responsive and adaptive, joined-up government services, designed and managed by the business.

Strong leadership required

A service-oriented 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. Imaginative leadership from the centre of government is essential. *Transformational Government* nods in this direction and the government has established a Common Infrastructure Board 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 sufficient. Ministers and senior officials need to understand and embrace the opportunity that a service-oriented architecture would bring, and then use political – and perhaps legal – authority to ensure change across the whole of central and local government.

The imposition of information standards would doubtless be denounced by some agencies 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

Protecting privacy

Respecting privacy is an important challenge for citizen-centred services. There is little appetite for a system that gives all of government access to a citizen’s personal information. A decentralised system, built on a common architecture, responds to that concern by storing data in separate systems and restricting (and auditing) the information that those systems share. While the user can see all information that relates to them, government employees would only have access to information relevant to their particular function.

Combining separate systems with common standards enables 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. In addition, the data and security layers of a decentralised architecture enable more effective ring-fencing of information to protect privacy than is possible in large-scale shared databases.

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 will 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, enabling them to develop efficient services that meet the needs of citizens. Then we could let a thousand flowers bloom. ■

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