

Chapter 8

Reshaping the State and its Relationship with Citizens: the Short, Medium and Long-term Potential of ICT's

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Introduction

Government has always been concerned with information and communication as much as control and coercion: writing was born out of tax collection, bureaucracy was pioneered as a means of managing territories and people with the use of records, commands and intelligence (the very word statistics comes from the German 'Staat'), and all states have paid close attention to rituals and propaganda.

Each wave of technology has changed the options available for the organisation of government, shaping how much can be managed, delegated, commanded or coordinated, and there has been a coevolution of techniques of governance—the new knowledge of professionals, methods of raising taxes, measuring and monitoring—and of communications technology, such as scripts, roads, telegraphs, satellites and more recently the web and the grid.

This evolution has not always been fast. It took over a century from the invention of the telephone to its widespread application to government services—for example placing nurses backed by diagnostic software in call centres. But the last 10-15 years have brought a dramatic acceleration (albeit one that has probably slowed in the last 2-3 years) in the application of new technologies making use of the web in and around government, an acceleration accompanied by a probably unprecedented, real time, running commentary from academics and consultancies.¹

¹ For example Accenture, *E-government leadership: High performance, maximum value* (London: Accenture, 2004).

In terms of the maturity of applications the front runners remain Canada, the US and Singapore; but there are probably some 8-10 countries at roughly similar stages of development, often making parallel mistakes, but steadily transforming the day to day business of government. E government is a perfect example of the rapid trend towards continuous benchmarking by governments and the acceleration of cross-border learning, albeit much less tempered by hard evidence than fields like macroeconomics and labour market policy (and more vulnerable to hype from vendor companies).

This paper draws both on international and on UK experience and aims to show that the question of e government is inseparable from broader questions of government: how it is evolving, in response to what forces, with what tools, and taking what shapes. I suggest a framework for assessing impacts in terms of public value. And I suggest that some of the most promising developments involve a shift from government providing structures, to government providing infrastructures on which more diverse forms of social organisation can be based.

Public value and e.government

Grandiose claims have been made for e.government, including that it would deliver:

- Major efficiencies
- Increases in overall societal productivity and competitiveness
- Transformations in the relationship between citizen and state

The now familiar distortions of rhetoric that have accompanied ICTs for several decades have been present again during the phase of major investment in e applications. Behind these claims the central issue for any state is whether e applications contribute to legitimation—the trust that is essential to collecting taxes, electoral success and the day to day functioning of government. This legitimation can be understood more precisely as an activity of value creation by the state. Broadly speaking states that create public value will tend to be legitimate, able to act, to recruit, to persuade citizens to share information and so on. The fundamental issue of e.government is how much it creates—or destroys—public value.

This question of public value has been the focus of a good deal of recent work. The core arguments of public value theory² are:

- that in democracies states exist to create and add public value—meeting the needs and wants of citizens
- that value is generally provided through a combination of: outcomes, services and trust (or the quality of the relationship between states and citizens).
- that public value has to be constantly discovered through politicians and officials interrogating public demands, discovering relative priorities
- that this value is different in nature from private value, and from the conventional accounts of welfare economics, in part because it is shaped out of dialogue and politics rather than existing as an objective reality
- that a clear understanding of value has to come prior to any meaningful discussion of efficiency or productivity (otherwise reforms which appear to increase efficiency risk destroying value).

E government has evolved as a means of contributing to value in all three areas—outcomes, services and trust—and this provides a useful rubric for understanding its evolution, assessing its current and future performance, and avoiding the pitfalls of technological determinism and hype. It also provides a helpful counterweight to overdetermined accounts of ICTs in government which postulate very general new principles linked to the broader evolution of a knowledge society or economy: instead, as I will show, some of the directions of change are contradictory.

² Summarised in *Creating Public Value* by Mulgan, Kelly and Muers (Strategy Unit, Cabinet Office, 2003); other relevant literature includes Mark Moore's book 'Creating Public Value' published in 1995, and a special issue of the *Australian Journal of Public Administration*

Outcomes

First, outcomes. The following are some of the varied ways in which the broad family of e.government applications can assist governments in the achievement of outcomes for which they are held accountable (such as lower crime, unemployment, better health &c):

- The simplest applications are models of information provision that help to deliver superior outcomes—for example online systems that provide comprehensive jobs databases have helped employment services to improve their outcomes in Sweden, the US and other countries. Often these have required new kinds of public private partnership.
- Somewhat more sophisticated are online curricula that assist home based working. These are beginning to have an impact, building on the various public and private on-line learning services now available (ranging from the UK's National Grid for Learning and Open University to the University of Phoenix and the plethora of private distance providers). They can provide a base of common knowledge, along with diagnostic tools as well as learning.
- Within public services a growing impact is being achieved by much more transparent performance data: a well known example is the use made of crime statistics for regular peer review sessions and performance management in the New York COMSTAT system. In the UK there is now web access to near real time performance data on schools, police forces, hospitals and welfare providers. This sort of transparency is still resisted by many professions.
- A panoply of policy measures have been tried out to enhance knowledge intensive economic activity. Despite many false starts (for example in the promotion of clusters and technopolises) these have become increasingly sophisticated: the ICS Polynet project led by Sir Peter Hall and conducted for the European Commission will show the rapidly evolving synergies between different advanced business services and the interplay of communications bandwidth, regulatory environments, transport (air and high speed rail), key institutions (big firms, markets and universities) and labour markets.

- Within fields of public policy we are beginning to see the use of more sophisticated knowledge management systems to spread best practice, research findings and organise communities to share tacit knowledge: the Cochrane collaboration provides one end of this, the UK NHS health collaboratives are another example. Private sector experience with knowledge management has been decidedly mixed; these public examples too involve major issues around culture, incentives and day to day practice. The networks of mutual learning established in the UK around programmes like Surestart (for under 5s) and the New Deal for Communities (regenerating poor areas) are good models for the future.
- Some governments are using more sophisticated tracking of data to improve outcomes. In the UK the move to tracking of all children at risk is an important—and controversial—example. One of its potential virtues is that it enables much more holistic organisation of government across organisational boundaries.
- Looking further ahead there are major potential gains to be achieved from the application of grid computing to efficient outcomes—mapping patterns in real-time using data collected from medical trials or public services in order to accelerate learning.
- Finally, a longer term implication of some current applications is to make knowledge more widely available not just to professional practitioners but also to the public in order to improve outcomes. In the UK NHS strategy is based in part on an assumption that the public will over time take greater responsibility for their own health, supported by online diagnosis and information systems; easily organised forums to bring together people with similar conditions; and wider understanding of the links between personal behaviour and health outcomes.

In all of these areas e-government is bound up with the broader trends towards making government more consciously knowledge based, shaped by evidence, and also providing much greater quantities and quality of knowledge for society and the economy to organise themselves.

Services

The second area of public value, services, has been the main focus of rhetoric about e.government in recent years. Much of this has primarily drawn on consumer models of service delivery, themselves often drawn from manufacturing.

Uses of e applications in services have tended to follow a fairly common pattern of evolution running from:

- Information—provision of websites containing existing information, some of which is banal but where in some cases even quite modest measures like making all health inspections of restaurants available online can have a big impact in terms of public value
- Communication—for example NHS Direct providing online diagnosis, or the moves to brigade different services together in more interactive ways; providing frontline staff (eg police officers, housing repair teams) with PDAs and other mobile devices to speed up response to public issues.
- Transactions—for example putting all financial transactions online as in Singapore (where most transactions can be performed online, including payment of fines and taxes); Australian visa services which are fully electronic from end to end; or the UK's Courts OnLine service which allows citizens to launch minor cases in a purely electronic way.
- Open access—moving beyond functional transactions to enrich service delivery cultures through allowing many more comments and informal knowledge to be combined on the web.
- In the longer term offering users the means to pull together a mix of elements to customise services to their own needs. The UK's Direct Payments model for the disabled is one variant of this: providing a choice over mixes of money, service provision all backed up by both face to face and online information and help. These models come closer to the service approaches favoured in premium areas of the market—highly personal, responsive—and move further way from the mass models still predominant in most private sector service.

Canada has probably gone furthest in the deliberate targeting of user satisfaction with services, addressing the 5 main drivers of satisfaction (timeliness, knowledge, extra mile/smile, fairness, and outcomes) and showing a steady improvement between 1998 and 2002 at every level.

These evolutions of service delivery models raise some difficult issues. One is that each further state of evolution requires some shared data systems across organisational boundaries, and some common protocols. Some countries have felt able to adopt unique identifiers as in Finland; but in many others there is insufficient trust in the state to allow this. Another is that integration of services across boundaries may be easier for non-state organisations given the nature of bureaucratic and professional interests: those states most willing to allow porousness across boundaries may reap gains fastest. A third is that these all enable more networked organisational structures with greater decentralisation of operational decision making in ways that are likely to threaten the power of middle tiers.

All are in part about altering the mix of channels to maximise public value—which implies automating some services and intensifying the personal nature of others.

Trust

The most difficult area of public value has always been the third—trust. Here, the development of e government is bound up with the broader opening up of the state to scrutiny, and the changing nature of the conversation held between states and the public. The picture is complex. Most citizens relationships with states are abrupt, unsatisfying and disjointed—voting in an election, serving on a jury, receiving schooling, being paid pensions and so on.³

There have been some common moves to reframe the environment for trust, including:

- Greater use of pre-legislative scrutiny, with legislation online prior to its agreement

³ See *Touching the State*, Design Council, London, 2004

- The move towards permanent consultation and conversation⁴, bound up with the spread of Freedom of Information legislation. Governments are to some extent being turned inside out as previously secret performance information becomes public.
- Methods of policy making with wider communities involved—for example the relatively open methods used by bodies like the UK Strategy Unit, including publication of project plans and working papers; likewise at local level the normalisation of online committee timetables, minutes, webcasts &c
- Changing practices in politics and parliaments, as politicians open themselves up to email, dialogue (and learn to cope with new ways of orchestrating campaigns). The British Labour Party's Big Conversation designed to help frame its forthcoming manifesto is an interesting example of a new approach both to face to face meetings and to use of the web
- New vehicles for citizen involvement—such as the BBC's very successful iCan project; mysociety.org which is producing social software such as theyworkforyou.org which provides easy access to all elected representatives; and upmystreet.com's geographically tagged message boards
- Social programmes addressing digital divides (cheap or free computers; access to institutions; training programmes);⁵ the UK now has near universal access to free internet (via some 6000 government supported sites in the UK)
- Wired neighbourhoods—encouraging greater mutual support and social capital (building on findings such as Keith Hampton's study of Toronto in the late 1990s which showed that residents who were connected online had far more day to day interaction with other residents than those who were not connected).

⁴ For example the UK's rule of 12 weeks consultation on policy proposals

⁵ Engaging the community in e-government: a briefing paper from the Strategic Support Unit (Improvement and Development Agency, 2005)

All of these are in part about changing the nature of the conversation between state and citizen—making it more reciprocal, open and nuanced. However, these trends are complex.

i) Greater transparency combined with aggressive news media can reduce trust (as some countries have learned with FOI).

ii) there are complex dynamics in public engagement—sometimes as in Porto Allegre public expectations can rise so fast that even successful programmes of involvement can lead to disappointment

iii) Analysis of trust in public institutions shows that the key determinants are how institutions behave—competence, integrity, speed of admitting mistakes—rather than any more structural trends.

Tensions around outcomes, services and trust

Outcomes, services and trust can be closely linked. In several countries the major barriers are now perceived to be public take-up rather than government provision. This of course raises the question of whether they are right to be sceptical of the offers being made. A related issue is whether the key barriers are questions of trust, in particular confidence in government's commitment to confidentiality. In some countries this may require stronger principles to underpin use of personal data—for example that identifiable personal data should remain under the control of the individual; guarantees of maximal anonymity to organisations providing data to governments; and strong sanctions for misuse of data.

This is just one of many complex ways in which trust, outcomes and services interrelate. In some countries the paramount issue is security against threats; where government is seen to respond inadequately one result may be greater mutual public distrust. Legitimacy therefore depends on often quite coercive enhancements to surveillance, with crime, DNA and other databases, linked together in ways that often conflict with privacy and civil liberties concerns.

Some of the key improvements in services and outcomes depend on there being sufficient legitimacy to impose strict common standards. There is a long history in communications of new categories liberating everyday relationships and strengthening community: the Penny

Post invented by Rowland Hill in 1840 required consistent addressing systems for every building in Britain; half a century later the telephone required consistent numbers for every building too, yet amidst this radical standardisation new scope was given for an infinite diversity of conversation, care and love. Similarly imposition of some common protocols in IT, and maximising interoperability, is coming to be the most important priority for innovation in technology. This implies a partial swing to greater centralisation.

Another link is that legitimacy and trust depends on value for money in delivering outcomes and services, yet IT programmes have been notorious for overrunning on costs. The UK NHS modernisation programme for example, the largest single IT project globally, has recently been estimated to cost £30bn, twice the earlier estimate. Part of the problem in securing reliable estimates is that many of the potential benefits flow from radical, and unproven, changes to organisational structures—allowing much greater decentralisation within tighter frameworks for accountability, performance and financial control. Different models for organising purchasing also appear to have achieved very different levels of value for money.⁶

The many measures to address inequality and exclusion also bring their own contradictions. Many past ICT programmes subsidised or provided hardware without any evidence of demand and this error has been often repeated under the rubric of tackling the digital divide. Few if any of the programmes offering technological solutions to what are essentially social problems have worked: informal social connections continue to be much more important than physical access in terms of opportunities; and many expensively provided networks have remained underused or used for very different purposes from those intended.⁷

⁶ Dunleavy P, Margetts H, Bastow S. and Tinkler J., 'Government IT performance and the power of the IT industry: A cross-national analysis' (Paper to APSA 2004 Conference).

⁷ I have written many pieces on this topic, including 'Communication and Control: networks and the new economies of communication (Polity, 1991). A good recent overview is William Davies, 'Don't assume that improving IT alone will breach the digital divide' (*The Times*, 25 January 2005, available at www.ippr.org.uk)

Radical, systemic and incremental innovation in e-government

This leads to the fundamental issue of the nature of innovation. Much of the daily reality of e-government has been distinctly incremental and cautious, despite ambitious rhetoric, and the impact on underlying state structures have been extremely limited.

This has also been true in the past of uses of communications technology in and around the state. A good example is the use of television in tertiary education: proposed by Michael Young in the UK in the late 1950s, introduced a decade later in the form of the Open University, and subsequently used by very large numbers of students. However, the practices of existing universities continue to be almost untouched, and not a single UK university uses OU course material (other European universities have been equally conservative in their methods).

In the same way most of the new models for using ICT in public services have been introduced alongside older models rather than displacing them—in the UK for example, Learndirect sits alongside traditional further education colleges. The reasons have to do with funding structures (which do not fund outcomes); power; and professional cultures.

For many years observers have commented on the scope for radically different organisational models of service delivery, combining transparency, accountability, decentralisation, and shared platforms. These promise a future of much greater citizen control over processes and services, supported by a mix of online, telephone based and face to face support, as well as greater front-line autonomy.

However it remains the case that there is not a single example of an entire public services that has been radically reengineered to make the full use of new technology. There are some good reasons for caution—risk, uncertainty and the likelihood that significant customer groups would not be able to use new technologies. But vested interests are also a large part of the explanation, as a result of which the new is added as a layer on top of the old, thus making it impossible to realise efficiency gains. This is part of a general feature of governments—that they find it easier to start programmes than to stop them—and a general feature of reform that it has to involve some contestability, and some creation of new structures of power to challenge the old.

Future issues

Looking to the future three areas of possibility stand out, all of which raise important questions about the radicalism of innovation and the potential of European governments to take advantage of future opportunities:

- One is the likely growth in the role of third parties acting as validators of information; as holders and managers of personal data; and as designers and managers of public data and online services. A good example of the latter is the role of *upmystreet.com* in providing superior local public information to anything provided by the UK public sector. The growing power of third parties may be extremely challenging to some governments and even further erodes government's monopoly even over its own information.
- A second is the potential for open source methods. The term 'open source' has been much misused, and much of the potential of open methods in the public sector is rather different from the specific characteristics of open source in fields like software, encyclopedias and news. However, there is great potential for governments to open themselves out; to make previously internal management information external; to extend the open principles of coordination that have been used in the EU to every aspect of public organisation; and in some cases to extend open methods to fields like legal services. Again the implications may be threatening to existing interests.⁸
- A third is the further evolution of government towards matrix models of organisation, with as much structured horizontally as vertically to meet the needs of population groups or to solve problems. This has long been the promise of ubiquitous communications. The UK has made extensive use of horizontal budgets, ministerial roles, task forces and targets (under the label 'joined up government') on the premise that unless the main drivers of governmental behaviour—budgets, political

⁸ The forthcoming paper 'Wide Open' by Geoff Mulgan and Tom Steinberg (Demos 2005) explores the potential for open source methods and proposes a new terminology for differentiating its various meanings.

rewards, targets—are aligned to horizontally change is unlikely to happen. Finland has attempted to integrate horizontal goals much more deeply into government strategy. The US attempts to integrate intelligence and security operations are another current effort.⁹ Stronger internal IT and knowledge management systems make it possible for government to become much more flexible, more task and project oriented, breaking away from classic administrative structures. However, most European governments remain traditionally organised into functional silos and change requires strong political will.

Conclusions: public value and the state as infrastructure

The broad future technological trends around e.government are reasonably predictable—more abundant bandwidth, capacity and speed; further digitisation; further miniaturisation; blurring of boundaries between hardware and bodies and biology; personalisation; more intensive conflicts over property rights and privacy; widening use of grid technologies. The precise forms that will be taken by technologies and their uses are far harder to predict—as recent experience over texting, blogs and mobile devices has shown.

But the bigger idea that lies behind many of the trends in e.government is not so much a technological idea. It is rather that states are reshaping themselves to be less structures that directly provide services or achieve outcomes; instead they are becoming more like infrastructures, orchestrating complex systems with greater capacities for self-organisation, and engaged in co-creation of outcomes with citizens and civil society. This requires strong provision of common protocols; easily useable public systems; and legible underlying rules. Some of the effects will be to make government less visible—with more complex underlying processes but simpler interfaces. Some of the effects will be to make government more modular (for example in the design of funding, support systems and care), as part of the broader personalisation of the welfare state—maintaining principles of equity and universality but allowing much more variation and personalisation within the system.

⁹ Partly prefigured in Fountain Jane E. *Building the Virtual State: Information Technology and Institutional Change* (Washington DC: Brookings Institutions, 2001)

This is the radical potential of e.government. It promises both greater differentiation and greater integration: differentiation of services and public relationships, alongside greater integration in achievement of outcomes, service design and social inclusion. To the extent that it does this it contributes to public value, and more broadly to the productive contribution of the public sector to the wider economy.