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12 YEARS OF E-GOVERNMENT: A REVIEW

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EXECUTIVE SUMMARY

This Memo, from the independent Centre for Technology Policy Research (CTPR), provides a review of some of the key developments in the approach to public sector IT over the past 12 years.

During this period an estimated £100bn-£120bn+ has been spent on public sector IT. Yet it is unclear to what extent such high levels of public expenditure have improved the design, delivery and operation of the UK’s public services. Understanding the history of approaches to public sector IT, what has and has not worked, and which problems remain as endemic as they were some 12 years ago, is key to the evolution of a more effective approach to public sector IT governance, architecture and procurement going forwards.

Without such an understanding, it is unlikely that the overall approach to public sector IT can be successfully reformed. The underlying analysis of what needs to be delivered – a significant improvement in the operational efficiency, relevance and strategic effectiveness of the UK’s public services through the smart application of IT – remains as valid now as it did in the mid 1990s.

Our findings in this Memo include:

- The UK lacks a clear, holistic, all-up vision and strategy for the role of IT in its public services. Ownership is split across multiple departments and agencies, with a wide variety of documents setting out partial and incomplete strategies (including, for example, the Digital Britain Strategy, the Smarter Government Strategy, the Cyber Security Strategy, Building Britain’s Future, Excellence and Fairness, the Operational Efficiency Programme (OEP), the recommendations of the Power of Information Taskforce, and the Government ICT Strategy). Technology policy – and responsibility for its procurement and delivery – needs to be brought together under a coherent governance structure managed by a Cabinet level Minister
- Government and Parliamentary reports from 10-12 years ago identify issues that still exist today regarding the ineffectiveness of the application of IT within the public sector and the UK’s IT supply-side capabilities.
- High level, aspirational commitments are often made in policy documents, but lack implementation and accountability processes, and are hence rarely delivered on the ground
Somewhere along the line many of the ambitious policies from the late 1990s and early 2000s – ranging from the use of open source, to the role of intermediaries, to the requirement for open standards, to the utilisation of third party identity federation – appear to have largely disappeared from the approach to Whitehall IT. The recent “Government ICT Strategy” paper (in draft at the time this Memo was being finalised) is an interesting illustration of the problem. It mentions some of these earlier policy areas, including open standards, but does not explain why in the interim period they had been de-emphasised, nor why so little delivery against aspiration has taken place. Neither does the draft ICT report appear to be linked with wider public service renewal and planning initiatives: it reflects a wider concern that IT appears to remain isolated from the mainstream of public service planning. This in part explains why public sector IT often appears to be an additional public sector overhead without commensurate benefits. IT needs to be brought into the fold, to become an integral part of the way the UK’s public services are planned and delivered.

Too many IT initiatives start from the narrow perspective of a proposed technical solution or technology without identifying the wider public services context, the underlying problem, or any apparent consideration of alternative solution models (including that technology may not always be the most appropriate answer to some complex policy issues)

A clear vision for public sector IT, combined with appropriate levers to ensure its effective delivery, needs to be established. This should be underpinned by a combination of transparency (such as open publication of OGC Gateway Reviews as well as contract details) and a more appropriate approach to accountability and responsibility

Despite several changes to the approach to governance of IT in Whitehall over the last 12 or so years, little impact in terms of outcomes can be discerned. From the creation of the original Office of the e-Envoy, its later replacement with the e-Government Unit and then the current Transformational Government initiative, accompanied by the creation of the CIO and CTO Councils, most of the underlying issues relating to poor governance, and inadequate architectural and procurement models, remain

The Gershon Review, which started the focus on the operational efficiency agenda, and more recently the operational efficiency report chaired by Dr
Martin Read, have latterly been brought into question in Parliament\(^1\) due to potential weaknesses in the way that such theoretical savings are measured. Indeed, serious doubts have been raised about whether the claimed £26.5bn of Gershon IT savings exist anywhere\(^2\) other than on paper. The notion of operational efficiencies, as opposed to budget cuts, has clearly left ambiguity and scope for creative accounting. More rigour is needed to ensure that so-called IT operational efficiencies deliver real savings in UK public services, not just paper-based estimates of the type that claim “We are spending less than we might otherwise have spent”

- Overall, the current public sector corporate IT governance model has resulted in a toxic combination:
  - the lack of a coherent, all-up Government strategic vision for the effective use of IT in the planning, design, development and implementation of modern UK public services
  - a centralised, monopolistic and monolithic approach to technical issues which has proved inefficient and costly, with just some 30% of public sector IT projects being regarded as successful
  - the lack of a coherent and authoritative governance structure, with the result being ineffective delivery and a lack of accountability

An opportunity exists for the UK to update the governance, architecture and procurement of IT in the public sector, to learn the lessons of what has and has not worked. The current structure of Whitehall IT, which largely remains outside the senior business and policymaking forums of the public sector, is a hangover of a structural model that has by and large existed since the late 1950s. One key change that is long overdue is the implementation of a more effective, holistic governance model that brings IT into the mainstream of public services planning, design and operation rather than continuing to exist as a separate “priesthood” (as some have called it).

This Memo is intended to help inform that discussion.

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\(^1\) [http://www.publications.parliament.uk/pa/cm200809/cmselect/cmtreasy/520/52002.htm](http://www.publications.parliament.uk/pa/cm200809/cmselect/cmtreasy/520/52002.htm)

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BACKGROUND
When the Labour Government was elected in May 1997, with Tony Blair as Prime Minister, there was a wave of optimism about the role that information technology (IT) could play in the modernisation of the UK’s public services.

As recently as October 2009, some 12 years later, the Rt Hon Stephen Timms MP (Financial Secretary to the Treasury) claimed during a speech given to the Royal Society of Arts that IT helps improve productivity, further emphasising a continuing belief in the role that IT can play in the improvement of the UK’s public services.

Whilst the effective use of IT can indeed be a powerful lever in helping improve public services, evidence from the Office of National Statistics suggests that product sector productivity has in fact declined during a period which has seen unprecedented levels of public sector expenditure, including major expenditure increases on IT. It is important that this mismatch between ambition and delivery is understood: it lies at the heart of the problem that needs to be fixed.

This review of some of the more significant public sector IT policies from the last 12 years is intended to help reflect upon this divergence between analysis and implementation, and between aspiration and reality, in order to help evolve a more effective model for the governance, architecture and procurement of IT in the public sector.

The starting point is Labour’s analysis on taking office in 1997 that a largely decentralised approach to IT development had allowed departments and agencies to modernise their systems in ways that met their own needs, but which had unduly neglected the potential benefits of IT for Government as a whole:

“As a result, we have incompatible systems and services which are not integrated.”

Labour therefore set about establishing a corporate IT strategy for Government, reflected in a series of papers and reports that this Memo revisits.

3 http://www.theregister.co.uk/2009/08/06/gov_it_waste/
**Electronic Government: The View from the Queue, October 1998**

“Electronic Government: The View from the Queue” was published by the Cabinet Office’s Central IT Unit (CITU) in October 1998 and set out comprehensive research into potential customer take-up of online Government services.

Out of all the IT-related documents reviewed, this 1998 paper is the only one that researches, and focuses upon, the needs of the citizen. Later papers appear to have been developed solely within Whitehall without any interaction with the users and funders of public services – whatever they may have claimed about “citizen centric services”.

The report found that individuals could be broadly divided into one of three categories:

- The first, accounting for about two-fifths of adults, are favourably inclined to adopt new approaches based to a large extent on their general use and acceptance of technology in their work, education or leisure
- A further two-fifths could be persuaded, although about half of this group would require incentives or active support and encouragement
- The final group, making up just under a fifth of the population, have had little experience of, and tend to avoid being exposed to, new methods and are antagonistic towards them

Two key messages were emphasised:

- It is essential to offer extra benefit by improving or enhancing existing services. Users will not accept changes that succeed only in “moving the queue from the counter to a kiosk”.
- Change must be based on evaluating the benefits to users and solutions found which are cost-effective for users as well as for Government

E-Government services were seen as having a potential role in improving four key areas:

- the speed of carrying out transactions
- convenience/access
- flexibility in options and hours of service
- empowerment (bringing services closer to the public and allowing them to choose how/when to carry out transactions)
It also warned of measures that would be required to allay the concerns of potential users about technology, and how it would be used by Government, in particular by:

- ensuring 'confidentiality' or privacy in interacting with Government
- providing safeguards against fraud or computer hacking
- providing guarantees about Government's use of information
- providing assistance and support to users

Then, as now, there was already healthy scepticism about Government’s ability to deliver benefits or to provide reliable assurances about e-Government. As an historical aside, it is interesting to note the penetration of IT into business at the time as an insight into how much the world has changed: just 43 percent of small businesses claimed to be using computers at that time and just 15 percent were using email. A very different world indeed.

**MODERNISING GOVERNMENT, MARCH 1999**

"Modernising Government" was a central part of Labour’s programme for renewal and reform, setting out a vision for making life “better for people and businesses” as part of a long-term programme of improvement.

In the foreword to Modernising Government, Tony Blair emphasised that:

"Modernising Government is a vital part of our programme of renewal for Britain. The old arguments about Government are now outdated – big Government against small Government, interventionism against laissez-faire. The new issues are the right issues: modernising Government, better Government, getting Government right."

It included a commitment to ensure that public services are available 24 hours a day, 7 days a week, although cautiously caveated with the phrase “where there is a demand”. It also included the now infamous target of all dealings with Government being deliverable electronically by 2008. That target was itself later reset to be achieved by 2005 and in the event was never delivered. The target was also diluted by including the use of telephones (and hence call centres) as part of “electronic” delivery.

The Modernising Government initiative also recognised the need to address issues related to Whitehall’s ability to deliver change, with a specific focus on delivery. Every Permanent Secretary was tasked with ensuring that their Department had
the capacity to drive through achievement of the key Government targets and to take personal responsibility for ensuring that this happened.

Despite these clear requirements being set at the very top, by the Prime Minister himself, it is apparent that the culture of Whitehall did not change as expected and that the ambitious vision and targets – and accountability for making them happen – were later dropped.

There are important lessons here for any future administration wanting to apply IT effectively. Many current aspirations and ideas look and sound very familiar to those of the 1990s. But unless Whitehall’s governance structure is reformed to ensure successful delivery it is unclear how technology policy will be any better realised now than it has been in the past.

The three key aims of Modernising Government were to:

- Ensure that policy making is more joined up and strategic
- Make sure that public service users, not providers, are the focus, by matching services more closely to people’s lives
- Deliver public services that are high quality and efficient

These aspirations were underpinned by five commitments:

- Policy making: we will be forward looking in developing policies to deliver outcomes that matter, not simply reacting to short-term pressures.
- Responsive public services: we will deliver public services to meet the needs of citizens, not the convenience of service providers
- Quality public services: we will deliver efficient, high quality public services and will not tolerate mediocrity
- Information age Government: we will use new technology to meet the needs of citizens and business, and not trail behind technological developments.
- Public service: we will value public service, not denigrate it

The paper recognised the potentially important role of IT in enabling the redesign of the UK’s public services for the twenty-first century. It included the following:

“Information technology is revolutionising our lives, including the way we work, the way we communicate and the way we learn. The information age offers huge scope for organising Government activities in new, innovative and better ways and for making life easier for the public by providing public services in integrated, imaginative and more convenient forms like single gateways, the Internet and digital TV.”
It also committed to:

“make certain that citizens and business will have choice about how and when to access Government services – whether from home via interactive TV, via call centres, via one-stop shops or, indeed, post offices, libraries, banks or supermarkets.”

In its “Information Age” commitments, the paper recapped on developments to date:

“We set out our programme in a consultation paper, ‘Our Information Age’. We have launched major initiatives in education, libraries and the health service. We have begun to widen access to IT skills and to encourage the growth of electronic commerce and digital broadcasting. In the White Paper “Our Competitive Future” we have made clear our championship of electronic commerce as a key tool for a successful knowledge-driven economy. And in the Budget we announced a programme worth £1.7 billion to provide computers and IT literacy for all”

The paper committed to “a fundamental change in the way we use IT”. Specifically it set out to use IT to:

- make it easier for businesses and individuals to deal with Government
- enable Government to offer services and information through new media like the Internet or interactive TV
- improve communications between different parts of Government so that people do not have to be asked repeatedly for the same information by different service providers
- give staff at call centres and other offices better access to information so that they can deal with members of the public more efficiently and more helpfully
- make it much easier for different parts of Government to work in partnership: central Government with local authorities or the voluntary sector; or Government with third-party delivery channels such as the Post Office or private sector companies
- help Government to become a learning organisation by improving our access to, and organisation of, information.

It recognised the potential for IT to help increase the choice of how citizens and businesses receive services. In setting out the new corporate strategy for IT in Government, the Labour administration aimed to:

- set key objectives for managing, authenticating and identifying data, using commercial open standards wherever possible
- establish frameworks for specific technologies where stronger co-ordination is needed
- ensure that Government acts as a champion of electronic commerce
• use the Government Secure Intranet (GSI) to boost cross-departmental working and to make the public sector work more coherently
• strengthen the protection of privacy and human rights while providing a clear basis for sharing data between departments

In terms of ensuring that the strategy would be delivered, a series of steps were proposed including:

• designating a senior official at board level within each Department to champion the information age Government agenda within the Department and its agencies
• benchmarking progress against targets for electronic service delivery, and against the best performance in the private sector and in other countries
• continuing to work closely with business, both bilaterally and through the Information Age Partnership and associated groups
• incorporating information age Government objectives into the approach for Best Value and beacon councils, and into agency framework documents
• aligning expenditure which supports IT investment from the Invest to Save Budget and the Capital Modernisation Fund with the strategy
• setting a target that by the end of the year all Departments should be participating in the Government Secure Intranet

PORTAL FEASIBILITY STUDY, JUNE 1999
Written by PA Consulting for the Cabinet Office’s Central IT Unit (CITU), the “Portal Feasibility Study” was the start of a long, and expensive, journey leading to the current implementation of a mega-portal for UK Government in the shape of direct.gov.uk.

The rationale was to provide a:

“...single, integrated means of access to Government information and services. This will allow information from different sources within Government to be brought together at one point, allowing the creation of new “joined-up” services with a standardised presentation.”

PA consulted numerous Government departments in developing the paper, but not citizens or representatives of citizens’ organisations. It set out a two-stage process:

“Stage 1 will see the implementation of a simple, demonstration site for internal Government use and for assessment by two or three focus groups which will provide an early view of how the service might look and operate. This is expected to be operational within a few months and is described within the report as the Stage 1 Demonstrator.”
In a longer timescale a fuller implementation will act as a more comprehensive evaluation of standards, architecture, traffic levels, user reaction, image and branding requirements for the 2002 Portal. This pilot will carry one service, notification of change of address to three Departments and is intended for use by a significantly larger user base. Hereafter it is described in this report as the Stage 2 Pilot.

The key rationale underpinning the report was the belief in moving towards joined-up Government.

“The Government has affirmed, through its “Modernising Government” White Paper and “Government Direct” Green Paper, its commitment to electronic service delivery as the means to deliver better services that are:

- More accessible
- More resistant to fraud
- More convenient
- Easier to use to access information and services
- Quicker in response
- Less costly to the taxpayer, promoting efficiency between Government Departments.

A key element of the proposed approach is the Portal concept which will integrate services across Government Departments to deliver seamless or joined-up Government as a one-stop service for citizens and businesses. The implementation of the Portal concept is expected to contribute directly to the achievement of the objectives by providing:

- Access from a wider range of locations, including the home and workplace, using a range of different access methods
- Leadership within Government in the development of electronic delivery methods which are resistant to fraud
- 24 hour, 7 day per week service
- “Seamless one-stop shopping” for a range of Government services from multiple Government Departments
- Fast, electronic interchange of information
- Increased efficiency through electronic delivery and authorisation

In all cases the Government Portals will be one of a number of methods of electronically accessing appropriate Central Government, Departmental and ultimately Local Government services or information which will also include:

- Direct access into the Department or Agency which owns the service, principally from customers who want the specific service offered
- Access through links from other parts of the Department, or other Departments, which offer associated services – for example vehicle registration and road fund licence
- Access from other similar Portals which could, for example, be focused on another or the same “life event”, for example marriage or moving house
In line with policy at the time, the report also sought to further the multi-channel strategy:

From the channel media perspective, potential Portal delivery channels can be categorised as:

- Direct electronic channels, for example internet access through a customer’s PC, interactive television or kiosk
- Voice telephony channels where the customer contacts a call centre agent by telephone who is able to communicate with the Portal using a direct electronic channel
- Face-to-face channels where the customer interacts directly with an agent who is able to communicate with the Portal using a direct electronic channel, for example with a Post Office counter clerk or Bank teller.

At the highest level, access channels will be focused towards the private citizen and SoHo (Small Office, Home Office) or SME (Small Medium Enterprise) segments of the business market. It is expected that the larger segments of the business market will prefer to continue to use other e-business implementations including value added networks, having made a significant investment in the development of their corporate systems to operate with this technology. This should not, however, preclude larger businesses from using the access channels available through the Portals if they prefer.

In the long term the development of diverse delivery channels to fully meet socially inclusion requirements will depend on the specific market segments to be addressed by each service and, in some cases, the rate of roll-out and take-up of the technology concerned. Focused market research will be needed to investigate this area more fully.

In the short term, if separate delivery channels are provided within each of the above three categories, this will confirm that the broad development principles are on the right track to provide the scalability required in future as the number of access channels develops.

The initial proposed service, change of address, has still to be delivered some 10 years later. The report highlighted the problems with many backend systems in departments, including those with systems that were in 1999 already some 20 years old.

In the Inland Revenue for example, 18 mainframes are used for Self-Assessment and 12 mainframes for PAYE.

It would be instructive to know how much this situation has improved over the last 10 years.
E-COMMERCE@ITS.BEST.UK, SEPTEMBER 1999
Published by the Cabinet Office’s Performance and Innovation Unit (PIU), “e-commerce@its.best.uk” re-affirmed the Government’s vision that electronic commerce was at the heart of a modern, knowledge-driven, economy in the UK. The Government’s aim had been set out in the 1998 Competitiveness White Paper, namely to:

“make the UK the best environment in the world for e-commerce”

e-commerce@its.best.uk set out the results of a six-month study by the PIU into how best to deliver the strategy necessary to achieve the Government’s aim. It set out three key commitments:

- to overcome business inertia. UK business is not yet fully switched on to e-commerce. The best UK companies are world class, but many are lagging behind. Small businesses especially need to wake up to the challenges
- to ensure that Government’s own actions drive the take-up of e-commerce. Sustained progress must be made on electronic service delivery and electronic procurement
- and to ensure better co-ordination between Government and industry to gain maximum benefit from existing and proposed programmes

Its objective was for the UK to be “the world’s best place to trade electronically by 2002” and this was to be achieved through a series of 60 detailed recommendations.

E-GOVERNMENT: A STRATEGIC FRAMEWORK FOR PUBLIC SERVICES IN THE INFORMATION AGE, APRIL 2000
The “e-Government” strategy was published by CITU in April 2000 as a fundamental element of the Modernising Government initiative. It contained four guiding principles:

- building services around citizens’ choices
- making Government and its services more accessible
- social inclusion
- using information better

It is worth narrating here the underlying thinking behind each of these four principles.
**Citizen-focused Government**

When people interact with Government they want to do so on their own terms. They want high quality services which are accessible, convenient and secure. People should not need to understand how Government is organised, or to know which department or agency does what, or whether a function is exercised by central or local Government. We need a strategy that will provide this - by helping departments and agencies, central and local Government, co-operate in new partnerships that will offer their services in ways that make sense to the customer. We need to form partnerships with innovators in the private sector who can find new ways of meeting changing patterns of demand.

**Accessible Services**

The Government intends that all services which can be electronically delivered should be. The strategy proposes that they should be accessible over the Internet and through mobile phones, digital TV, and call centres as well as through personal computers. The mix for any service will be determined in relation to demand. Electronic service delivery does not do away with the need for personal contact and this must be better supported. Services should be tailored to individuals’ needs. The Government will develop a business portal, initially for small- and medium-sized enterprises, and a personalised ‘home page’ for individuals. It will do so in a non-exclusive way and will create the conditions for others, including commercial enterprises, to create innovative service offerings.

New ways of doing business will change the relationship between individuals and Government. Access to information will be firmly established under the Freedom of Information legislation and Government organisations will be more responsive to citizens’ views. At the same time, it will be vital to make sure that people can trust the systems we use, by ensuring that their personal data is protected and that systems are secure.

**Inclusiveness**

New services must be developed so that they are available to all and easy to use. Digital TV and mobile phones will become increasingly important as a means of accessing the Internet. The Government is committed to making it easier for all people to get access, whether individually or through community facilities. The telephone will remain a preferred means of contact for many. Call centres must be improved by giving their staff access to information networks that will enable them to provide better service. Better information systems will support the work of those who have face to face contact with the public.
Online public services must be well designed and accessible to all. This includes providing services for minority language groups and those with disability or limited mobility.

e-Government is an opportunity to enhance the services which are provided to UK citizens overseas, EU citizens and others overseas who wish to do business with or visit the UK. This is likely to be a stimulus to provide further multilingual services.

**MANAGING INFORMATION**

The Government’s knowledge and information are valuable resources. At the heart of this programme is the need for the public sector to make the best use of them. Implementing the strategy requires organisations to adopt coherent and compatible information policies in support of better policy making, better service delivery and more efficient working.

Delivery of the strategy was the responsibility of the Office of the e-Envoy and CITU. Public sector organisations were also to be individually responsible for establishing new ways of doing business, implementing common standards and framework policies, developing e-business strategies and providing services which are accessible via Government and other portals.

The e-Envoy was required to report regularly on progress made against delivery of the strategy.

**SUCCESSFUL IT: MODERNISING GOVERNMENT IN ACTION, 2000**

“Successful IT: Modernising Government in Action” was published by the Cabinet Office in 2000. It was a review of major Government IT projects aimed at “improv[ing] performance and avoid[ing] the mistakes of the past.” In his introduction, then Minister of State for the Cabinet Office, Ian McCartney MP stated:

“It sets out a package of measures to help us deliver effective modernisation through IT. Putting them into practice will require commitment across Government, as well as from our private sector partners ... The recommendations in this report will enable us to put our modernising vision into practice. They are a vital part of turning our strategy into real improvements in public services.”

In the body of the report, a familiar problem statement is set out:
“In the past, Government IT projects have too often missed delivery dates, run over budget or failed to fulfil requirements. This review was set up to improve the way Government handles IT projects”

It set out a key objective:

“...A change of approach is needed. Rather than think of IT projects, the public sector needs to think in terms of projects to change the way Government works, of which new IT is an important part. Our recommendations aim to achieve this change.”

In prescient observations still as relevant today as they were then, the report notes:

“The change in approach ... is about bringing in a focus on business change. This means that, when organisations are managing programmes and projects, it is vital they concentrate on how to deliver improvements to the way they do business. Too often we have seen an approach that looks only at part of the change programme (for example, bringing in new technology) and does not integrate this with other elements (such as culture change) or take an overall view of the whole change process. Achieving and maintaining this integration is a vital, and ongoing, management task.”

Other points are equally well made, such as:

“Achieving integration of all the aspects of change requires effective leadership and that is only possible where responsibility for the delivery of a project or programme falls to an individual. If it is not clear who is taking charge, then it is almost impossible for an initiative to succeed.”

As well as:

“There must be people in place who have the ability to deliver.”

Inadequate risk management is highlighted, with the report setting out that:

“Managing risk is easier if ambitious and complex programmes are broken up into sections that can be delivered independently. The recommendations ... address modular and incremental approaches to implementing IT-related change. They include introducing a presumption in favour of such approaches and supporting guidance.”

Supplier-side and procurement-related issues are also flagged as a problem area:

“The Government’s radical change agenda cannot be delivered by the public sector alone. Suppliers have a major role to play, and implementing an improved approach will be impossible if relationships with suppliers are poor or procurement is badly done. The
recommendations ... aim to establish improved interactions between Government and its suppliers. They include taking a more strategic approach to suppliers, addressing problems with current guidance and setting out actions suppliers need to take.”

It recognises that implementing change effectively is problematic and sought to address this issue with clear responsibilities and timelines:

"Many of the reasons why IT-related change has frequently failed have been known for some time. However, translating that knowledge into practice is not easy. What this report does is to make specific recommendations for how Government will achieve improvement and states how those recommendations will be put into practice. Section 11, implementation, sets out all the recommendations. It also sets out who has to take action, and by what date, to implement them. The recommendations are prioritised, so that those that will make the biggest difference on their own are put into practice first.”

It recognises that there must be clear ownership and accountability for making the recommendations stick:

"It is vital that this review makes a real difference. To achieve this, Section 11:

- sets out ways of making sure our recommendations are put into practice;
- and invests ownership of the report in the e-envoy, who will hold overall responsibility for its implementation and will report to the e-Government Minister on progress

MODERNISING GOVERNMENT FIRST ANNUAL REPORT, SEPTEMBER 2000

In his introduction to the “First Annual Report” on progress with the Modernising Government programme, the Prime Minister, Tony Blair MP, wrote:

“Investment is the first step. That’s why in July, the Chancellor of the Exchequer announced the biggest investment in public services of modern times. This is a huge opportunity for everyone who works in public services. But with that opportunity comes a real responsibility — a responsibility to use those resources effectively, efficiently and imaginatively. That is why our investment is tied to clear targets. By being specific about what outcomes we want but flexible about how they should be achieved, we can free up public services to innovate. In particular we can give power to those at the front line who know best how to improve services and meet the needs of their users.”

Reviewed from the perspective of 2009, the report contains little in terms of objective outcomes. It combines mini-news stories and colourful graphics, with little quantifiable evidence of progress that can be articulated here. Some 10
years later, it is evident that little of the policy aspirations have been delivered during the intervening period.

**E-GOVERNMENT STRATEGY FRAMEWORK POLICY AND GUIDELINES: REGISTRATION AND AUTHENTICATION, NOVEMBER 2001**

It was realised early on by the Labour Government that successful e-Government would rely on being able to identify and authenticate citizens and businesses online in order for them to interact with services. This report, which addresses such issues, was therefore prepared and published by the Office of the e-Envoy within the Cabinet Office.

This paper, and some of its earlier drafts, presents a key approach in a potential solution to this complex solution area. It set out a number of trust levels for registration and authentication in e-Government transactions. In particular it put into place a framework for the provision of registration services by third parties, including local authorities and the private sector, and sought to make use of these services wherever possible rather than central Government running such services. This stands in contrast to the later approach to identity proposed in the National Identity Cards Act, which sought an unproven centralised approach to identity in which the Government would act as the single trusted source of identity and authentication.

The original trust framework also put into place the mechanisms whereby third parties could deliver online Government services, rather than citizens always having to interact with Government directly. It established a series of trust levels, appropriate for different classes of transaction, as well as supporting anonymous and pseudonymous credentials where appropriate:

> “As a rule, service provision should operate on a principle of maximum anonymity consistent with necessary functionality.”

In brief the levels of identification and authentication were:

- **Level 0** – no confidence
- **Level 1** – balance of probabilities
- **Level 2** – substantial assurance
- **Level 3** – beyond reasonable doubt

At the time, the higher levels were assumed to be supported through the use of smartcards, although problems during the dotcom boom and bust later meant
that the ubiquitous deployment of smartcards did not happen. And of those smartcard offerings that remained commercially available, they were associated with high annual payments that acted as a deterrent to businesses and citizens alike adopting them for use.

Much of this document builds on the earlier “e-Government Authentication Framework” of December 2000. That document included many of the underlying principles, including:

“For most electronic transactions, Government will accept authentication provided by accredited third parties, which will register individuals and organisations and issue them with credentials enabling them to authenticate themselves in subsequent transactions.”

Also:

“Government will encourage the provision of authentication services by a variety of bodies, including local authorities and the private sector, and will seek to make use of these services wherever possible... The Modernising Government white paper makes clear Government’s intention to work in partnership with local authorities, the voluntary sector, and with third-party delivery channels such as the Post Office and private sector companies. Where third-party service providers are conducting transactions on Government’s behalf, they will be required to authenticate the citizens and businesses they deal with to the same standards as Government itself would. Government will in turn accept transaction data from those service providers, who will certify that they have carried out the authentication transaction to the agreed standard.”

The principles of this framework and approach were to be adopted in 2009 by the incoming Whitehouse administration of President Obama, and updated and enshrined in documents such as the US Trust Framework Provider Adoption Process (TFPAP)\(^4\).

**Open Source Software Use within UK Government, 2002**

With just four core pages (introduction, policy, justification and next steps), this was the UK Government’s first attempt to assess how open source software (OSS) would fit within its wider IT vision. It followed on from the European Commission’s initiative “eEurope – An Information Society for all” which had set the target that:

“... during 2001 the European Commission and Member States will promote the use of open source software in the public sector and e-Government best practice through exchange of experiences across the Union”.

The policy set out 5 points:

- **UK Government will consider OSS solutions alongside proprietary ones in IT procurements.** Contracts will be awarded on a value for money basis.
- **UK Government will only use products for interoperability that support open standards and specifications in all future IT developments.**
- **UK Government will seek to avoid lock-in to proprietary IT products and services.**
- **UK Government will consider obtaining full rights to bespoke software code or customisations of COTS (Commercial Off The Shelf) software it procures wherever this achieves best value for money.**
- **UK Government will explore further the possibilities of using OSS as the default exploitation route for Government funded R&D software.**

In terms of how the policy was to be delivered and enforced, it set out a short range of Next Steps, namely:

- **OGC will update their Procurement Guidelines to reflect this policy.** Advice will be made available to all those involved in procurement exercises on areas of the software infrastructure and application marketplace where OSS has strengths and weaknesses.
- **Advice will also be made available to all those involved in procurement exercises on how to assess the merits of OSS v proprietary solutions in procurements.**
- **OeE and DTI will discuss with academic research institutions the possibilities of future R&D work.**

In retrospect, the policy appears to have been little observed in either the spirit or letter of how it was intended. The *Actuate 2009 Survey*\(^5\) covers both private and public sector globally. Their conclusion with respect to the UK was as follows:

> The **UK shows little change since last year with just over two fifths (42.1%) already using open source software. Significantly the UK continues to demonstrate a degree of reticence towards open source adoption with almost a quarter (22.4%) still monitoring developments but not yet evaluating.**

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\(^5\) *Actuate: Annual Open Source Survey 2009.*
http://www.actuate.com/resources/assets/?articleid=18311#Survey
With UK public sector accounting for some 55% of all UK IT spend, the open source policy appears to be having relatively little impact when compared with other countries.

**Measuring the Expected Benefits of e-Government, 2003**

This HMT document set out clear expectations of the benefits to be derived from IT:

> “e-Government has the potential to improve greatly the delivery of public services, making them easier to access, more convenient to use, more responsive, more transparent and so on. It also has the potential to free up resources in the public sector by delivering services more efficiently.”

That vision remains as relevant now as then, but has been little achieved in reality despite the £100bn-£120bn+ spent on public sector IT over the last decade or so. HMT flagged such problems in this paper, commenting:

> “... the Government’s record on IT projects is not good and the drive towards e-Government also comes with risks…”

Despite setting out an approach that recognised that:

> “It is important to develop a thorough business case for any major investment decision; it is not sufficient to justify action solely on the basis that it is needed to meet a target.”

More recent IT documents, such as the draft ICT strategy doing the rounds at the time this Memo was being prepared, set out technology objectives first and indicate that a business case will be defined later.

HMT also emphasis the intermediary model, commenting:

> “Additional guidance on developing possible options, including how to work with intermediaries, is available....”

HMT set out some clear steps to be considered in the way IT is evaluated in the context of public services:

- Identifying the options that are likely to result in the greatest external and internal benefits.
- Estimating customer take-up of e-Government services.
- Estimating internal departmental costs and benefits of e-enabling services.
Evaluating options

**Improving IT Procurement, 2004**

This report considered the impact of the Office of Government Commerce’s initiatives on departments and suppliers in the delivery of major IT-enabled projects. It highlighted that

“The history of [IT] procurements has not been good, with repeated incidences of overspends, delays, performance shortfalls and abandonment at major cost.”

It identified three key principles to help ensure a more successful approach:

- rigorous challenge and scrutiny of projects and programmes at each key stage in their lifecycle;
- highly skilled and capable programme and project managers;
- and effective engagement with suppliers.

In words that appear largely relevant still today, the report commented (with regard to OGC Gateway Reviews):

“the concerns raised in Gateway Reviews have remained broadly the same since their introduction in 2001, and unless there is growing evidence that these weaknesses are being addressed their recurrence will reduce confidence in the ability of OGC and departments to bring about a step change in the performance of projects.”

It points out that OGC advice is not always followed. It also highlighted “...a lack of skills and experience necessary to deliver major IT-enabled projects.” It set out the common causes of failure as being:

- Lack of clear link between the project and the organisation’s key strategic priorities including agreed measures of success.
- Lack of clear senior management and Ministerial ownership and leadership.
- Lack of effective engagement with stakeholders.
- Lack of skills and proven approach to project management and risk management.
- Lack of understanding of and contact with the supply industry at senior levels in the organisation.
- Evaluation of proposals driven by initial price rather than long-term value for money (especially securing delivery of business benefits).
- Too little attention to breaking development and implementation into manageable steps.
- Inadequate resources and skills to deliver the total delivery portfolio.

The main issues raised by its Gateway Reviews were identified as:
• the need for involvement of key stakeholders;
• the clearer identification of the roles and responsibilities of departments and suppliers in the governance of IT-enabled projects;
• improved development of business cases, particularly on the scope and content;
• better risk management;
• improved skills and resources, including resource planning, succession planning, and the quantity and quality of suitably skilled staff

Many of the findings and recommendations remain as valid now as they did in 2004.

TRANSFORMATIONAL GOVERNMENT: ENABLED BY TECHNOLOGY, 2005

The “Transformational Government” agenda was seen as a major updating of the vision for the use and application of IT to the UK’s public services.

The paper set out three key “transformations”:

• Services enabled by IT must be designed around the citizen or business, not the provider, and provided through modern, co-ordinated delivery channels. This will improve the customer experience, achieve better policy outcomes, reduce paperwork burdens and improve efficiency by reducing duplication and routine processing, leveraging delivery capacity and streamlining processes.

• Government must move to a shared services culture – in the front-office, in the back-office, in information and in infrastructure – and release efficiencies by standardisation, simplification and sharing.

• There must be broadening and deepening of Government’s professionalism in terms of the planning, delivery, management, skills and governance of IT enabled change. This will result in more successful outcomes; fewer costly delivery failures; and increased confidence by citizens and politicians in the delivery of change by the public services.

The publication of annual Transformational Government reports has provided some useful summaries of budget costs and programmes, albeit complicated by the lack of year-to-year consistency and varied auditing customs.

The online service that receives most praise and mentions on the DirectGov portal is the DVLA tax disc renewal service, previously directly available on the DVLA site.
OPEN SOURCE, OPEN STANDARDS AND RE-USE: GOVERNMENT ACTION PLAN, 2009

The update to the Government’s open source strategy (which had previously been updated just once, in 2004) appeared to be triggered by a series of Opposition party speeches highlighting the role of open source. In particular, the Shadow Chancellor, George Osborne, gave a speech in 2007\(^6\) at the Royal Society of Arts (RSA) in which open source was highlighted, a theme to which he returned in 2009\(^7\).

A key driving force for the updated strategy was a keen advocate of open source, the then Minister for Digital Engagement, Tom Watson MP. He aimed to help renew the emphasis on open source and the pace with which it was being adopted in the UK public sector. The updated paper set out six key objectives, namely to:

- ensure that the Government adopts open standards and uses these to communicate with the citizens and businesses that have adopted open source solutions.
- ensure that open source solutions are considered properly and, where they deliver best value for money (taking into account other advantages, such as re-use and flexibility) are selected for Government business solutions.
- strengthen the skills, experience and capabilities within Government and in its suppliers to use open source to greatest advantage.
- embed an “open source” culture of sharing, re-use and collaborative development across Government and its suppliers, building on the re-use policies and processes already agreed within the CIO Council, and in doing so seek to stimulate innovation, reduce cost and risk, and improve speed to market.
- ensure that there are no procedural barriers to the adoption of open source products within Government, paying particular regard to the different business models and supply chain relationships involved.
- ensure that systems integrators and proprietary software suppliers demonstrate the same flexibility and ability to re-use their solutions and products as is inherent in open source.

Its specific objectives were to default to open source software in procurements, all other things being equal, and to avoid lock-in to proprietary software. Like the earlier policies in this area, it remained inconclusive about how the policy would


be delivered in practice. It is unclear at the timing of writing this Memo what impact, if any, it has had.
LESSONS FOR FUTURE UK GOVERNMENTS

It is evident from the documents of the late 1990’s and into the early part of the current century that there were positive and constructive ambitions to renew the UK’s public services, with IT an integral part of how that could be made to happen.

Equally apparent, in retrospect, is that despite some worthy policies and objectives, delivery remained adrift of the vision. And at times that vision – as with central identity cards – drifted off track from the underlying ambition to improve the UK’s public services.

Several common threads run through the last 12 or so years of ambitious IT programmes:

- the lack of integration of IT into the mainstream of policymaking and business as usual thinking (IT remains, as some have called it, a “priesthood” outside of the mainstream of senior Whitehall management)
- the lack of an overall vision and effective governance mechanism for public sector IT
- the lack of consistent architectural principles
- the lack of effective procurement and supplier management policies, leading to the concentration of the public sector IT market in the hands of a limited number of suppliers (with a wider impact upon the UK’s IT supply-side capabilities)
- a procurement regime that has adopted an intentional policy of increasingly aggregated demand at all levels, raising barriers to entry for smaller more innovative suppliers
- the lack of effective, reliable delivery of IT-related projects and programmes
- the lack of any positive overall impact on the renewal and improvement of the UK’s public services

Some 12 years later, and an estimated £100bn-£120bn+ of expenditure on IT later, it is hard to identify any outcomes of major significance in terms of the impact that IT has had on the renewal and modernisation of the UK’s public sector. IT planning often seems to be focused on the short-term tactical rather than the longer-term strategic and genuinely transformational. IT has largely
remained an additive cost to the operation of the public sector, rather than helping it realise service and quality improvements, and productivity gains.

Technology planning seems to operate in a vacuum, isolated from the political, economic and social considerations operating elsewhere in the public sector. The *Transformational Government* strategy of 2005 is an interesting example. It set out a largely centralised, database driven view of the future that even at the time of its publication appeared at variance with the political and technical mainstream. For example, in his 2004 speech on localism at Demos⁸, former Health Secretary Alan Milburn MP had stated that:

> "The days of Whitehall or any part of Whitehall knowing best are over … central bureaucracies make work …. If we want to place limits on the role of Whitehall we need limits on the size of Whitehall"

At a time when politicians were increasingly talking about devolved and localised services, and the IT world was focusing on the wave of consumer-driven technology, *Transformational Government* instead set out a vision of increasingly centralised and controlled IT.

Although the Prime Minister’s introduction to *Transformational Government* included the following:

> "The future of public services has to use technology to give citizens choice, with personalised services designed around their needs not the needs of the provider"

the body of the strategy was focused on the consolidation of a provider-centric view of the world at odds with the Prime Minister’s vision. No citizens or other recipients of public services appear to have been consulted in its development. It was, at best, a producers’ view of what citizens needed. It rationalised a view of technology being used on the producer side to join up and share services rather than recognising the political and technical reality of citizen engagement that would enable citizens themselves to be active players in the way in which they engaged with public services. Neither was its thinking developed and integrated with the business plans of the Whitehall departments and their agencies. It remained a predominantly technical initiative outside of the political and policymaking mainstream.

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⁸ [http://www.demos.co.uk/publications/localism](http://www.demos.co.uk/publications/localism)
The problem of the relative lack of delivery is compounded by issues such as the secrecy of procurement contracts and OGC Gateway Reviews. Making both contracts and Gateway Reviews transparent and open to wider public and competitive scrutiny is one mechanism to help ensure greater accountability, greater scrutiny and greater responsibility.

The lack of understanding of IT and the lack of accountability for its performance within Whitehall remains an issue, despite being identified as a problem in the 1990s. Plans to make Permanent Secretaries accountable do not seem to have happened.

These are all matters of major concern to any future administration. They will require reform of the overall mechanism for governance across Whitehall and the wider public sector to address the way in which the IT establishment operates. IT needs to be brought into the fold, empowered by being brought into the mainstream of policymaking rather than left to operate in relative isolation. In particular, the approach to IT needs to be able to address specific issues, such as:

- what are we trying to achieve with public services and what capabilities do they require?
- how does IT help to enable these capabilities?
- what technical architecture is required to support them?
- how do we best procure and deliver the relevant technologies?
- what governance and resourcing structure is required to ensure effective strategic and operational planning, effective oversight, and successful financial diligence and delivery (and accountability) across the entire lifecycle?

The UK needs an all-up, holistic vision and strategy for the role of IT in the UK’s public services. An integrated governance model is required to address this shortcoming, one that plans and ensures effective implementation and leadership across the wide spectrum of activities, from those of the Office of the CIO and CIO Council, the CTO Council, local and regional Government, OGC, Ofcom and the wide variety of other departments and agencies who all play some part in determining the application of IT to the UK’s public services. A Cabinet level Minister needs to bring all the relevant policy and delivery functions together and to focus them on a clear set of objectives.
RECOMMENDATIONS

[For the July 2010 public release of this Memo, this section has been removed. We hope to be able to release a further update to this Memo at some point in the future that will restore some/all of the recommendations made.]
DOCUMENTS REVIEWED FOR THIS MEMO
A wide variety of Government documents were tracked down and reviewed during the preparation of this Memo. Not all of them have been referenced, with the focus being on the main ones of impact, or interest, over the last 12 or so years.

Links to some of the papers are provided on the public-facing part of the CTPR website in the Resources section.

1998: Electronic Government: the view from the queue
1999: PROFESSIONAL POLICY MAKING FOR THE TWENTY FIRST CENTURY
1999: Portal Feasibility Study
1999: Modernising Government
1999: e-commerce@its.best.uk
1999: Electronic Service Delivery of Government Services, progress report
2000: Wiring it up. Whitehall’s Management of Cross-cutting Policies and Services
2000: The Government’s Expenditure Plans 2000-01 to 2001-02
2000: e-Government. A strategic framework for public services in the information age
2000: UK Government Portal: Change of Address Demonstrator Design
2000: CITU Portal Demonstrator: Lessons learned for future portal project phases
2000: Counter Revolution: Modernising the Post Office Network
2000: UK Online Annual Report
2000: Successful IT: Modernising Government in Action. REVIEW OF MAJOR GOVERNMENT IT PROJECTS
2000: Framework for Information Age Government. Privacy and data sharing
2000: Modernising Government First Annual Report
2001: E-Government strategy framework policy and guidelines: Registration and Authentication, Version 2.1
2002: OPEN SOURCE SOFTWARE USE WITHIN UK GOVERNMENT, Version 1
2002: Privacy and data-sharing: The way forward for public services
2003: MEASURING THE EXPECTED BENEFITS OF E-GOVERNMENT. Version 1.4
2004: The three E’s: efficient, effective and electronic
2004: Improving IT procurement: The impact of the Office of Government Commerce’s initiatives on departments and suppliers in the delivery of major IT-enabled projects
2005: Transformational Government: Enabled by Technology
2006: Transformational Government Annual Report
2007: Transformational Government Annual Report
2007: Public Sector Flex
2008: Transformational Government Annual Report
2009: Data Centre Strategy, G Cloud and the Apps Store Mobilisation ‘Strawman’
A BRIEF SUMMARY OF CENTRAL PUBLIC SECTOR IT STRUCTURES

The Treasury initially established a technical support unit in the late 1950s to help advise on telecommunications and related issues, including computing. This later evolved into the Central Computer Agency (CCA) in the early 1970s. The CCA in theory had considerable power in terms of advice and particularly procurement across Whitehall, although even then departments preferred to ensure they retained at least some of their autonomy in such matters.

The CCA in turn evolved into the Central Computer and Telecommunications Agency (CCTA) in the early 1980s, which retained both an advisory role as well as responsibility for procurement.

In the mid 1990’s the Cabinet Office set up the Central IT Unit (CITU), which focused on policy development and proving of new approaches to the use of IT in the public sector, with procurement moving into the Office of Government Commerce (OGC) homed in the Treasury.

CITU was superseded by the Office of the e-Envoy (OeE) (also based in the Cabinet Office) as part of the Modernising Government initiative, with the OeE responsible for delivery of the Prime Minister’s target of all public services being online by 2005. The OeE had a reporting line directly to the Prime Minister, a recognition of the importance placed on IT during the early terms of the Labour administration. The OeE became a large department (of around 200 at its peak), but was never popular with other departments who saw it intruding upon what they perceived as their own autonomy.

The Office of the OeE was later quietly dismantled (together with the ambitious targets it had been responsible for delivering on behalf of the Prime Minister). It was replaced by the eGovernment Unit (eGU) which only lasted a few years. The head of this unit likened himself to a “group CIO”, although the reporting line of most Whitehall CIOs is not analogous to those of their private sector counterparts (who sit on Boards and possess managerial and business experience as well as being able to direct technology investments), and sought to place an emphasis on three “e”s: “efficient, effective and electronic”.

The eGU also saw the establishment of the CIO and CTO Councils as a more collegiate way of enabling departments and agencies to work together, a pragmatic reflection of the fact that the eGU lacked any real power in Whitehall.
and sought to work through persuasion rather than coercion. The purpose of the CIO Council was set out as being a team in which individual members:

- develop a common agenda which they personally believe in, and which they take back to their own agencies to execute
- take a Government-wide view whilst maintaining accountability for specific operations and programmes in their area
- break down the silo barriers which can exist across Government.
- facilitate and encourage learning from each other feel comfortable in asking for help or giving advice

The eGU was itself superseded by the Transformational Government (TG) team, picking up the Transformational Government strategy published in 2005 as its main focus.

Both of the eGU and TG teams were based in the Cabinet Office. OGC and OGC Buying Solutions have remained within the Treasury. A future administration will need to bring these back together under a common governance structure.
ABOUT THE CENTRE FOR TECHNOLOGY POLICY RESEARCH

The Centre for Technology Policy Research (CTPR) is an independent, non-partisan organisation that aims to ensure that IT is better understood across public, private and voluntary sector boundaries in order to provide mutually beneficial outcomes. We hope to help avoid the toxic outcomes often associated with ill-designed projects and programmes. We help to make this happen by improving the evidence base, dialogue and links between private, public and voluntary sectors and academia.

We do this by:

- remaining independent of any market interests
- using open source market intelligence to provide insightful reports and analysis
- providing rigorously independent and objective insight, analysis and guidance into the best applications of IT in public, private and voluntary sectors
- informing public understanding of the intersection of information technology and public policy through reports, and private and public interactions
- improving the opportunities for engagement for SMEs in UK public sector programmes

Technology is everywhere around us, but rarely planned for effectively at a policymaking level due to a lack of understanding of its impacts during the formulation of public policy. One of the aims of the CTPR is to help raise the level of understanding of information technology and technology policy as a lever of policymaking, rather than as purely an administrative and operational tool.

The CTPR’s website can be found at http://ctpr.org.

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