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Three initiatives that government can undertake to address the lack of substantial progress in digital transformation of public services

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Authors:

Executive summary

We draw attention to the lack of awareness and understanding across senior levels in government (both politicians and civil servants) about what ‘digital transformation’ actually is. This has led to unimaginative, technology-driven framing of ‘digital’ initiatives that ultimately miss their transformative potential. In response, we suggest three urgent interventions to strengthen the capacity/capability of senior decision-makers in the public sector to deliver digital business change:

- Make available high-quality business education about digital delivery models to policymakers
- Shift the perspective to long-term planning
- Invest in a stronger digital infrastructure.

Background

The “consistent pattern of underperformance” identified by NAO can be directly linked to the fact that over the past 25 years UK digital government efforts have largely focused on achieving efficiency (that is, for example, automating processes or replacing analogue with digital) and, to a lesser extent, rationalisation (that is, standardising and sharing data, systems and processes). These digital strategies have almost entirely missed out on achieving longer-lasting results around re-designing and transforming public services through the use of data (Fishenden 2021). This is the difference between automation (centring on technology-driven efficiency) and transformation: re-imagining the actual objectives and enabling business model around data and emerging technology, to produce modern, citizen-centred outcomes.

Three main factors account for this focus on rationalisation rather than transformation:

- Poor understanding of digital business models and enabling technology amongst most politicians, advisers and officials. This drives technology towards automating existing inefficiencies and perpetuating existing fiefdoms/legal entities, rather than redesigning organisations to improve the way our public services operate.
- Short-term political horizons and a lack of institutional memory. This is due to a culture that rewards broad, varied experience as opposed to specialism. As a result of this, central government is stuck in a loop whereby the same systems and processes are built, dismantled and rebuilt over and over again, but still within existing organisational and service structures.
- Lack of shared understanding around, and commitment towards using, (technology) platform models, and better standards and system development approaches.
- An over emphasis on drawing in outside technology skills (e.g. from consultants or IT practitioners) to build technology but failing to draw on civil service and political expertise to re-imagine services and objectives.

Question

As a result of the above, we have asked whether there may be some simple, targeted interventions that would go a long way towards improving government's poor understanding and capability in digital business models and enabling technologies.

Practical recommendations

#1 - Offer senior decision-makers high-quality education about digital business models, and how these apply to government^{1 2}

1. **Government should offer senior decision-makers high-quality, business school-style education** (not training) to build understanding of/confidence in digital business models, how to use such models/associated thinking to transform government, and what enabling technologies and data are involved.
2. **Government should offer certification of competence** on the basis of examination in the above along 'digital driving licence' lines in the form of a kitemark; possession of a kitemark should become a prerequisite for policymakers.

¹ TechUK is developing a similar digital kitemark with selected business schools to enable employers to access candidates with understanding of digital business models and how these can be applied to industry; this is considered a separate category from 'tech skills'.

² A similar programme, Public School of Technology, is in initial stages of development by public.io

3. **Government should invest in building a strong alumni network** of digital kitemark holders across public services with a shared understanding and approach towards digitalisation/digital transformation and a willingness to collaborate around shared capabilities and artefacts.

#2 - Shift the perspective to long-term planning

1. **Ensure that digital change provides a way of improving policy outcomes, not just creating websites and online services.** There is a tendency in government to view technology largely as a means of automating top-down policy decisions and to put forms online. Yet using technology to automate existing hierarchical policies, organisations, structures, processes and services is the antithesis of transformation: it instead fossilises the way things have always been done. Technology provides the opportunity to reinvigorate democracy; to use real-time and historic data to better understand and inform policy; to redesign government around more effective organisations and services; and to deliver improved outcomes for citizens, businesses and public sector workers alike.
2. **Mandate the implementation of open data and interfaces across the public sector,** central and local, to help expose and de-silo existing systems, processes and services. Using data and evidence, together with processes of continuous feedback, will help inform and improve policy making far more effectively than the endlessly repeated tactical focus on moving forms onto websites.
3. **Address government's lack of memory and ability to see things through.** A significant problem in both Westminster and Whitehall is the lack of memory of what has already been done before. This is compounded by the failure of both politicians and officials to see initiatives through. As a result, government is going in circles. For example, there have been repeated efforts since at least the early 2000s to map all government held data and to adopt consistent technical, security and privacy standards to enable these data to be accessed to support evidence-informed policy and more "joined-up" services centred on the citizen. Yet the recommendation from the Digital Economy Council³ recently repeated the same idea again, demonstrating the lack of progress. Similarly, a recent publication about "new" data standards from the government's Data Standards Authority⁴ specifies the same standard already adopted by government two decades earlier.
4. **Analyse, understand and start tackling the technical debt⁵** that inhibits large programmes in the public sector, with almost 50% of current government IT expenditure⁶ maintaining legacy systems rather than implementing improvements.

³ See <https://www.gov.uk/government/publications/organising-for-digital-delivery/organising-for-digital-delivery-recommendation-8>

⁴ See <https://www.gov.uk/government/collections/metadata-standards-for-sharing-and-publishing-data>

⁵ Technical debt is a concept in software development that reflects the extra work that arises when code that is easy to implement in the short run is used instead of applying the best overall solution.

⁶ See <https://www.gov.uk/government/publications/organising-for-digital-delivery/organising-for-digital-delivery>

5. **Cultivate better systems analysis, data analysis and design skills** to help understand where policy needs improving or updating; and to identify what citizens, businesses and public sector employees need — rather than the decades-old focus on moving forms from paper to a screen.

#3 - Invest in a stronger digital infrastructure

1. **Invest in tidying up and removing legacy systems.** Holding long-term budgets for maintenance and replacement of existing systems separate from departmental budgets and political priorities.
2. **Ensure better “tooling” for IT projects** including systems development approaches and cloud-based platforms.
3. **Identify key capabilities** that are replicable across government projects - then standardising and centralising their delivery and maintenance.
4. **Build platforms for innovation** that enable simpler innovation through process automation, low-code, AI and digitalisation strategies.
5. Our analysis highlights the importance, across the whole spectrum, of **central political sponsorship of a platform**, attention to incentivisation and the need to be clear about privacy and security implications.
6. **Understand the need for simplicity** - that it may be better to design processes for the 80% of easy cases, then build human-based systems to deal with 20% of difficult cases until they can be automated effectively. Using AI to speedily identify edge cases and push these to human action.
7. **Ensure that services are devices/provider agnostic** and built for the long term, and can accommodate policy improvements in a timely, cost-effective manner ('built for change').
8. **Understand digital infrastructure as a flow of ongoing innovation** rather than a series of “new projects” that inevitably become old and legacy.

Authors

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Further reading

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