

Institution: University of Cambridge

Unit of Assessment: 19 - Business and Management Studies

Title of case study: New IT Strategy for UK Government

## 1. Summary of the impact

Thompson is recognised as a pioneer of Open Innovation thinking within the UK public sector. He has influenced a major shift in thinking in ICT-driven public service design towards open innovation, with demonstrable impact on public and private sector business models. His 2009 paper for George Osborne, The 'Thompson Report', *Open Source and Open Standards* (Ref 1), launched a seismic change in thinking by government policy-makers, public servants, and private sector service providers. Thompson became a Cabinet Office advisor in 2011, and continues to provide critique and contribution to parliamentary reports and policy documents across government and industry, and support implementation within local government.

# 2. Underpinning research

The research, conducted since 2008 by Thompson (University Lecturer 2003 – 2012, Senior Lecturer 2012–) centres on the principle that advances in ICT design (Open Standards and Service-oriented Architecture) permit the disintegration of traditional, integrated business functions into discrete components. Open source software allows users to read, alter and improve its code – in contrast to proprietary software where a company controls the source code. In turn, this allows more standard components to be treated and purchased as commodities (i.e. high volume, low margin), and other, less standardised components to be delivered on a bespoke basis. It has also demonstrated that if government can move away from its traditional, department-based design and cluster similar components together, it will be able to take commercial advantage of its unique scale as a volume purchaser to create platforms around which suppliers of many different kinds will innovate. This necessitates a radical approach to the business model and supporting architecture within public services, in which government becomes a 'component trader'. The research indicates that this approach is capable of generating savings of 10% of government IT expenditure, or £1.2 billion per annum (Ref 1).

In **Ref 1**, Thompson uses case studies from the UK and outside, to detail how changes to infrastructure and procurement can move from a proprietary software model to a mixed economy where open standards are applied, and with certain strategic investments, generate significant cost savings to the government in the region of 10% of IT expenditure. This research leads to recommendations to reform how ICT public services are designed, delivered, and purchased. Whereas departments might traditionally outsource an entire vertical function (e.g. Finance, HR), they would now offer such companies 'utility' business, whilst sourcing more innovative, high-risk activities at a premium, often from SMEs or third-sector organisations. In turn, rather than assuming the delivery of entire functions, the public sector itself is required to move to a commissioning model where it must increasingly differentiate between types of service components and purchase these from the most appropriate supplier. By rigorous standardisation of some components, government can purchase these on a consumption basis (e.g. cloud computing). Where some components remain 'special' to government, these are sourced on a shared service basis. Other components, which require more skilled (often face-to-face) interaction, benefit from the major savings available from the other two areas.

Fishenden and Thompson (**Ref 2**), resulting from joint work with Fishenden (Cabinet Office), is the only academic paper on this subject. In their research collaboration, Thompson provided the theoretical framework and Fishenden the bulk of the case examples and government reference documentation. Both authors worked on the manuscript during successive revisions



of the paper, and are jointly responsible for the output.

#### 3. References to the research

- 1: Thompson, M. (2009) *Open Source and Open Standards: Reforming IT Procurement in Government* Independent report for the Conservative Party (<a href="http://markthompson1.files.wordpress.com/2012/02/open-source-and-open-standards-osborne-report1.pdf">http://markthompson1.files.wordpress.com/2012/02/open-source-and-open-standards-osborne-report1.pdf</a>)
- 2: Fishenden, J., and Thompson, M. (2012) 'Digital government, open architecture, and innovation: why public sector IT will never be the same again.' *Journal of Public Administration, Research and Theory* 23 (4) 977-1004 DOI 10.1093/jopart/mus022

### 4. Details of the impact

Thompson's work has wide and deep impact on government policy. The Thompson Report, (Ref 1) moved forward the Labour government's Open Standards agenda; formed the basis for the Conservative Party 2010 Technology Manifesto; was highly influential in reports from HM Government's Chief Technology Officer at the Cabinet Office, the Public Accounts Committee and the Public Administration Select Committee. In 2009, Chancellor George Osborne and the Cabinet Office announced a contract cap of £100m for all government ICT projects. This was a direct recommendation in Ref 1. Thompson was asked to assist the Cabinet Office's Efficiency and Reform Group in drafting and trailing the announcement of this initiative, which had a major impact on the strategic and commercial context of the government procurement and supply chain (Source 4).

Whilst direct impact can be traced to two core research documents **Ref 1 and 2**, they are but part of Thompson's credible platform of closely related activities in research, policy development, advice and guidance, written critique, and trialling of Open Innovation ideas within the UK public sector, which together led to a 'sea change' in government ICT thinking, broader impact on the UK technology industry, and on Intellect, the UK's leading technology trade association.

Thompson was co-author of *Better for Less: How to make the government deliver IT savings*, a 2011 white paper published by the *Network for the Post-bureaucratic Age*, which builds on recommendations of Open Source and Open Standards, and forms the 'playbook' for Francis Maude's formation of the Cabinet Office Efficiency & Reform Group (Source 4, Source 8). Cabinet Office (2011) *Government IT Strategy* is based around Open Standards and draws on the *Thompson Report* and *Better for Less* (Source 4, Source 9).

The Chief Technology Officer, Cabinet Office, confirms the impact of Thompson's work on government IT policy, in generating IT cost savings, and his substantial contribution to *Better for Less* as the key driver in the Open Standards component, to the 2011 government IT strategy and explanation of Open Standards. Thompson's work has also influenced behaviour through assistance in setting up an ICT spend controls methodology, which has been successful in government and adopted by the OECD. As a direct consequence, the government will have saved over £1 billion of spending over the next 5 years, £400 million of this in 2012 (**Source 4**).

The Chairman of the Public Administration Select Committee (PASC) refers to Thompson's direct impact on the committee's ability to scrutinise government policies and their implementation. Thompson contributed to their 2012 report, *Government and IT – 'a recipe for rip-offs': Time for a new approach.* The PASC provided Parliamentary approval for the Open Standards approach recommended by Thompson et al. **(Source 3, Source 5)**.

Cabinet Office (2011) Government IT Strategy Strategic Implementation Plan: Moving from the



'what' to the 'how' draws directly on Ref 2 for its entire approach, as acknowledged by HM Government Chief Technology Officer (Source 2, Source 4).

Head et al. (2012) *Planting the Flag: Strategic Sourcing,* Pocket Guide Number 4, Society of Information Technology Management (SOCITM: the national association for local government IT directors/CIOs) is based directly on **(Ref 2) (Source 7)** and is used as best practice to guide ICT procurement.

As a Cabinet Office Advisor (2011-), Thompson has supported co-authors Maxwell and Fishenden to gain a platform for their ideas in government, despite initially very strong cultural resistance. Two examples are Thompson's preparation of an *Open Desktop Strategy White Paper* for the Cabinet Office (**Source 9**), and his 'Delivery Approach & Principles' (Fig. 2) fronting up the Cabinet Office ICT Strategic Implementation Plan (**Source 2**).

Thompson's work has also impacted the UK technology industry and the activities of Intellect, the UK's leading technology trade association. He presented work on *Open Source and Open Standards*, as delivered to George Osborne, to the Intellect Annual Conference, 2009. He showed that progressive use of open standards and platform-based re-use by the public sector would revolutionise the design and delivery of UK public services and supporting technology, and that this would dramatically impact business models in the industry, creating a 'level playing field' that would offer SMEs greater access to government business. The Director General of Intellect acknowledges Thompson's work, 'this was a new message, and at the time was not accepted by everyone' (Source 6). Thompson was elected to the board of Intellect. He advocated the need for change in order to respond to the fast-changing technological and commercial landscape. This led Intellect to make the following strategic changes now being implemented: i) wholesale adoption of an internet-based platform to facilitate networking, both internally and to government, ii) a 'market radar', providing real-time visibility of the emergence of new supply and value chains and partnering clusters, iii) greater focus on campaign management and social media (Source 6).

There is considerable press interest from broadsheet publications and national media; Thompson is a frequent plenary speaker at national conferences, including at the Number 10 'Better Procurement' event (attended by David Cameron, with Francis Maude as discussant), Govnet Next Steps for Government ICT Conference (2012); Public Service Reform Conference, (2012), and has shared platforms with Lord Freud, Paula Venellis (Chief Executive of the Post Office) and Lord Erroll on public sector reform. Thompson has also advised seven local councils on redesigning services using Open Standards.

## 5. Sources to corroborate the impact

- 1. Cabinet Office (2011) *Government IT Strategy*, March 2011 www.cabinetoffice.gov.uk/sites/default/files/resources/uk-government-government-ict-strategy\_0.pdf
- 2. Cabinet Office (2011) Government IT Strategy Strategic Implementation Plan: Moving from the 'what' to the 'how', September 2011 <a href="https://www.cabinetoffice.gov.uk/sites/default/files/resources/govt-ict-sip.pdf">www.cabinetoffice.gov.uk/sites/default/files/resources/govt-ict-sip.pdf</a> (Delivery approach, p9)
- 3. Thompson, M. (2012) "Appendix 3: Comments by Dr Mark Thompson, University of Cambridge". Government and IT. 'A recipe for rip-offs': Time for a new approach: Further Report, with the Government Response to the Committee's Twelfth Report of Session 2012-12. House of Commons Public Administration Select Committee, pp. 39-43, www.publications.parliament.uk/pa/cm201012/cmselect/cmpubadm/1724/1724.pdf
- 4. Written Supporting Statement from HM Government Chief Technology Officer, Cabinet Office

#### Impact case study (REF3b)



- 5. Written Supporting Statement from Chair of Public Administration Select Committee
- 6. Written Supporting Statement from Director General, Intellect UK (UK Technology Trade Association)
- 7. Head of Policy, SOCITM and copy of SOCITM Pocket Book, Strategic Sourcing 2012 (electronic copy on repository)
- 8. Maxwell, L., Fishenden, J., Heath, W., Sowler, S., Rowlins, R., Thompson, M., and Wardley, S. (2010) 'Better for less: How to make Government deliver IT savings'. White Paper published by *Network for the Post-bureaucratic age*, 7 September <a href="http://www.scribd.com/doc/37020044/Better-for-Less">http://www.scribd.com/doc/37020044/Better-for-Less</a>
- 9. Maxwell, L., Sowler, J., Thompson, M., and Stevens, T. (2010) *Desktop Better for Less*. White paper submitted/presented to Cabinet Office, July1 <a href="http://markthompson1.files.wordpress.com/2012/02/desktop-paper-for-cabinet-office-july-20101.pdf">http://markthompson1.files.wordpress.com/2012/02/desktop-paper-for-cabinet-office-july-20101.pdf</a>
- 10. Rt. Hon George Osborne MP, Chancellor of the Exchequer (*The Times*, 3/2/2009 electronic copy on repository)