

<b>Institution:</b> University of Cambridge		
<b>Unit of Assessment:</b> UoA17		
<b>Title of case study:</b> Digital Transformation of Public Services through Shared Platforms in the UK and Australia		
<b>Period when the underpinning research was undertaken:</b> 2013 – 2018		
<b>Details of staff conducting the underpinning research from the submitting unit:</b>		
<b>Name(s):</b> Mark Thompson	<b>Role(s) (e.g. job title):</b> University Senior Lecturer in Information Systems	<b>Period(s) employed by submitting HEI:</b> 01.10.2003 – 31.12.2018
<b>Period when the claimed impact occurred:</b> 2014 - 2020		
<b>Is this case study continued from a case study submitted in 2014?</b> Yes		
<b>1. Summary of the impact (indicative maximum 100 words)</b>		
<p>Research on common platforms has helped government in the UK and Australia to improve efficiency and make public services more citizen-led through digital transformation. This became a key part of the digital strategy of UK and Scottish governments, and influenced how local authorities chose to enact digital reforms. At the local level, one council's digital programme delivered an estimated saving of GBP190,000 between 2016/17 and 2018/19 and enabled cost savings of GBP20,000 a year on software spend in waste management. Finally, the research was the driver behind the creation of an open-source digital library for councils, which has enabled more than 100 local councils to share digital resources, improving efficiency and quality of services for remote and/or under-resourced councils in the UK and Australia.</p>		
<b>2. Underpinning research (indicative maximum 500 words)</b>		
<p>The underpinning research was conducted by Mark Thompson (at University of Cambridge until 2018) together with Professor Alan Brown (University of Surrey) and Dr Jerry Fishenden (London School of Economics/Bath Spa University). Over the past decade, they developed a shared research agenda that has helped governments to understand how digital technologies can contribute to more efficient and citizen-oriented services, and how governments can best transition to and implement digital public services. Thompson took forward efforts to bring the research to a diverse set of policymakers, working directly to help policymakers to apply the research insights. Through this work, he has contributed new ideas on the conceptualisation and strategic development of digital transformation in government.</p> <p>The research demonstrated that an open architecture model of public services is best aligned to the deployment of digital transformation. They compared new public management (NPM) and Open Architecture models, and argued that an NPM approach was too static and failed to align to the open nature of technology platforms. They incorporated these insights into their model for digital transformation in public services [R1]. This model is distinct in its dynamic view that emphasises the relationship between shared platforms and cost, and innovation, thereby accounting for technical and commercial aspects of digital transformation.</p> <p>Their approach to digital transformation has identified business models, tools and techniques for an open architecture [R2], drawing on a range of case studies of digital services in the UK public sector. Their findings were twofold [R2]: successful deployment of an open architecture approach requires both leadership and a cultural shift (around strategy and education) to enable the adoption of a government-as-a platform approach. They showed how a siloed approach has persisted in the redesign of public services and has limited the efficiency of previous transformations.</p> <p>Their research also explained the value of a platform approach [R2] and learning from operational models of private tech-based firms in a sensitive and appropriate manner for the public sector. A platform approach disaggregates vertical business logics in government into horizontal processes and functions, and approaches back-end processes as Lego building</p>		

blocks. This makes it possible to identify common building blocks across government through which to implement digital reforms efficiently and effectively. Working with the UK Government's digital strategy, Thompson and colleagues showed how this approach helped to identify what 'Lego' building blocks can be outsourced and where specialist requirements should be maintained [R4]. They also emphasised that organisations could usefully separate and analyse high-risk and low-risk activities before they are procured. These findings led to a further contribution to scholarship: an assessment framework for digital transformation that reflected the model set out in [R1] and took into account the business dimensions of change to government-as-a-platform [R3].

### 3. References to the Research (indicative maximum of six references)

[R1] Fishenden, J., and Thompson, M. (2013) "Digital government, open architecture, and innovation: why public sector IT will never be the same again." *Journal of Public Administration, Research and Theory* - doi: 10.1093/jopart/mus022.

[R2] Brown, A., Fishenden, J., and Thompson, M. (2014) *Digitizing Government: Understanding and implementing new digital business models*. Palgrave MacMillan, UK.

[R3] Brown, A., Fishenden, J., and Thompson, M. (2017) 'Appraising the impact of platform models and government as a platform (GaaP) in UK Government public service reform: towards a platform assessment framework (PAF)'. *Government Information Quarterly* (published online May 2017; DOI: 10.2016/j.giq.2017.03.003)

[R4] Fishenden, J., Thompson, M. and Venters, W. (2018) *A Manifesto for Better Public Services*, launched at the Institute for Government, March 27 2018

Some outputs published in peer-reviewed journals.

### 4. Details of the Impact (indicative maximum 750 words)

This research, on why and how shared platforms can make digital transformations in government efficient and citizen-led, has contributed to more efficient and equitable digital public services in the UK and Australia. Building from a public-facing manifesto, Thompson led on efforts to bring the research to policy, playing a pivotal role in engaging local, devolved and national government in order to facilitate uptake of the research in strategy and implementation.

#### **Integration of platform approach in the UK and Scottish Government's Digital Strategy**

The research on the value of shared platforms and a supportive culture for the effective transformation of public services were integrated into UK government digital strategy, which gives direction for digital transformation in government across the UK.

Uptake of the research was possible through Thompson's close working with senior government officials. Thompson served on the National Audit Office *Digital Advisory Panel* from 2014 to 2016, and provided *ad hoc* advice to CEX Civil Service John Manzoni, and three cabinet ministers (F. Maude, D. Gauke, B. Gummer). He also provided expert advice to the 2014 Labour *Digital Review* on platforms. Thompson then contributed directly to the drafting of the UK Government's Digital Strategy in 2017, which recommends strategically sharing components across government, incorporating findings in [R2].

The former Deputy Director, Government Digital Service, led on the Government Transformation Strategy and attributes this to Thompson's research:

*"Mark's impact is most evident from the high-level structure of the document [Digital Strategy], where we have placed a significant focus on the need for government to move towards shared platforms, components and reusable business capabilities. This has taken significant inspiration from Mark's research – particularly the book Digitizing Government. Mark's advocacy of the spend controls, value chain / Wardley mapping, and 'minimum viable business capability', have helped us to create a common narrative for transformation across government"* [S1].

Also, Thompson worked with the Department for Culture, Media and Sport (DCMS) by helping to design an education programme for Permanent Secretaries and Director Generals around digital transformation to learn about potential efficiencies in government and for users through a

platform approach. This directly reflected their findings in [R2]. The research is core to the training, which has become central in their efforts to build senior civil servants' digital literacy. HM Government National Technology adviser explains:

*“Mark’s research on applying digital business models to redesign and transform public services – most recently the publication on government platforms in Government Information Quarterly – underpins a significant part of the content for the programme ... Mark’s thinking has changed the way we teach our senior policymakers to conceptualise, design, and deliver digitally-enabled public services” [S2].*

The Scottish Government also took up the research findings on shared platforms in their strategy and reforms spearheaded by their Digital Directorate. The Scotland’s Digital Strategy (22 May 2017) made common platforms a government priority. It aims for “a public sector that operates on contemporary, digital, platform-based business models” and “demands” that they create common platforms, deploy common technologies and use cloud-based solutions to avoid reinventing the wheel [S3].

Interest in platform thinking originated from senior officials’ engagement with Thompson and the published work. The Transformation Lead for the Government Digital Service, and the Director of Digital, read and applied findings published in *Digitizing Government* [R2]. Thompson was one of two Digital Advisors, and gave the Keynote address at 2017 Digital Scotland event, attended by the Scottish Minister for Digital.

Audit Scotland identified common platforms as a key requirement in their digital strategy [S4]. As the Director of Digital explains this is being done by directly taking up Thompson’s research:

*“The Scottish Government’s Digital Strategy, published in 2017, sets out an approach to digital transformation based on the development and operation of common operating platforms across Government for processes such as publishing, identity, licensing and payments. Mark Thompson’s book “Digitizing Government” was hugely influential in shaping our thinking on this topic, in the way in which it develops the concept of “Government as a platform” and identifies the potential opportunity of enabling resources to be redirected across Government based on their ability to deliver public value.” [S5].*

### **Realisation of local government’s greater efficiencies through digital transformation**

Local authorities utilised the research to improve efficiency in digital transformations. For example, Adur and Worthing Councils adopted platform thinking and a ‘Lego block’ view of services, and also utilised tools developed for the private sector, like e-payment systems, to accommodate for a lack of financing [S6]. The Director for Digital Resources for Adur and Worthing Councils, led in designing their digital strategy. He explains,

*“Mark’s academic work on the potential of digital platforms to enable councils to establish and share core capabilities has had a significant impact on our approach here at Adur and Worthing, where we have been successfully pioneering this model now for several years” [S7].*

The then Head of Digital and Design affirmed Thompson’s central influence on their approach to rethinking organisational operations [S8].

Already, there is evidence of improved efficiency and effectiveness. The UK Local Government Association estimates the Councils’ digital programme achieved an annual saving of GBP190,000 between 2016/17 and 2018/19. The ‘lego block’ approach enabled them to save GBP20,000 a year on software spending in waste management since April 2016 [S6]. It recognised the Councils as a forerunner in digital transformations that are efficient and ease customer interactions [S9].

### **Levelling up of digital reforms through reuse and sharing across UK and Australian councils**

Expanding even further its support for local government, the research on shared platforms was the premise for an open source platform that enables local governments to share their digital tools. This provides for increased efficiency and equity through sharing between councils.

Jadu Group, a UK-based technology platform provider, developed an open source digital library for local authorities in May 2018. Jadu’s Executive Director testifies that Thompson was central

to the library's design; this was affirmed at its launch in May 2018 [S10, S11]. The support enabled through the library for local councils as the implement of digital reforms has been profound, premised upon sharing of backend 'Lego block' tools.

The Executive Director of JADU, emphasises:

*"The idea for the Library came from Mark and his team, or certainly the idea seeded from their theories. Mark's evangelism is a lighthouse for how we actually do make changes in government by leveraging reusable technology and open standards"* [S11].

Since 2018, 90 UK local authorities have used the library,[S11] importantly those with limited capacity [S12] have benefited from the sharing of tools and digital processes from other councils. The JADU Executive Director suggests:

*"The Library concept is a game changer, there is no question about it. Two years later it's very clear that this is a long term commitment in driving adoption and creating a community of users" .. "what we are doing is having an impact on the entire local government market... This is driving the speed at which digital services can be developed and launched"* [S11]

The library has proven valuable in improving efficiencies for local authorities globally. In Australia, the JADU library has promoted access and sharing to address inequality in access to public services between remote and indigenous, and metropolitan councils. The Local Government Association of Queensland (LGAQ), representing 77 councils, partnered with JADU in early 2018.

The acting CEO for LGAQ, explains the importance of levelling up digital capacity across councils: *"Our indigenous community members have a lot of disadvantage for a lot of range of different reasons but their digital platform that they can access is as powerful and as contemporary as the people living in the southeast Queensland, which is the high density part of our state"* [S13].

With the library, the impact of the research has expanded beyond shaping government strategy, to enabling councils to support each other in delivering and sharing public services efficiently and in an inclusive manner.

#### **5. Sources to corroborate the impact** (indicative maximum of 10 references)

S1 Deputy Director, Transformation, Government Digital Services, email to Mark Thompson, 23 March 2017.

S2 HM Government National Technology adviser, email to Mark Thompson, 1 May 2018.

S3 Scottish Government. A Digital Strategy for Scotland (pp. 4, 20)

<https://www.gov.scot/publications/realising-scotlands-full-potential-digital-world-digital-strategy-scotland/pages/7/>

S4 Auditor General of Scotland. Enabling Digital Government, June 2019 (pp. 36, 37) Accessed from: [https://www.audit-scotland.gov.uk/uploads/docs/report/2019/nr\\_190620\\_enabling\\_digital\\_government.pdf](https://www.audit-scotland.gov.uk/uploads/docs/report/2019/nr_190620_enabling_digital_government.pdf)

S5 Director, Digital Directorate, Scottish Government, testimonial letter, 16 March 2020.

S6 "Adur and Worthing's journey to 'government as a platform,'" Public Technology.net (4 April 2016). Accessed at: <https://www.publictechnology.net/articles/features/adur-and-worthing%E2%80%99s-journey-%E2%80%99government-platform%E2%80%99>. Evidence for e-payment and other features in Adur & Worthing council's platform.

S7 Director for Digital & Resources, Adur & Worthing Councils, email to Mark Thompson, 4 May 2018.

S8 Head of Digital and Design at Adur and Worthing Councils. *Personal Blog*. Accessed at <https://davebriggs.io/> on 10 November 2019

S9 Local Government Association. (2019). Adur & Worthing Councils: A Joint Council Finance Peer Review, On site 27th – 29th November 2018. Feedback Report January 2019.

S10 Combined (press releases for JADU) "Councils welcome open source library for digital services," (16 May 2018). Accessed at: <https://www.localgov.co.uk/Councils-welcome-open->

## Impact case study (REF3)

[source-library-for-digital-services-45300](https://www.jadu.net/news/article/196/councils_back_launch_of_open_source_library_for_digital_services-45300) AND Jadu. "Councils back launch of open source library for digital services," (15 May 2018). Accessed at: [https://www.jadu.net/news/article/196/councils\\_back\\_launch\\_of\\_open\\_source\\_library\\_for\\_digital\\_services](https://www.jadu.net/news/article/196/councils_back_launch_of_open_source_library_for_digital_services)

S11 Executive Director, JADU, written testimonial, 7 April 2020 and JADU correspondence

S12 ICT Data and Information Systems Architect (Digital) for Lincolnshire County Council, phone interview, 19 February 2020 (approx.. min. 7)

S13 Acting CEO, Local Government Association of Queensland, phone interview, 13 February 2020 (min. 32)