Multi-functional view of technology governance in tax administration: A case study

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ABSTRACT

Despite digital technology gaining importance in recent years, a holistic view on its governance in public and tax administration is yet to be clearly articulated, a shortcoming made more acute by the centrality of the government sector. Guided by a case study approach considering three key perspectives in a European tax administration – 1.) Customer Service Leader; 2.) Information and Technology Leader; and 3.) Operations Leader. This study surfaces the elements central to the effective governance of disruptive digital technologies.

CCS CONCEPTS

• **Management of computing and information systems**; • **Government technology policy**; • **Human and societal aspects of security and privacy**;

KEYWORDS

Governance, Disruptive digital innovation, public administration, tax administration

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1 INTRODUCTION & LITERATURE

The rate and pace of innovation means that technology is evolving at rapid pace; digital technologies have enabled public sector reform while simultaneously deepening governance challenges [1]. To explore technology governance, taking a multi-perspective view provides a rich understanding of the unique challenges navigated by each key leadership function. Firstly, the ***customer service perspective*** is considered given public administrations role to serve all of society. Technological innovation is leading to rapid change outside of public policy institutions, and such administrations need to proactively engage with this change rather than wait for technology to shape the landscape [2]. Furthermore, data is a key asset of public administrations and is centrality in today's digital economy, therefore an ***information and technology perspective*** is the second to be considered within the tax administration. A robust governance architecture includes oversight of political institutions, political and administrative processes, and policy instruments; such governance strategies should facilitate adaptive and flexible adjustment to respond to the ever-changing context in which they operate [3]. An agile and adaptive governance approach aligns with today's rapidly evolving environment; governance should support and guide disruptive technologies rather than shape them as "the choice of regulatory strategy should not be affected by the availability of regulatory technology" [4]. As such an ***operations perspective*** is the third and final perspective central to exploring the elements of technology governance.

This paper adopts a case study approach to examine the governance of digital technologies within a European tax administration that consistently ranks in the top ten most effective countries to pay tax in, both in the EU and globally [5]. This case study was conducted during the first year of the Covid-19 pandemic; the difficult environment enabled the researchers to truly capture the meaning of governance during unprecedented times. The study responds to the following research question:

What technology governance elements shape digital technology adoption in a tax administration?

2 METHODOLOGY

A qualitative case study approach is employed to investigate "a contemporary phenomenon within its real-life context" [6]. The nature of the research required access to high-ranking executives within a tax administration, including the Information and Technology Leader, Operations Leader, and Customer Service Leader. In-depth interviews were conducted based on an interview protocol devised from an analysis of the literature and discovery of the key themes and components related to governance in public administration. The interviews took approximately seventy minutes each and they were recorded and transcribed in preparation for analysis. In addition to the primary data, secondary data in the form of public government documents and consultancy reports were gathered to further strengthen the researchers contextual understanding of the operational environment. To analyse the data,

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this research employed Interpretative Phenomenological Analysis. Initial coding began through reading and re-reading interview transcripts to identify and confirm common themes. The second round of coding involved refining and clarifying these identified categories while the third and final phase of analysis involved the identification of key emergent themes or categories through a hierarchy of codes resulting in thematically coherent interpretations of the data. Analysis and coding of the data identified 11 technology governance elements that shape digital technology adoption within a tax administration.

3 FINDINGS

The main findings are captured through the identification of 11 governance elements described below and highlighted in Figure 1.

Governance Elements

- ***Application of governance:*** Successful application and use of a technology helps the organization effectively and efficiently allocate resources to achieve a particular business objective or anticipated result.
- ***Legislation and tax law:*** Public administrations must follow enacted legislation and fulfil various tax requirements, these constraints impact the way new technological applications are selected, adopted and governed.
- ***Engagement and strategic alliance:*** The nature of public administrations means they are often part of a complex network of stakeholders, the breadth of this network necessitates engagement and strategic alliances; new technological solutions must accommodate the needs of relevant stakeholders.
- ***Technology impact areas:*** Public administrations have a civic and legislative duty to ensure that newly adopted solution provide a tangible and measurable impact for citizens (either directly or indirectly).
- ***Management and monitoring:*** The nature of public administration mean there are strong governance and oversight boards in place and the management and monitoring of activities is increasingly important.
- ***Ideation and third parties:*** The pace of digital disruption and public sector resource constraints has resulted in a reliance on third parties for innovation support; this can be positive (cross-pollination of ideas) or negative (vendor lock-in, imbalance of power).
- ***Data availability and integrity:*** Data is one of public administrations' key resources; a vast reservoir of data is both an asset and a liability. Data management practices play critical role in maximizing the value of data available to the organization.
- ***Users' needs and preferences:*** Public administrations have a responsibility to a large number of diverse stakeholders; technology can streamline the complexity of serving a broad spectrum of user groups.
- ***Technology/technological solution beneficiaries:*** Technological solutions have the potential to radically alter public administration, and this has implications for stakeholders yet public administrations must continue to service the interests of all their users.
- ***Innovation culture and training:*** Public administrations are regarded as conservative organisations yet the increasing impetus to remaining relevant requires an innovation culture through support and training initiatives both for staff and service users.

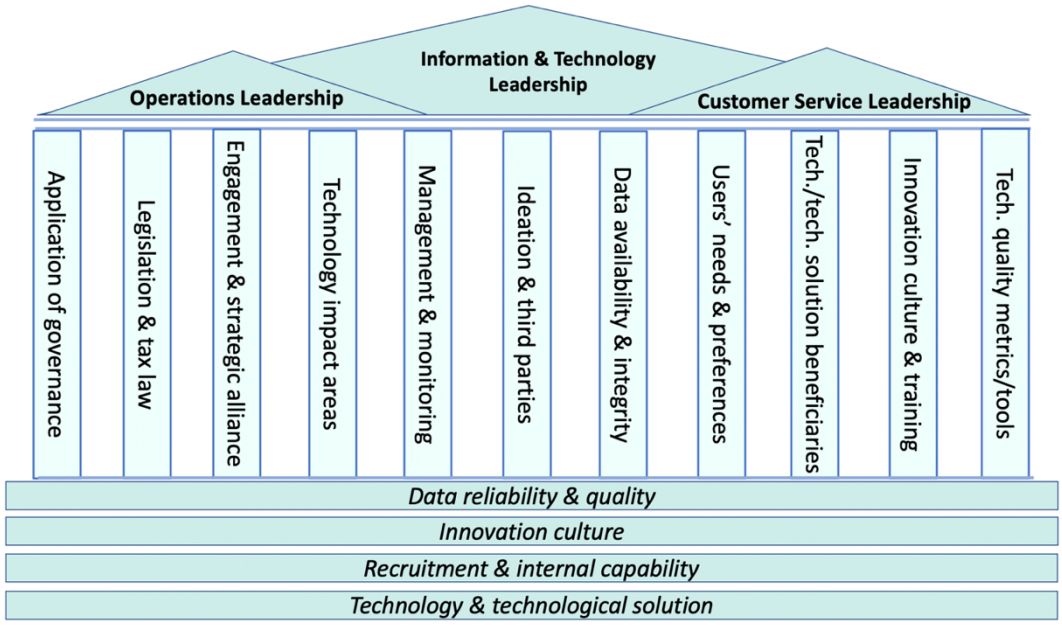

Figure 1: Overview of Governance Themes

- ***Technology quality metrics/tools:*** The effectiveness of solutions need to be monitored to ensure proper allocation of resources and assessment of technology quality metrics.

4 DISCUSSION

There is strong motivation and strategic alignment between the three leadership functions to ensure deliberate use of technology. This manifests in the overarching objective to use "technology to ensure that [taxation] happens as naturally as possible" (Information and Technology Leader), coupled with the goal of developing real-time data that can guide both the tax administration and complementary public departments, such as the department for social protection. Where technology is concerned a key challenge relates to public procurement requirements, these impede public sector activities and lengthen the change process. A further challenge is vendor lock-in (heightened by public procurement processes) whereby the use of public funds is fraught with strict processes and mechanism to ensure the public are protected yet conversely such mechanisms can slow progress and stymy innovative behavior. With regards to agile governance, the literature identifies the centrality of demand-driven services and multi-actor collaboration, thus highlighting the importance of serving citizens and working with stakeholders. In this study, the emphasis on public consultation, collaboration, and idea generation as a result of working with external stakeholders, in addition to the dependency on public opinion, illustrate an acutely service driven approach that places the service users at the heart of the administration. The closeness between the administration and service users facilitates open communication and an understanding of user needs which further enhances agile governance. The effectiveness and efficiency of strong governance that offers flexibility, agility and responsiveness was illustrated in this case when the nation was faced with a public health crisis – the tax administration had access to real-time reliable data allowing them to work with the department of social protection to identify those in need that require subsidies and income supports.

5 FUTURE RESEARCH

This study explores technology governance elements that shape digital technology adoption in a tax administration through analysis of three key leadership functions (customer service leadership, information and technology leadership and operations leadership) in a tax administration in a European country. Future research may examine expand the study to other nations to assess the robustness of the identified elements in other geographical contexts.

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