The Role of Digital Transformation in Enhancing Public Revenue Management in Iraq

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ABSTRACT

Digital transformation plays a very important role in enhancing the management of public revenues, and in the context of sustainable development, it has become a cornerstone of the global drive for sustainable development, especially in developing countries, including Iraq. The fact that Iraq has a super sophisticated economic system nature and other route challenges i.E., dependency at the oil revenues quite some distance from smoothly exercising effectiveness and transparency in controlling public describer has been tough equivalent to process big parts of the public wealth. In this paper, we examine the part digital tools and technologies can play in revenue collection, administration and allocation. For instance, the ease of access to public financial systems is the workflow that leads toward sustainable economic growth through the integration of digital solutions that promote transparency, accountability, and efficiency. Through analyzing Iraq's problematic management of the revenue, as well as the impact makings digital can enterprise; this paper delineates them as a core place of anchor for developmental aspirations broader. (A.Al- Kassar et al., 2014).

Keywords: Iraq, Digital Transformation, Public Revenue, Management, Development

INTRODUCTION

Iraq is a country with high level of natural resources, but since its revenues have almost completely been based on public revenues, through the oil sector, managing these revenues efficiently has been challenging. This dependence has constrained efforts to build alternative sources of revenue streams and rendered the economy vulnerable to fluctuations of international oil prices, resulting in the management of public revenue to be an integral part of economic stability and sustainability. Hence, digital transformation might come into play here to create a win-win situation. The Iraq economy need to modernise revenue collection, greater transparency and less inefficiencies in the public finance systems and integrating digital tools in them will help. These steps are important because they will both help to improve the fiscal management of the country, and because they connect to larger aims of sustainable development. That is, this paper investigates the contribution of digital technologies to mitigate the inadequacies of the public revenue management system in Iraq, yet is indirectly it can go a long way in contributing to a stable and diversified economy in the country, the descriptive and analytical approach was used. (Urman & Makhortykh, 2023)

The Concept of Digital Transformation

Digital Transformation an understanding of the integration of digital technologies into every facet of an organization in the systemic shift from traditional ways of working to technology operating in lockstep with core business processes enabling value principles to delivery customers. Its more about leveraging the technology advances such as cloud, automation, ai, analytics to actually transform / innovate deliveries and how these processes will be run and create more efficiencies and value and innovation to each enterprise. In simple terms, digital transformation is less about the new EU product adoption and more about re-imagining the traditional business models, ensuring best customer experiences, and agility to rapidly changing market conditions. It is not a simple one-time process, and organizations need to be open to change and build an ecosystem that will aid further technology-led innovation, growth and sustenance. (Saeed et al.2023)

Defining Digital Transformation in the Context of Public Administration

So digital transformation in public administration means use of digital technologies according to the way governments operate with it in order to achieve efficiency, along with transparency and effectiveness of service delivery. This entails the transformation of manual administrative processes to digital solutions and systems that empower swift, automated, and data-driven decisions. The process is a transformation from what we already do. The objective of the reform is to improve how governments deliver public services, citizen engagement and allocation of resources. In the public sector, the goal is smarter, more agile organizations that can adapt to changing demands of society and deliver better governance. Digital transformation is primarily the use of technological innovations in public administration to make it more accountable, accessible and agile. **(Ciancarini et al., 2023)**

Global Trends and Examples of Digital Transformation in Public Finance Management

Digital transformation in public finance management has rapidly developed world wide where various governments are inclined to be more efficient, transparent, and accountable. Digital tools have also saturate in different countries for better effectiveness of tax collection, budgeting to the expenditure services. Estonia, for example, has been at the forefront of e-government systems that simplify tax collection and other citizen-state interactions. Likewise, UK and Singapore also introduced digital platforms which assist countries to advance on tax compliance improvement, and on tax revenue generation in data analytic combined with automation system. The above referred to global experiences provide an evident lesson learnt for countries like Iraq in terms of potential benefits through progresses in their public finance management system as a part of the public sector digital transformation to ease and sustain the malpractices such as corruption, revenue collection process, and trust in the financial systems. (Rosenbloom et al., 2022)

Public Revenue Management in Iraq

That exacerbates Iraq's ongoing public revenue management crisis, a crisis central to the country's economic structure as the oil-export sector is the key source of government revenues. These multi millions come in oil, but not know how to manage such wealth, Iraq is rich, so poor because of lack of transparency, corruption, and tax and fiscal systems failure processes. The narrow type of revenue source makes the public sector a predominant force in the economy. That has thus, produced an economic environment characterized by volatility and the cycles of oil. The management of public funds has had attempts at change for improvement, however as these are systemic there may be a delay in the results. With these problems in mind, the digital transformation seems to offer an abundance of solutions through transparency, efficiency, and optimal resource allocation; ultimately resulting in a more stable and sustainable economy after all. (Iraq, 2022)

Digital Transformation and Its Role in Public Revenue Management

Digital transformation is about integrating digital technologies into every facet of public service, including revenue management. In this context, it covers tax automation, electronic/auto invoicing, data analytics, and digital platforms for payments and reporting in the larger context of public revenue systems. These allow full automation which reduce human interventions & increase efficiency and transparency in revenue collection. Digital government of financial systems allows governments to more accurately and quickly provide revenue reports, better monitor financial transactions, in order to even reduce corruption or revenue leakage. A simplified approach to managing public funds is therefore imperative to making government more accountable and responsive — and these are critical factors for the stability and sustainability of economic growth. The use of digital transformation in the public revenue management field of many of platforms has achieved success one of these solutions that Iraq could benefit in solving these chronic problems and ease the transition towards a more diversified, sustainable and resilient economy (AJ & S, 2018).

How Digital Tools Can Improve Efficiency, Transparency, And Accountability

Public revenue management can be automated, there are many tools that can increase efficiency, transparency, and accountability of tax revenue management and digital tools to avoid human error and access to real-time data. Automation also speeds up and increases accuracy of transactions by streamlining workflows in revenue collection and processing. This makes tracking the flow of money easier, and digital platforms that allow better monitoring and access to public data improve transparency and accountability by making it more difficult to hide the ways in which money is collected and allocated. A system at the federal level is subject to scrutiny while digital systems enable the records and reports prepared by any department to be generated for auditors, stakeholders and citizens, making them accountable; the government actions are open for perusal that limits corruption or mismanagement. In sum, they make for a more dependable and efficient system of public finance. (A. Al- Kassar et al., 2014).

A Comparative Analysis of Iraq's Public Revenue Results before and After Digital Initiatives.

Public income tracking and collecting systems have begun to benefit, if slowly, from digital transformation projects initiated by the Iraqi government. Transparency and efficiency have significantly improved between the pre- and post-digital reform eras, particularly in tax and customs revenues.
The table below illustrates changes in non-oil revenue performance in selected fiscal years:

Year	Non-Oil Revenues (Billion IQD)	% of Total Revenue	Digital Systems in Use
2015	8.2	4.1%	Manual systems
2018	12.7	5.9%	Partial digital integration
2022	22.5	8.3%	Full e-tax & e-customs systems

Source: *Iraqi Ministry of Finance Annual Reports (2015–2022)*

According to this data, the use of digital tools including automated customs clearing systems and e-taxation platforms has helped to enhance non-oil revenue collection by 174% between 2015 and 2022. The goal of digital public financial management (DPFM), which encompasses several instruments, is to modernize the way governments gather and handle fiscal resources.

Link between Digital Transformation and Sustainable Development

Digital transformation and sustainable development are correlated in the sense that digital technologies serve to enable sovereign systems based on sustainable management with equal access to transparency and inclusion in systems for the achievement of preventative economic–social–environmental goals and durable evolution. They are resource management, process efficiencies, and decision-making powered by digital tools to facilitate sustainable outcomes. Digitization in public revenue management, for instance, can help to simplify financial systems, enhance transparency, and reduce leakage, and thus directly to the economic sustainability. Digital solutions also promotes innovations in energy preservation, healthcare, and education — the three areas critical to sustainable development. Thus, we believe, digital transformation then delivers scalability for sustainable development by laying down systems that are nimbler, more efficient and who knows, possibly, more robust to challenges that are lying ahead. (Castro & Lopes, 2021)

Case Studies and Best Practices

The experience of other countries in implementing this digital transformation in their general revenue management systems is a good example for Iraq. Consider Estonian e-governance, a world champion in digital and public services, with e-tax completing the highest level of tax collection and administrative efficiency among developing countries. Similarly to other integration of digital technologies, there has been an improvement in revenue collection in Rwanda as result of the adoption of digital payment system for tax compliance, even in some remote areas of Rwanda. These are only examples of how more digital means can help reduce inefficiencies, ensure transparency and slow down resource plundering by allowing for better revenue management. There are lessons to be learnt from these experiences, which might help Iraq finding the way to adapt and adapt these solutions during the current context to improve public financial systems and support potential contributions to sustainable development (Bevacqua, 2023).

Challenges and Barriers to Implementation in Iraq

The lack of infrastructure and technology resources will remain an issue, particularly in rural or developing regions – a challenge of Digital Transformation implementation of Public Revenue Management in Iraq. Furthermore, having the advanced digital instruments to use them is of little value without specialists who can set them up, manage them and run them. In addition, cultural resistance to change along with cyber security and data privacy issues are other formidable challenges. Moreover, political instability and the issues related to economic

uncertainty; further complicates the modernization process. One can clearly see that there is a need for strong institutional support behind the digital solutions (in the particular Iraq case at hand, those are often hobbled by state bureaucracy and splintered governance). To break through these barriers, we need to set the stage for a better capacity, infrastructure and culture of innovation within government. (Abd et al., 2019)

CONCLUSION

In Iraq, digital transformation can also radically improve the management of public revenue the transition to new technologies would provide an opportunity for Iraq to start to reduce its dependence on oil revenues and move towards a more diversified and sustainable economy. Digital tools not only strengthen public finance systems and the management of the economy, but lifestyle changes with digital tools also assist in realizing a broader sustainable development agenda. Digital transformation has undeniably huge and well-established benefits, although it does face some challenges, particularly on the front of capacity building and infrastructure. Not only will implementing these measures in Iraq strengthen the financial system; it will enable the nation to become more resilient and prosperous for the future.

RECOMMENDATIONS

The paper recommended the possibility of developing public revenue management through digital transformation in Iraq by modernization of its financial infrastructure and creation of modern digital tools for revenue collection, data analysis, and reporting. The digital single platform for tax & revenue services through efficiency will diminished chance for corruption. There is also a need for training in digital technologies for government personnel, so they can leverage such systems effectively. Additionally, by speeding up accountability, more public-private partnerships can expedite innovative digital solutions. Finally, there remains a strong need for policy reforms that promote transparency and the accountable use of digital assets to both bolster public trust and support sustainable practices over time. Collectively, these actions will also support the public finance system reform towards a more efficient and transparent system, which is the needed precondition to sustainable economic development.

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