

Pockets of Innovation in the Public Sector: Digitalization as a Driver of Change and Innovation in Ghana's Public Sector

Joshua Jebuntie Zaato ^{1*}

Abstract

Digitalization has had a phenomenal impact on public management by redefining how public services are delivered in two main strategic ways; (a) speeding up and strategically improving public service delivery and (b) enabling public servants, politicians, and citizens to interact, engage and influence each other in the public sphere. Despite these promises, most countries especially those in developing countries, are still waiting in vain for the expected returns on their digitalization investment. This raises some questions worthy of consideration. First, what is digitalization and what is its value in the public sector? What kind of digitalization is suitable for developing countries and under what conditions? The central argument of this paper is that expected benefits of digitalization are not a given, but wholly dependent upon the successful adoption and adaption of what is referred to here as digitalization friendly policies. Using the example of the recent digitalization crusade in Ghana, the paper examines this relative success story in a developing country context to highlight how reforms can be creatively adapted to fit the needs of individual countries. This way, the research contributes to and advances knowledge and understanding of practitioners, policymakers and students of public management on how to build resilient societies and communities through digitalization.

Article History: Received 18 December 2023

Accepted 5 June 2024

Keywords: Digitalization, innovation, service delivery, Ghana

1 Department of Political Science, School of Social Sciences, University of Ghana, Legon, Ghana

***Corresponding author:** Department of Political Science, University of Ghana, Legon, Accra, Ghana.
Email: jjzaato@ug.edu.gh

Introduction

In search of a better public sector management

Governments all over the world have spent a lot of money and time investing in physical infrastructure, human resources and other hard and software with the main objective of improving their public sector. They strive to make the public sector and public management more effective and efficient to give citizens value for money. But despite all these investments, citizen satisfaction with public service delivery, especially in developing countries has been low. Most citizens still feel the lethargic bureaucracy is still too bloated, outdated and bent on processes, procedures, and rules to the detriment of better and innovative service delivery. Thus, while governments point to the huge investments they have made in the public sector to improve services, citizens complain about the slow pace of change and their frustrations with the old ways of doing things.

This raises a number of questions worthy of consideration. First, what is digitalization and what is its value in the public sector? What kind of digitalization is suitable for developing countries and under what conditions? When is the right time to adopt and implement digitalization policies? The central argument of this paper is that expected benefits of digitalization are not a given, but wholly dependent upon the successful adoption of what is referred to here as digitalization friendly policies like those advocated under the NPM. In other words, while the objectives of NPM are to improve public service delivery by cutting the red tape, digitalization on the other hand strives to make the job of public servants faster and simpler using cutting edge technology.

The paper argues that the solution lies in embracing the core ideas and tenets of digitalization and the New Public Management (hereafter, NPM). Coupling both digitalization and NPM can unleash vast amounts of innovation and transformation in the public sector to the benefit of the citizen client. Done well, and with the recent memory of the COVID-19 experience, both can help bridge the gap between citizens and their governments, cut down the cost of government operations, deliver fast and efficient services and products to citizens and help improve the citizen client interface. Using the recent digitalization process in Ghana, the paper demonstrates how a committed and dedicated agenda of digitalization can leapfrog a nation to better service delivery, cut down on red tape, integrate various sectors of the economy like healthcare, banking and other financial services, domestic and international travel and national safety and security. The experience of Ghana is an example to other developing countries on the vast potential and real advantages of digitalization and NPM as powerful levers of innovation and change in their economies.

Methodologically, this is desktop research that uses documentary and content analysis (Bouma et al., 2012; Booth et al., 2003), to collect and analyze data. The paper therefore draws on both primary and secondary documentary sources for analysis. For primary data, the focus was on published and unpublished government documents, while secondary sources focus on published works both by the government and other reliable agencies of the government and in the literature.

Content analysis was used to analyze government and agency/Ministry annual audit statements, financial budgets, performance appraisals and monitoring reports. Content analysis is a process of carefully “listening to the words of the text and understanding better the perspective(s) of the producer of these words” (Berg, 2004, p. 269). It has also been defined as “a research method for the subjective interpretation of the content of text data through the systematic classification process of coding and identifying themes or patterns” (Hsieh & Shannon, 2005, p. 1278). Content analysis has proved to be an effective approach in this research because it enabled us to better understand both the intentions of the government and the final outcome of those intentions. By carefully listening to and reading these documents too, we got a better understanding of where the whole government digitalization process was, where it was going and how it might get there. Finally, it enabled us to glean some of the intangible inputs like political support and time that the government was prepared to invest into this process.

The arguments in this paper will be structured as follows. Section one will make a broader case for the need for reforms in the public sector. This will be followed by providing an operational definition of digitalization and NPM. The aim is to conceptualize these concepts, while highlighting their revolutionary influences on one another. The third section will be a theoretical exposition where digitalization and its impacts on PM will be discussed. The focus will be on how the effects of digitalization ably complement ideas advocated in NPM theory. Next, a case study of the digitization agenda in Ghana will be provided to highlight policies, successes and failures and lessons for the future. Finally, the paper will conclude with lessons and suggestions for other developing countries as they race to improve their public sector with the aid of digitalization.

The case for reforms in public management

Giving a genealogy of the terminological origins of Public Management (PM), Hood (2005) concludes that it can be given an image as a social or a quasi-religious movement. As a movement, it has characteristics that make it different from others before and possibly after it. Contrary to the view that PM is a kind of social or quasi-religious movement, PM has also been described as an art, a science or even a profession (Lynn, 1996). As an art, PM epitomizes the creativity of public managers in their roles; as a science, PM denotes the methodological nature and orderliness employed by public managers in performing their duties; and finally, as a profession, it symbolizes the faces, creative minds and people associated with PM (Lynn, 1996). Furthermore, PM has been defined as a structure, a craft or an institution (Lynn, 2007). As a structure, public management is constitutionally mandated to execute the legitimate orders of government. As a craft, public management is viewed as skilled practice and finally as an institution, it has rules and practices that guide it (Lynn, 2007).

For the purposes of this study, PM is defined as “the responsible and lawful exercise of discretion by public administrators” (Lynn, 2007, p.13). Hence, PM denotes the lawful activities of the bureaucracy or public service in the execution and prosecution of the

agenda of the state. Conceptualized in this way then, PM, bureaucracy, public service and public sector will be used synonymously and simultaneously in this paper to mean the execution of the will of the people as expressed by their elected representatives and the delivery of public services to the people.

A lot of has been put forward in the academic literature to explain the workings of the PM. These range from rational/public choice which preaches that public servants are motivated by their personal interest in the making and implementation of public policies (Ostrom & Ostrom, 1971); managerialism, which advocates that there is a blurring of the lines between a strictly private and public sector (Dixon et al., 1998; Boyne, 2002) among others. All these scholars sought to explain how public administrators work, what influences their work and how PM differs or is the same as private management.

Over the years, there have been calls from academics, practitioners, citizens, and students of public administration clamoring for reforms and changes to improve the public sector and PM in general. Most of these calls find ex-ante support in the NPM and private sector managerialism (Boyne, 2002; Pollitt & Bouckaert, 2004; Dixon et al., 1998; Osborne & Gaebler, 1993). Proponents of the NPM argue that due to competition, innovation, market discipline, private sector inspired ideas, principles and managerial practices can and should be emulated in the public sector to deliver high quality services at lower prices to the benefit of all (Hood, 1991). In other words, the market or market type models can discipline public organizations to be efficient and deliver value for money in the provision of public goods and services.

According to the NPM orthodoxy, by emulating private sector competition and shifting focus from processes to outcomes and results, private expertise holds the answers to the woes and pathologies of public sector inefficiency and under performance. A core idea of the NPM is managerialism, which believes and advocates that “there is a body of sound management practice applicable to the private sector that is generic in its scope and thus directly transferable to the public sector” (Dixon et al., 1998, p.168). Thus, unlike NPM which proposes an emulation of private sector ideas and principles, managerialism advocates a direct transfer and copying of private sector models and ideas, not merely emulation since both sectors are the same.

Despite the cogency of the NPM arguments however, scholars critical of the NPM approach have not only questioned the validity of these claims, but further surmise that the fixation on efficiency, value for money and the bottom line of the NPM might trade off important democratic values such as accountability, transparency and rule of law (DuGay, 2005; Goodsell, 2004; Parker, 2002). They further argue that due to the numerous complexities involved with the competing, ambiguous and sometimes contradictory commercial and social values, aims and objectives of public organizations, the fixation on value for money can't enhance and secure holistic and comprehensive performance (Lynn, 2006; Goodsell, 2004).

Critical social theorists for instance, have called for the need to humanize public organizations and improve citizen engagement in the governance and reform process

(Box, 2004; Casey, 2002). So also, are ideas from the new public service scholars (Perry, 2007) who seek to ameliorate the overly bias private sector influence in the NPM and public sector reform and bring back the citizen in. Others include critical management studies scholars (Adler, 2002) and anti-administration scholars (Parker, 2002) who question the mainstream ideas and concepts of the state, modernity, rationality, objectivity and performance.

They therefore oppose the assumed technicality and positivism associated with the scientific management movement in classical public administration theory and literature associated primarily with Taylor's *Principles of Scientific Management* and Gulick's *Notes on the Theory of Organizations* among others (Taylor, 1911; Gulick, 1937; Fayol, 1949). These critical scholars advocate a refocusing and re-characterization of the locus and ethos of public management reform to better reflect, embrace and integrate governance concerns in the reform process and performance evaluation (Zaato, 2009). Such criticisms have even led to what some scholars refer to as the new public governance.

In the heat of these arguments for and against how to better manage the public sector and public organizations, some experts have called for the introduction of digitalization as a better alternative to the ideologues and theoretical purists. Digitalization has therefore been singled out as part of the foremost forces that will shape the 21st century (Oliver & Sanders, 2004). It has been argued that it does not only play a key role in modern public administration, but it can also and is still playing a significant role in changing the traditional means of public service delivery (Dunleavy et al., 2006; Margetts, 2007).

The point of departure for this study is that when it comes to reforming, improving and ensuring innovation, creativity and efficiency in the public sector, digitalization and NPM are two sides of the same coin. They are joined at the hip and should be seen as complementary. They are both necessary and sufficient when the objective is reform, innovation and creativity in the public sector especially in developing countries. Therefore, whether you believe in the market or the state, what is clear to students of public administration is that both are necessary for reforms and innovations in the public sector. And the two best approaches to achieve these objectives are the principles and ideas espoused under the NPM and digitalization.

The new public management (NPM) and public sector reforms

The new public management (NPM) basically operates from the understanding that there is something inherently wrong and dysfunctional with the traditional *modus operandi* of the public bureaucracy in the delivery of public services. Therefore, in order to improve and be more efficient, there is the need for the public sector to copy from, borrow, or even contract-out some of its present roles to the private sector (Kernaghan et al., 2005; Osborne & Gaebler, 1993). By marrying the might of the state and the efficiency and efficacy of the private sector, NPM theorizes that not only will it bring efficiency and efficacy to the public sector; it will reduce cost and give value for taxpayer's money (Osborne & Gaebler, 1993). The NPM have had a huge impact over the last decade in

the form of privatizations, public private partnerships and contracting-out (Kernaghan et al., 2005; Osborne & Gaebler, 1993; Borins, 1995).

The NPM theory has had a huge impact on PM in general and public bureaucracy in particular. As a theory, NPM basically preached a complete rejection, if not remodeling of the Weberian model of ideal bureaucracy by proposing a paradigmatic shift from the bureaucratic organization to the post bureaucratic organization (Kernaghan et al., 2005) and the reinvention of government (Osborne & Gaebler, 1993). The main objective of such proposed changes is to improve and empower the public bureaucracy, make it more efficient through the introduction of private sector practices and finally make it achieve more with less. Thereby, giving citizens, who are also clients, better value for their tax money. Since the early 1990s, NPM has had a major influence on government, making it one of the most influential factors in PM (Hood, 1991). Therefore, NPM can be regarded as a strong force in shaping ideas and occupies a very dominant position in PM discourse over the last two decades (Hood, 1991).

However, despite the dominance and impact of NPM on PM, it is argued that the role of NPM philosophy in PM has either been overtaken by or overshadowed by Information and Communications Technology (ICT)s and the influence they are having on PM, making ICTs one of the most influential forces in PM in the 21st century (Coe, 2004; Oliver & Sanders, 2004). Today, rarely anything gets done in the machinery of government without the application of ICT. In fact, while it may be difficult for ordinary citizens, as recipients of the end products of the bureaucracy to conceptualize and comprehend the nuance involved in NPM discourse, it is pretty easy for citizens to immediately recognize and appreciate the impact of ICTs in public service delivery. So, while NPM 'theorizes' about how to improve and innovate in PM, ICTs are the tools and instruments used to achieve those objectives.

NPM theory has had and is still having a catalytic effect on transformation and innovation in PM. NPM theory can best be described as an anti-Weberian ideal model theory. NPM operates from understanding that there is something inherently wrong or dysfunctional with the Weberian ideal model of bureaucracy, (Kernaghan et al., 2005; Borins, 1995). Additionally, NPM stipulates that the private sector is more efficient and effective than the public sector and that to innovate and improve, the public sector should as a matter of necessity and for its own survival borrow, copy or even partner the private sector, especially, in delivering public services (Osborne & Gaebler, 1993,).

Perhaps, it can be argued that Osborne and Gaebler (1993) through their illuminating book 'Reinventing Government' made the perfect case for NPM theory. According to them, governments should limit their role and presence in the public service delivery process. On the contrary, governments should 'steer rather than row', since those that steer have more control over the destination of the boat than those that row (Osborne & Gaebler, 1993). Continuing, they argue that for governments to break themselves free from the conventional responsibilities of 'tax and service wagon', they must learn to

1 This according to Osborne and Gaebler refer to the traditional role of governments as tax collectors and service providers which governments must refrain from.

steer effectively and allow others (the private sector) do the rowing (Osborne & Gaebler, 1993). To steer means that governments should limit their presence in the service delivery process. Governments should concentrate on the process of governing, which includes rule making, diplomacy, setting regulations, providing peace and security because that is what they know how to do best. In other words, the business of government is not business.

According to (Borins, 1995), the NPM should not be viewed as a “simple big answer, [but] a normative re-conceptualisation of public administration consisting of several interrelated components” (p. 122). These interrelated components are made up of the provision of services of high quality and value to citizens, making public managers more autonomous and providing the needed human and technological support needed by public managers to succeed (Borins, 1995). The NPM is not an ad hoc measure, but a response to challenges that confronted governments and needed practical answers and solutions to fix. Some of these environmental challenges include reducing the bloated and expensive public service created during the war years, responding to the challenges of ICTs and the yearning for quality public services by citizens (Borins, 1995). To address these issues, the NPM implores public managers to “use competition as a metaphor; that is, to act as if there were competitors who could take their customers away” (Borins, 1995 p.124). This clearly brings into focus the great influence of private practices that underlies the NPM. However, the NPM “is not slavishly following the sector ideas nor failing to recognize the differences between the private and public sectors” (Borins, 1995 p.126) On the contrary, it seeks a marriage between the two sectors with the intention of combining the might of the state and the efficiency of the market to form a winning combination.

Notwithstanding these noble ideas espoused by the NPM theory which have resulted in huge transformations and innovations across the globe from Australia to Canada, the UK, New Zealand and Denmark (Borins, 1995), it has come under a barrage of criticisms from scholars who believe in public bureaucracy and dispute NPM claims that the public sector is inefficient and that with the arrival of NPM, the days of the traditional public sector are over (Savoie, 1995; Meier & Hill, 2005; Olsen, 2006). Chief among these criticisms is that “the NPM is basically flawed... because the private sector management practices very rarely apply to government operations” (Savoie, 1995 p.113). Hence, any attempt to deploy business practices into the public sector will not work because both sectors operate in different environments and under different conditions.

Furthermore, the NPM crusade for innovation and empowerment might not work well in the public sector because the public sector abhors and despises errors in its operations, which is inevitable in the course of innovation and empowerment. According to Savoie (1995) it does not matter how many times you make an error in the private sector so long as you return a profit. On the contrary, it does not matter how many times you get it right in the public sector so long as you make a single mistake. Additionally, the NPM concept of citizen-client has not been spared the criticism. This is because while clients can shop around for different producers when not content with the services

being provided, citizens do not have that luxury because most government services are monopolistic (Savoie, 1995).

It is fair therefore to state that the NPM has its adherents (Kernaghan et al., 2005; Borins, 1995), opponents (Savoie, 1995; Meir & Hill, 2005); those advocating caution in NPM application (Denhardt, 2004) and a “fundamental limitation of...the NPM” (Barzelay, 2000 p171). One thing clear though is the fact that NPM, just like ICTs, has over the last decade had a profound impact on public sector reforms and innovation. Public sector reform has one agenda: to dismantle the Weberian ideal model of bureaucracy by breaking down the silos, replace vertical and hierarchical processes and structures with horizontality, process and rule oriented with citizen centered and results oriented services, monopoly with competition, citizens with clients and finally promote partnerships (Borins, 1995; Osborne & Gaebler, 1993). The main ideas fueling these changes are those espoused in the NPM literature. Also, the main vehicle on which these successes depend is digitalization. Hence, it is fair to state that the main drivers of innovation and transformation in PM over the past decade are ICTs and the NPM theory. According to (Chadwick, 2006) e-government which is the application of ICTs to the operations of government is a direct product of the NPM on public sector reform. In the next section, the analysis will shift to the role of ICT/Digitalization on public sector reforms and management.

Conceptualization of digitalization in the public sector: A literature review

The constant progression of technical innovation has been a profoundly transforming force in human history. The era of digitalization, characterized by the widespread conversion of information and operations into digital formats, serves as a monument to the transformative capabilities of innovation. This has had profound effects on several industries and has significantly impacted societal structures, necessitating a comprehensive awareness and comprehension of its implications. According to Haefner and Sternberg (2020) digitalization is high on the policy agenda in many countries and explains why several related programs and initiatives combine the expansion and improvement of digital infrastructure with efforts to reduce spatial economic inequality. It has changed the way individuals and states usually operate and has created new technologies and innovations to meet present and future demands (Parviainen et al., 2017). In this study, digitization and digitalization have been consistently used interchangeably to mean and refer to the application of ICT, specifically the internet to reform and improve the public sector.

Terras (2011) defines digitization as the conversion of analog signals or codes into digital counterparts. This process involves transforming physical materials, such as documents and recordings, into digital formats, creating what she terms “digital surrogates”. Katz et al., (2013) support this notion, defining digitization as the act of

converting analog information into a digital format. This technical dimension involves processes like scanning, which result in digital files. However, the significance of digitization goes beyond the technical aspect. Terras (2011) contextualizes digitization as a transformation triggered by available digital technologies. This transformation has a historical context, with libraries, archives, museums, and private collections embracing digitalization to make their holdings available to a wider audience (Terras, 2011). This argument lay emphasis on the position held by Van Horik (2005) who delineates two types of digital files created during digitization: digital images representing the original analogue documents and coded content files, such as electronic texts and databases.

For the purpose of this study, digitalization will be defined to involve a comprehensive transformation that encompasses technological, organizational, and strategic dimensions (Lorenz et al., 2020) of government and its business. This reaffirms Jacobi and Brenner (2018) position as they argue that digitalization has what they refer to as transformative implications. They note that digitalization is broader, encompassing the fundamental shift in business models, processes, and structures enabled by digital technologies. This perspective underscores that digitalization goes beyond technical conversion and requires a paradigm shift in organizational culture.

Scholars such Schmidt et al., (2016) choose to focus on the fact that digitalization transforms static products into interactive services, allowing customization and flexibility. This value-creation perspective of digitalization underscores the transition from centralized value creation to collaborative co-creation with stakeholders. This co-creation orientation enables organizations to harness external knowledge and innovate collectively, marking a paradigm shift in value creation (Schmidt et al., 2016).

Beyond its technical conversion, other scholars provide a conceptualisation that highlights its impact on industry and workforce (Arntz et al., 2019; Haefner & Sternberg, 2020; Stauffer, 2016; Gobble, 2018). Arntz et al., (2019) delves into the macroeconomic consequences of digitization by highlighting the impact of technology on employment. They discuss how digitalization reshapes industries, necessitating a reevaluation of workforce skills and policies. The authors emphasize the complex interplay between automation potentials and actual employment effects, highlighting the need for proactive policies to manage the transition (Arntz et al., 2019).

In summary, the literature underscores the intricate relationship between digitalization and innovation, reform and change. Digitalization therefore encompasses a paradigm shift that transcends technical conversion of data to efficient and effective provision of public goods and services. Digitalization necessitates cultural shifts, strategic realignments, and co-creation with stakeholders. This review of literature provides a comprehensive understanding of the concepts, highlighting the importance of embracing both technical and transformative aspects to navigate the digital age effectively. As the digital revolution continues to reshape industries, organizations, and societies, a nuanced understanding of these terms is indispensable for harnessing the full potential of the digital era. What is also clear from the above is that the stated and implied benefits of digitalization are not

given, but dependent upon successful adoption and application of digitalization friendly policies and programs.

Based on the above understanding of digitalization, the analysis now shifts to how Ghana, a developing country can use these ideas and concepts to better improve its public service and meet the demands and expectation of the citizen-client.

The National Identification Authority of Ghana in the digitalization agenda

To aid in the country's social, economic, and political growth, the government of Ghana established the National Identification Authority (hereafter, NIA) in 2003 under the direction of the president. The NIA's mission is to implement a comprehensive, value-added, integrated, multi-sectoral, and multipurpose National Identity System (NIS) through the creative use of information and communication technology (NIA, 2021a). To keep track of all of these transactions, a state-of-the-art client-based identification service widely known as the GhanaCard is being implemented.

To give the NIA the legal grounding it needed to function, on January 1, 2007, the NIA Act, 2006 (Act 707) was passed (NIA, 2021). The National Identity Register (NIR) Act, 2008 (Act 750) was also passed to authorize the collection of personal and biometric data for the registration of all Ghanaians and permanent resident foreign nationals under the National Identification System (NIS). Subsequently, a national database or register was established and used to issue the National Identity Cards (Ghanacards) to respective individuals (NIA, 2021b).

According to the NIA (2021a; 2021b), the Authority's responsibilities include setting up a national database and data centre, creating a system to collect, process, store, retrieve, and disseminate personal data on the population (Ghanaian citizens, both resident and non-resident, and legally and permanently resident foreign nationals), protecting the accuracy, integrity, and security of such data, and issuing and promoting the use of national identity cards in Ghana. It also has a legal obligation to share any information in its possession with anybody or any organization that is permitted by law to view such information (NIA, 2021). One of the most significant and visible outcomes of this rigorous process is the development of the GhanaCard.

The Ghana Card

The GhanaCard is the government-issued identification (ID) card of Ghana provided by the NIA. It is required for all citizens and permanent residents of Ghana to prove their identity whenever they interact with the government or use any official services. The NIA (2021b) indicates that each person who is zero years old or older and a citizen of Ghana by birth, registration, or naturalization is included in the database, as are all Ghanaians who currently reside outside of the country. In addition, foreign nationals who are lawfully or permanently residing in Ghana will also need one (NIA, 2021b).

Existing data as of September 2021 shows the NIA has registered 17,549,031 residents, with 17,375,937 ID cards printed and 16,765,475 of them issued. The NIA in addition has registered 180,233 non-citizens, updated the details of 91,125 of individuals and replaced 297,292 lost GhanaCards (NIA, 2023).

The card contains the individual's personal data, allowing for constant identification and verification. For authentication reasons, the NIA National Identity System makes use of three distinct forms of biometric technologies. Among these biometric identifiers are digital templates of the cardholder's fingerprints, face (in the form of a color photograph), and iris (NIA, 2021b). The NIA uses state-of-the-art technology with many levels of security (physical, logical, and technological) to make the card impossible to forge and to safeguard the sensitive data contained on it. These safeguards ensure that only the card's rightful owner may access its contents and use it as an identity.

According to the NIA (2021b), biometric information, including the cardholder's fingerprints in digital templates and signature, are stored in either a 2-dimensional barcode or a Machine-Readable Zone (MRZ) on the back of the card, depending on the individual's age. The card features the holder's portrait, name, date of birth, height, a randomly generated and assigned identifier, and an expiration date (NIA, 2021b). The GhanaCard is designed such that citizenship of an individual does not change the physical outlook of the card as the same card is issued for citizens and noncitizens alike. For example, a Ghanaian's card has the letters "GHA" followed by ten digits "GHA-00000000-0," while a Nigerian's card has the letters "NRG" followed by ten digits "NRG-00000000-0," all in accordance with the International Civil Aviation Organization (ICAO) country codes (NIA, 2021b). However, a foreigner's card will have NON-CITIZEN printed in large, red letters on the front of the card (NIA, 2021b).

The Ghana Card is well recognized as a reliable multi-purpose card that provides electronic and physical user and activity authentication. According to the NIA (2021b), the Ghana Card can be used for a variety of purposes, including voter registration, as it is recognized as valid photo identification in Ghana. The Ghana card is a government-issued photo ID that may be used in financial transactions to facilitate Know Your Customer (KYC) checks and can also be used to gain access to a wide range of government-provided services, including passport and driver's license applications, medical care (thanks to its integration with the National Health Insurance (NHI) Card), and social welfare programs like the Livelihood Empowerment Against Poverty (LEAP) programme (NIA, 2021b). Lastly, the Ghana Card's e-passport functionality also allows its holders to use it as an intra-regional travel document inside the ECOWAS bloc of countries (NIA, 2021b).

Lessons learnt from Ghana

Based on the above, what lessons can practitioners, policymakers, and students of public management, especially those from developing countries learn from Ghana? As we have already indicated above, digitalization is a major driver of change and innovation in

public sector management and service delivery. However, it is not a panacea and merely investing in technology, hardware and software and training, though necessary, is not enough to guarantee success. The contention here is that more is needed apart from the above to move the digitalization agenda forward. This section discusses some of the invaluable, but intangible success factors that are crucial for the successful adoption and implementation of a robust and successful digitalization agenda, especially in developing economies.

One of the most important ingredients in the successful adoption and implementation of any digitalization policy is what Borins (1998) refers to as the presence of local heroes. By local heroes, Borins (1998) refers to front-line public servants and middle managers who are reinventing state and local government and transforming it into a more efficient and effective one. As used here, we have this concept in mind but have adapted it to mean an individual(s) high up the echelons of political power, with the right expertise, amount of political power and political will who is ready to champion the course of digitalization in the government. Such an individual has deep levels of political goodwill, is prepared to spend that good will and power to support and champion the course of digitalization. In Ghana, the Vice-President of the Republic, Dr Mahamudu Bawumia is a local hero of digitalization.

As one of the most influential Vice-Presidents in Ghana's history, the economist turned politician has the ear and full support of the President of the country, who is Chairman of the Economic Management Committee of the Government, has the full support and trust of his peers in Cabinet, the bureaucracy and even in the private sectors. That is why he has over the years cultivated this strong political will, good will and support to crusade for a total transformation of the Ghanaian economy through digitalization. So successful is his cheerleading and campaigns for this course that he has been affectionately referred to as 'Dr Digitalization'. What this has meant is that in all government policies, programs, and activities, the issue of digitalization has been front and center. This has resulted in a very good number of resources, both technological, financial/economic and human resources all invested in the sector. The relative success that Ghana is enjoying under digitalization can be directly attributed to the crusading efforts of the Vice-President and other developing countries desirous of benefiting from digitalization can learn by unearthing their own local hero/heroes. For a successful digitalization agenda, it is not enough to have local heroes since that may lead to hero worship. When it is all about hero worship, such policies tend to suffer especially when the hero exits or loses his power.

That is why in Ghana, and apart from the Vice-President, there is a full political commitment of the whole government to support the digitalization agenda. To further this course, the former Ministry of Communication and Technology was renamed and rebranded into the Ministry of Communication and Digitalization by section II of the Civil Service Law, 1993 (PNDCL, 327) as amended by the Civil Service (amendment) Act, 2001 (Act 600) (MoCD, 2023). The change of name, refocusing on digitalization, and the appointment of a Cabinet level Minister means that the Ministry can outlive any

one individual and avoid the idea of hero worship. Rather, a Ministry with over 1000 highly trained public servants will ensure innovation, provide institutional memory, and ensure that future generations and governments can continue with the digitalization program. Other governments can learn from this example of Ghana to ensure that even as politicians come and go, and as government priorities change overtime, the agenda of digitalization can continue to thrive if it is not personalized but transformed into a national agenda.

One of the key ingredients in Ghana's digitalization process is a very strategic state institution known as the National Identification Authority (NIA). The NIA is vested with the power and authority to issue the Ghana Card. Housed under the Ministry of the Interior, it was deliberately created to avoid verticality and ensure the concept of horizontality in both its structure and assignments. Thus, it has a national security role that is handled under the Ministry of the Interior, an economic and financial duty that is handled by the Ministry of Finance. Then there is the health aspect handled by the Ministry of Health and the registration of Births and Deaths under the authority of the Ministry of Local Government (NIA, 2023). By integrating all these different sectors of the economy into its operation and the Ghana Card it produces, the NIA is in a very strong position to champion the governments digitalization agenda across all sectors of the country. It also ensures a one stop shop for all information and data for individuals and organizations in Ghana. With its widespread offices and agencies all over the country, the NIA has the ability to extend the digitalization agenda to all corners of the country, even to rural areas.

Conclusion

Using the relative success of the digitalization process in Ghana, the main objective of this paper was to highlight how reforms can be creatively adapted to fit the needs of individual countries. It therefore used the example of Ghana to suggest lessons for other developing countries seeking to digitalize and improve their public service in particular. A key theme in this research is that one-size-fits-all approaches do not work whilst golden and magical bullets do not exist. Reforms must therefore be creatively adapted to fit the context of the adopting country. That is why in the case of Ghana, both the legislative framework, policy framework and physical resources were all adapted to lay the foundation for a successful digitalization agenda. But these alone were not enough if they are not matched with the right NPM reforms.

For instance, Ghana has one of the most liberalized economies in West Africa and also one of the most liberalized ICT sectors. There are more than four main telecommunication companies operating in Ghana. These, together with the over five internet provision companies means that the private sector gets to play a big part in the digitalization agenda. No other sector in the country has seen so much competition like the ICT sector. The presence of big players like MTN and Vodafone attest to the keen competition within the sector. Also, the arrival of big and small internet companies and

other ICT players have all played a big role in the development of the sector. Thus, with the might of the state and the efficiency of the market at play, Ghana is able to achieve some meaningful benefits from its digitalization agenda. Other developing countries can learn from Ghana with the right policies, agendas and political support to help advance and improve their digitalization agenda.

Disclosure statement

No potential conflict of interest was reported by the author(s).

ORCID

Joshua Jebuntie Zaato  <https://orcid.org/0009-0005-8476-8870>

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