

PUBLIC SERVICE DELIVERY IN THE ERA OF DIGITAL GOVERNANCE

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1. INTRODUCTION

To achieve continuous optimization of service delivery, constituency, participation, and governance through the transformation of internal and external relationships through technology, the Internet, and new media, digital governance primarily focuses on using ICT in all aspects of Government operations.

IT's influence on people's lives is undeniable, and it's just expanding. It is difficult, if not impossible, for most organisations to operate without extensively depending on information and communications technology, which have infiltrated almost every professional, commercial, and industrial activity. As no part of society functions in a vacuum, it stands to reason that the many forms of technology are also involved in interactions between individuals, groups, and organisations. Regarding social and information sharing, the government is not left behind. Organizations within the government use Technology to manage their states, giving rise to the field of Electronic Governance.

Numerous case studies published by various multilateral organisations show that digital can be used in a wide variety of contexts to speed up the spread of information, enhance the effectiveness of public services, make government administration more transparent and accountable, cut down on corruption, and encourage citizen participation in municipal government. However, the delivery of such advantages in large-scale initiatives is seldom verified by analytical studies or impact evaluations (Bhatnagar and Singh 2010). A recent anti-corruption book (Bhatnagar, 2013) acknowledged the crucial role of Digital in lowering corruption, but it also noted how difficult it has been to fully realise this promise. Although it is crucial to maintain service delivery, governments must increasingly consider e-government and e-governance, as indicated by the United Nations Public Administration Network (UNPAN) poll of 2012. Expanding e-reach government's would let the government play a more transformational role in creating unified systems that work together smoothly. It is possible to increase the deployment of e-governance since its current use is only minimal in emerging nations in Asia. Realizing the full potential of Digital deployment to enhance service delivery is crucial. In addition to learning how to tap into this potential, knowing which aspects are crucial for widespread implementation is essential.

The possible value of implementing Digital inside businesses has been conceived in various ways. One advantage is Digital's capacity to mitigate the principal-agent dilemma by decreasing information asymmetry (Gurubaxani and Whang 1991). Further advantages that apply to businesses of all sizes include increased access to markets and suppliers, streamlined interactions with all stakeholders, and more widely available information thanks to electronic publication.

2. PUBLIC SERVICES DELIVERY

Both industrialised and developing nations have had a long-standing interest in finding ways to enhance the delivery of public services, here defined as those services given to the public by or on behalf of governments (local, municipal, or larger-scale). The emphasis here is on the measures taken and planned to enhance the delivery of public services in OECD nations.

Now, as in the past, such services need the involvement of non-governmental organisations and the government. Each country has a unique set of cultural and institutional traditions that inform its unique combination of financing and delivery arrangements, which may include both direct provision by public sector organisations and indirect provision by commercial or voluntary organisations under contract to government. Meaning that the reform of the public service is "path dependant" (Pierson, 1994). However, since the mid-1980s onward, neo-liberal ideological realignment has led to a new distribution of responsibilities for public service delivery among government, private, voluntary, and community organisations, as well as new definitions of the range and nature of citizen entitlements to public services.

Although there has always been a need for better inter-agency communication, OECD nations have changed their approach to improving public service delivery. Since the 1980s, new, more managerial public service values (value for money, innovation, customer service) have risen to prominence as concern has shifted from improving the "administrative" performance of government organisations (satisfying public expectations of equity and fairness in the application of rules and procedures, ensuring integrity in the use of public money) that was the traditional focus of the post-1945 welfare state. Managerialization, also known as the new public management (NPM), typically entails several intertwining strands, including the following: the breakup of large, monolithic bureaucracies into smaller units; the delegation of more authority to local management based on control of budgets; an emphasis on private sector management styles, with explicit standards and measures of performance linked to a greater emphasis on outputs and outcomes; the increased use of outsourcing and competition in the delivery of public services (Aucoin, 1990; Hood, 1991; Le Grand, 2007).

In many OECD countries, administrations of varying political stripes aggressively propose ambitious programmes of public service renewal, reinvention, or modernization to their voters, giving management reform of the public services a prominent political profile. Greater reliance on choice and competition as mechanisms to improve public service delivery has been a hallmark of public service reform in English-speaking countries (Australia, Canada, New Zealand, UK, and USA), which has gone beyond the empowerment of local managers and technology-driven innovation in customer service. Exploring novel organisational forms and arrangements, such as collaborations with other levels of government and non-governmental sectors, is a common thread across such programmes with the overarching goal of bettering service delivery. Yet, the scholarly literature distinguishes between the various national "buy-in" forms to new public management reform packages (Pollitt and Bouckaert, 2004).

No guarantee increasing the amount of money spent on programmes to modernise public services will result in better service for the public. This is shown by Pollitt's (2007) examination of the outcomes of the rapid and extensive serial reengineering of the British national health service (NHS), an exceptional situation in terms of speed and intensity. Setting aside the technical challenges of assessing large-scale change and the transition costs resulting in at least temporary loss of service quality, a key consequence is the general loss of trust in stability and the consequent erosion of organisational loyalty. Continual change can easily become irritating "white noise" for service users, raising no particular hopes or interests but creating anxiety that the latest initiative might turn out to be a concealed cut, as the sense of impermanence can spill over from managers and professional staff to the people receiving the services (Pollitt, 2007, p. 539).

The work of Pollitt and others shows that attempts to reorganise public services via trendy modernization programmes eventually fail to address fundamental tensions and trade-offs (Hood, 1998; Hood and Jackson, 1991; Pollitt and Bouckaert, 2004). If we take the National Health Service as an example, ministers and their advisors may have to weigh several competing priorities, such as the need for centralization (a national service) versus local "ownership" and flexibility, expert knowledge versus political control, universality of access versus efficiency, quality versus cost. As the drawbacks of one's viewpoint on a trade-off become evident to individuals and the media, there is a propensity to switch to a different emphasis (Pollitt, 2007, p. 535).

There is a growing consensus in the United Kingdom that the government's top-down, programmatic approach to enhancing public services has been ineffective. Critics say they failed because of a flawed approach to managing change. For instance, Mulgan and Albury (2008) identify a conflict between those who believe that service improvement can be achieved through reorganisation and efficiency-based business models and those who realise that creative improvements are dependent on the development of cooperative bonds between front-line workers and their communities entailing new forms of local public service leadership. She argues that local managers in tune with the central government's target and performance management culture are rewarded by the preference for large-scale re-engineering, while those skilled in networking and communicating with diverse local communities (often women) are marginalised. Pollitt (2009) argues that the UK political parties competing to enhance public service delivery should evaluate the argument for smaller scale, more modular improvements (where individual reform components may be built up over time) instead of greater programmatic revolutions.

Attributes of Public Service

Public services sometimes have characteristics with public commodities (such as being non-rivalrous and non-excludable), but they also often include services that the market may inadequately supply due to societal norms. Public services are often service-based rather than product-based. Especially in natural monopoly areas, they may be provided by regional or national monopolies.

Sometimes the results are difficult to ascribe to a single person's efforts or to quantify quantitatively in terms of quality or other important features. Several of these jobs need extensive schooling and study to fulfil their potential. They might appeal to those who are committed to public service and want to make a difference in the world.

A competent public service is essential to attract investors and make it easier for citizens to join the economy. Governments are challenged with a wide range of interrelated problems due to globalisation. Delivering public services has taken on new dimensions as governments adapt to a more interconnected and demanding population and a shifting global landscape. An agile and efficient public service that can foresee upcoming difficulties and guarantee that possible solutions are influenced by greater knowledge of future situations is crucial for developing cohesive policies and their successful execution.

Several formerly publicly provided services are now being privatised. To privatise public services, one might use a variety of methods. It is possible to create a free-market corporation and then sell it to private investors, free of any involvement from the government. This means it is no longer provided by the government but rather by private companies. Instead, one may

incorporate a business while having the government retain substantial control over its management and operations. Up until 2007, the government of Finland held 49% of Kemira's shares; private investors then bought up the balance. Although the state's 49% stake didn't constitute a "government business," it did imply that the state's choices at shareholder meetings would need to be opposed by all other investors.

Permits may be granted to regulated businesses on the condition that they perform specified public service obligations. When a private firm has a monopoly by necessity, regulations are tightened to prevent the company from abusing its dominance. The government may now purchase the service from a private company. This model of providing access to healthcare is common in many nations, with governments covering a portion of the cost of prescribed medications. This method of privatisation is also used in the transportation sector, the power sector, the healthcare sector, and the garbage sector. Public-private partnerships are a relatively new form of governance used in the United Kingdom, Australia, and Canada. A lengthy lease is offered to private consortia in exchange for some of the money for infrastructure.

Delivering services with the client in mind is a challenge for the public sector. Many major obstacles must be conquered. Services must be provided to many people. According to reports, public services will face formidable obstacles in the years ahead, including severe financial pressures and cuts, rising demand, increased public and user expectations, decentralisation and community empowerment, opportunities to deploy new technology, and global competition. Consequently, citizens and service recipients will interact differently with the government and service providers. Multi-level change is required to improve public services, including how government agencies and organisations communicate with one another, private sector partners, and the general public.

Five elements are integral to building this capacity

- Methodology performance improvement and process reform, aided by technology.
- Taking Charge (securing the understanding and support of top-level leadership).
- Structure of organisations creating empowered institutions responsible for a pan-government focus on customer-centricity and connected government.
- Human Resources, Capability, and Education focusing on the internal capacity-building needed to manage the transformation, manage talent and train public sector people to respond to changing customer needs.
- Societal Influences organisational change management is the key to a successful customer-centric strategy.

3. DIGITAL GOVERNANCE

Although the term "Digital Governance" didn't appear until the late '90s, there is evidence of computers being used by government agencies ever since they were invented. Research on "IT in Government" may be traced back to the 1970s. Formerly, ICT was only used internally, but now it is increasingly being used to provide services to the public and other outside entities.

E-government utilises Technology as a facilitator to stifle or decrease government ineptitude from the 1970s, intending to address a broad variety of aims and visions. Most often, they include the excessive distribution of public money due to the expansion of government, the poor quality of public services, secrecy and lack of transparency, the creation of new ministries, and the failure

to hold public officials accountable for their actions. Hence, e-government aims to achieve competitive commerce, really democratic Governance, and communal ideals to transform the dwindling government into a competitive one.

To improve people's interactions with their government, governments throughout the globe are transitioning from analogue to digital systems and practises. This means moving away from time-consuming, antiquated manual procedures in favour of more modern, efficient digital ones. The widespread use of ICT by governments at all levels of service provision in both developed and developing nations is largely responsible for this sea change in public administration.

There is a rising need for e-services, along with the highest standards of PSD, as the globe becomes increasingly linked due to globalisation and countries participating in the World Trade Organization's (WTO) General Agreements on Tariffs and Trade (GATT). Administrative reform is necessary to provide a comprehensive legal and regulatory environment for this to occur. Non-governmental organisations (NGOs), organisations, and governments (governments) everywhere have worked together to embrace e-government methods of administration, to facilitate open and transparent transactions with the public. What, after much fanfare, does it take to implement e-government? It has been claimed many times that buying computers and making websites, pages, and portals isn't enough to create e-government. IBM claims that the first characteristic of e-government is its multidimensionality, which encompasses leadership and policy, economics and competitiveness, education and citizen services, internal government operations, and digital democracy.

Without proper oversight, digital development becomes cumbersome and inefficient. Government serves as a catalyst. It helps businesses reduce development risks by defining who is responsible for what in the digital realm and who has the final say over important decisions. This, however, does not imply that those who are not decision-makers cannot give valuable insight or suggest novel approaches. Instead, it implies that the business has a thorough understanding of its decision-making process and has considered all relevant factors.

The term "digital governance" refers to guidelines for managing an organization's digital assets, including assigning responsibilities and approving changes. Less time and money spent while yet guaranteeing digital business maturity: that's the result of a well-designed digital governance framework. Establishing governance and dismantling silos, while also coming into agreement on the following criteria, should be the top priorities right now:

- Strategy and governance
- Digital organization and culture
- Technology
- Data and analytics
- Automation
- Insights and engagement

Strategy and Foundation

Digital teams should begin by gauging how advanced their digital skills are. The next step is defining the company's digital business aim and strategy, promoting collaboration across teams.

- Key Performance Indicators (KPIs): These should be identified and standardised to allow measurement and optimization and a test and learn culture. These findings are essential for strategy, budgeting, experience, employee buy-in, and operational planning.
- The decision-making process is validated and streamlined using a decision framework. It's useful for keeping your priorities straight and ward off the anxiety of making significant decisions.
- Alignment of the organisation and management tools for the digital strategy model. By doing so, the company's management and employees may work together towards a shared goal of success. It guarantees that the transition and road map to digital maturity will be successful.

Once these strategic blueprints have been created, leaders must build a communication strategy to educate and sell the digital transformation goals and approach to the team and the organization as a whole.

Implementation

Now that the plan for digital transformation has been finalised, the digital governance structure can be put into place. Action plans and actions, both short- and long-term, should be defined by stakeholders to help the business reach its strategic goals. Organizations should now have a digital committee of important stakeholders to develop the project's vision and strategy, secure necessary funding and workforce, and establish measurable success indicators. How to Do It:

- Make a strategy. Increasing the velocity and quality of your projects may be achieved via strategic alliances and collaborations, resource planning, and defining RACI.
- Make use of strategies that promote the success of the plan. Guidelines and playbooks, app governance, compliance and risk management, and the management of vendors and changes are all examples of such activities.
- Determine what must be done first and how, then automate as much of it as possible.
- Establish a framework for handling organisational changes and put it into action.
- Set up a system of rules for handling requests, systems, investments, and priorities.
- Establish the routine, agenda, and procedure for the committee.

Enforcement and Monitoring Success

Leaders should monitor and manage stakeholder adoption of the digital governance framework, and KPIs and other metrics should be measured and tracked using analytics. Staffing, training, vendor management, and effective communication to detect hazards are all part of the human resource management required to build a successful enforcement programme.

As businesses increase their worldwide omnichannel presence and develop their roadmaps, digital governance emerges as a critical aspect in achieving their goals. Determining who has

final say over the company's digital strategy, policy, and standards may help reduce internal disagreements and diversions. We propose forming a digital committee to handle the following tasks:

- Dismantling silos, encouraging teamwork, reducing inefficiency, redundancy, and burnout
- Reducing risks of noncompliance, litigation, and erroneous application
- Enhanced perception of the brand
- Technology basis, essential characteristics, and road plan alignment for a total cost of ownership management and reduction
- Enabling a more rapid time-to-market by consolidating the company's backing for standards, solutions, and shared skill sets
- A backlog of solutions, platforms, and features must be built, managed, and prioritised, thus, it's important to keep an intake process running.
- Streamlining processes and maximising results by establishing clear goals

Digital Governance Models

A small number of foundational theoretical models of digital governance may guide the implementation of this idea. There has been no change to the advances in these two-featured variants. To begin, everyone who uses a digital network is guaranteed equal access to data under these forms of digital governance. Secondly, the dispersal of data over the internet. (Wirtz, Weyerer, & Schichtel, 2019).

- **Design for Broadcasting**

The broadcasting model sees material based on governance already available to the public being transmitted to a wider audience using state-of-the-art information and communication technologies. It educates people on the benefits of democracy and how they may participate in the many government services available to them (LeeGeiller & Lee, 2019). It allows citizens to voice their opinions on the quality and availability of public services supplied by their respective governments (Wirtz, Weyerer, & Rösch, 2019). Regulations and laws published online by the government are another examples, as is the online posting of authoritative opinions.

- **Model for Comparative Analysis**

By contrasting examples of poor and excellent administration, researchers may uncover causes of dissatisfaction and work to alleviate them (Beerli, Uster, & Vigoda-Gadot, 2019). The concept relies on a massive information and communication technology (ICT) and social media tool for comparing and contrasting knowledge bases in the public and commercial sectors included inside data sets. Simply put, the model is constantly absorbing "best practises" from the many domains of governance and using them to test additional governance practises. The findings are then used to promote beneficial changes or influence the 'public's' perspective on the state of governance at present. The comparison might be made throughout time to provide a snapshot of the past and

present, or it could be employed by comparing two similar situations to improve the outcome.

- **Model of Critical Flow**

The model is geared at the transfer of "sensitive" yet important data. By design, it does not use information and communication technologies (ICTs) or other tools to reach a specific audience and instead participates in questionable forms of governance. Media, litigants, opponents, judges, academics, and public members might all be included in the intended audience. (Xu, Badea, & Cheng, 2021).

- **Model of E-Advocacy**

Moreover, the E-Advocacy/Mobilization & Lobbying Model has aided international civil society in participating in international decision-making. It's a popular digital governance paradigm (Popoola, Matthew, & Fayomi, 2020). Building strong virtual allies to supplement physical endeavours is a primary feature of the concept. Online communities that share similar values and interests are formed by linking or inspiring offline organisations or activities to work together. The approach captures the vitality of the real-world process by factoring in the opinions and concerns of online communities. (Popoola et al., 2020).

- **Model of Service Delivery**

The merging of multiple types of digital governance into one model, the interactive service model, allows for self-service and individual participation in management (Linders, Liao, & Wang, 2018). This concept envisions a system in which citizens may have direct, two-way interaction with the many government services available to them. It does this by creating a line of communication between the government and its constituents through interactive governance (G2C2G) in areas such as government elections (e-ballots), decision-making on particular issues (such as healthcare plans), delivery of individualised government services, measurement of public mood and opinion, and the provision of targeted management advice or services for targeted communities. (Linders et al., 2018).

4. CASE STUDY

What Has Been Achieved in Nigeria Thus Far?

Although the logistical challenge of deploying central government services throughout Nigeria's 923,768 square kilometres is daunting at best, significant progress has been made regarding government offering G2C services via ICT channels. Nigeria is home to over 178 million people. In 2003, the West African Examinations Council (WAEC) launched its website. Candidates for the West African Senior School Certificate Examination (WASSCE) may now easily obtain data that answers their questions about taking the exam, registering, and finding out how they fared on it. Equally convenient for would-be test takers is that the National Examination Council's NECO exam, the counterpart of the WASSCE, is also available online.

The educational system underwent yet another dramatic enhancement in 2010. Millions of students in Nigeria took the Joint Admission and Matriculation Board's (JAMB) National

Matriculation Examination, and their scripts are now being computer-marked; the board plans to announce and upload the results to the internet within seven working days. For context, consider the eight weeks before, during which hopefuls waited anxiously for letters to be delivered by the traditional post office. This led to confusion since some notifications failed to arrive because potential applicants may have moved during that time. Furthermore, this was a major advance over the previous system, which relied on manually marked scripts that were more open to error and examiner bias.

Being one of the country's most vital businesses, the Oil and Gas industry desperately needed better contract allocation practises that phased out favouritism. In 2006, the sector underwent a significant change in how it dealt with the government. The Nigerian Petroleum Exchange was founded by the Nigerian National Petroleum Corporation (NNPC) and its subsidiary National Petroleum Investment Management Services (NAPIMS) (Nipex). Nipex was established to facilitate more efficient oil and gas contracting procedures. It's NNPC's and its partners' go-to electronic contracting platform for presenting projects to pre-qualified contracts and suppliers. Because of this technology, the contractual cycle has been cut down from over 24 months to only 12 months, resulting in faster, more efficient, and more transparent transactions across the sector. It has provided a venue for local businesses to advertise their services and become more competitive for contracts. Industry participants may relax knowing that their projects will be handled by the most competent suppliers in the business.

With more verified examples of live G2C services online, people now enjoy streamlined procedures that improve their quality of life. Among them are: The National Youth Service Corps (NYSC) has moved its job advertisements and recruit registration to an online system. During the country's terrible civil war, the NYSC programme was created to help rebuild, unify, and integrate the population. The National Youth Service Corps (NYSC) is a mandatory national service programme for all Nigerian college grads, whether they attended school in Nigeria or elsewhere. The Nigerian Immigration Services now issues residence permits through computer system. Federal Capital Territory Abuja Administration (FCTA) officials have streamlined the land registration and CO issuing procedures by becoming paperless. One of these programmes that is now available online is the Nigerian Custom Asycuda Programme. The United Nations Conference on Trade and Development created and oversees this centralised database to streamline the customs clearance process (UNCTAD).

Outside of the Internet, other information and communication technology (ICT) channels have been set up to support the government's e-governance initiatives. Due to the widespread availability of mobile phones nationwide, short message service (SMS) text messaging has proven to be an effective means of communicating between businesses and consumers. Electronic payments and pension records for government employees, verified by biometric identifiers. Abuja's traffic management and regulatory enforcement system uses electronic encoding of car and driver information, allowing traffic officials to quickly and accurately identify each vehicle and its occupants.

In light of all that has been against it, the progress made so far is quite remarkable (which will be discussed in the next chapter). Although the e-system of governance has shown promise, much work remains before it can reach its full potential.

5. CONCLUSION

If the e-governance regime is to succeed, it must guarantee that people have access to a wider

variety of public services in a efficient and economical way. Whatever strategies are used, they must be in everyone's best interest.

Notwithstanding its limitations and available resources, every government should try to maintain a fully operational e-government system. Undoubtedly, e-government will improve good governance and transparency, but it won't erase the past of the governments who adopt it.

From what we can gather from studying the development of e-government in different parts of the world, it's clear that each instance is unique and requires a tailored strategy based on the specifics of the local economy, government, and society. E-government may be implemented in various ways, and there is no one "best" method.

Considering that the state must determine workable strategies for providing digital services, new technologies for long-term transformation must be developed. Otherwise, the government is still attempting to develop workable alternatives to reducing expenses and resolving organisational challenges by introducing novel ideas and adopting acceptable and consistent technical methods. A more responsive, innovative, and transparent government may be achieved with digital technology, which can also be used to revolutionise public sector services to benefit humanity. Information technology (IT) is crucial to implementing many new technologies to enhance services, despite the government's numerous difficulties in embracing these more contemporary methods, tools, practises, and models. Thus, digital government platforms provided by technology aim to efficiently aid self-organizing, interdisciplinary universities in translating thoughts and ideas into actions. Mobilizing stakeholders to reduce costs and increase service supply is one way it promotes innovation.

To sum up, public service has significantly contributed to providing public goods in both the developed and developing worlds, including defence, public order, property rights, macroeconomic management, basic education, public health, disaster relief, environmental protection, and management of private sector activity.

REFERENCES

- Aucoin, P. (1990). Administrative reform in public management: paradigms, principles, paradoxes and pendulums. *Governance: an international journal of policy and administration*, 3(2), 115-137.
- Beeri, I., Uster, A., & Vigoda-Gadot, E. (2019). Does performance management relate to good governance? A study of its relationship with citizens' satisfaction with and trust in Israeli local government. *Public Performance & Management Review*, 42(2), 241-279.
- Bhatnagar, S. C. (2013). E-governance: can it be a potent tool to fight corruption?. Academic Foundation.
- Bhatnagar, S. C., & Singh, N. (2010). Assessing the impact of e-government: a study of e-government projects in India, information technologies, and international development.
- Gurbaxani, V., & Whang, S. (1991). The impact of information systems on organizations and markets. *Communications of the ACM*, 34(1), 59-73.
- Hood, C. (1991). A public management for all seasons?. *Public administration*, 69(1), 3-19.
- Hood, C. (2000). *The art of the state: Culture, rhetoric, and public management*. Oxford University Press.

- Hood, C., & Jackson, M. (1991). *Administrative Argument*. Aldershot, Hants.: Dartmouth. Traducció al castellà:(1997). *La argumentación administrativa*.
- Le Grand, J. (2009). The other invisible hand. In *The Other Invisible Hand*. Princeton university press.
- Lee-Geiller, S., & Lee, T. D. (2019). Using government websites to enhance democratic E-governance: A conceptual model for evaluation. *Government Information Quarterly*, 36(2), 208-225.
- Linders, D., Liao, C. Z. P., & Wang, C. M. (2018). Proactive e-Governance: Flipping the service delivery model from pull to push in Taiwan. *Government information quarterly*, 35(4), S68-S76.
- Mulgan, G., & Albury, D. (2003). Innovation in the public sector. *Strategy Unit, Cabinet Office*, 1(1), 40.
- Pierson, P. (1994). *Dismantling the welfare state?: Reagan, Thatcher and the politics of retrenchment*. Cambridge University Press.
- Pollitt, C. (2007). New Labour's re-organization: Hyper-modernism and the costs of reform—a cautionary tale. *Public management review*, 9(4), 529-543.
- Pollitt, C. (2009). Structural change and public service performance: international lessons?. *Public Money & Management*, 29(5), 285-291.
- Pollitt, C., & Bouckaert, G. (2004). *Public Management Reform: A Comparative Analysis* Oxford: Oxford University Press.
- Popoola, R. O., Matthew, E., & Fayomi, O. (2020). Cross-examining the effectiveness of e-advocacy as a tool for advancing women's rights in Nigeria. *International Journal of Electronic Governance*, 12(4), 367-386.
- Wirtz, B. W., Weyerer, J. C., & Rösch, M. (2019). Open government and citizen participation: an empirical analysis of citizen expectancy towards open government data. *International Review of Administrative Sciences*, 85(3), 566-586.
- Xu, H., Badea, A. F., & Cheng, X. (2021). Analysis of two phase critical flow with a non-equilibrium model. *Nuclear Engineering and Design*, 372, 110998.