

Challenges and Opportunities of Digital Economy in Malawi: A Critical Analysis

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Abstract: *This study provides a comprehensive analysis of the challenges and opportunities associated with the Digital Economy DE in Malawi, focusing on the Information Communication Technology ICT sector. The research highlights the potential of DE to foster innovation, but also underscores the limitations imposed by inadequate digital infrastructure and loss of information control. The study employs a qualitative approach, guided by the New Public Management NPM model, and includes interviews with senior public officers from various departments. The findings reveal that while DE offers numerous benefits to Malawi, these advantages are often overshadowed by the prevailing challenges. The study concludes with a call for the Government of Malawi and key stakeholders to devise strategies to mitigate these challenges, thereby maximizing the benefits of DE. The insights gleaned from this research contribute to the knowledge base required for effective DE implementation in Malawi.*

Keywords: Challenges, Opportunities, Digital Economy, Critical analysis, Malawi

1. Introduction

The aim of this article was to critically analyze the challenges and opportunities of the Digital Economy (DE) in Malawi. DE is the part of economic output that is derived solely or primarily from the digital technologies (Bukht, et al., 2017). This is based on a business model on digital goods or services. Similarly, DE is defined as an ecosystem which transforms all the economic sectors that consist of digital technologies supporting the production and consumption of goods and services (Hanna, 2020). In Malawi, there are several opportunities that have been benefitted from the implementation of the DE. Some of the opportunities of the DE are: promotion of innovation and efficiency through the digitization of processes and information; and supporting better service and goods delivery to the consumers and organizations through the automated systems and digital infrastructure (Brands et al., 2019& Vyas et al., 2021). These opportunities have helped in the achievement of some of the DE objectives. Although there are several opportunities as a result of the DE, a limited digital infrastructure; a loss of information control; an increase in fraud and marginalization of the people who do not have access to the digital technologies, are some of the challenges affective the effective implementation of DE in Malawi (Ganichev et al., 2021 & Mansel 2021). As such, it was of great significance to critically analyze the challenges and opportunities for the effective and efficient implementation of the DE.

The study used New Public Management (NPM) model theoretical framework to critically analyze the encountered challenges and opportunities. The NPM theoretical framework is based on the ethos of the private sector management in improving the public service delivery (Obong'o 2009). The NPM theoretical framework was chosen because it is very relevant to the justification of the research objectives in this study. The NPM model advocates for efficiency and effectiveness in public service delivery.

What is central to all the NPM arguments is the implementation of market - based principles in the running of the public sector (Hoque, 2005). This helps to explain how the challenges encountered in the DE implementation can be mitigated for the full realization of the strategy in Malawi.

2. Materials and Methods

This study was conducted in the month of September 2022, at the Ministry of Information (MoI), E - Government Department and the Public Sector Reforms Management Department (PSRMD). A case study design was used to help describe the phenomenon in detail, in context, and holistically. A case study is the development of a detailed, intensive knowledge about a single case or a small number of related cases (Stake, 1995). Similarly, a case study is defined as an empirical inquiry that investigates contemporary phenomenon within its real - life context, especially when the boundaries between phenomenon and context are not clearing evident. As such, the case study design helped the researcher in an in - depth investigation and detailed critical analysis on the challenges and opportunities of the DE in Malawi.

Based on the purpose and objectives of this study the researcher used qualitative approach to understand the concepts and opinions in the research problem, gather in - depth insights and generate new ideas. This qualitative approach falls within the interpretive paradigm which is based on assumption that social reality is subjective to experiences of individuals (Creswell, 2014).

Purposive sampling was used to collect data in the above mentioned organizations. The researcher purposively sampled a total of thirteen study participants for Key Informant Interviews (KIIs). The intention to utilize purposive sampling method was to select participants in a strategic manner based on the research questions and aims

(Bryman, 2016). Data was collected through Key Informant Interviews (KIIs) and secondary sources. Thematic analysis was used to analyze the results.

3. Results and Discussion

In this section, there is a provision of a brief profile of the study participants which includes the number of participants that were interviewed at E - Government department, PSRMD and the MoI. In addition, the researcher has provided the study results for the critical analysis on some of the major challenges and opportunities of DE in Malawi.

Characteristics of study participants

A brief profile of the study participants has been shown below, in table 1.

Table 2: Study participants

Number	Study participants	Total Number
1	E - Government Department	4
2	PSRMD	4
3	Ministry of Information	5
Total		13

As shown in Table 1, the researcher interviewed a total number of 13 study participants. The sample size was guided by data saturation limit (Creswell, 2016). In terms of gender, the researcher interviewed 7 males and 6 females. Although the researcher was particularly interested in the Top and Senior Managers for the research participants, the researcher included the Middle Managers. This helped the researcher to get views from both sexes thereby, being gender sensitive.

Critical analysis of some challenges and opportunities of Digital Economy in Malawi

In Malawi, there are several opportunities that have been realized from the DE. Some of the opportunities are: a promotion of innovation; efficiency through the digitization of information and processes; ability to work for global multinational companies through the digital platforms; enhanced competitiveness; creation of economic value; and improved well - being for the citizenry (Makoza, 2022).

According to the study respondents, DE is very crucial in the provision of e - government services to the citizenry. This is affirmed in a study "*Servicization with skill premium in the digital economy*", whose findings indicated that DE helps in provision of opportunities for the development of new knowledge and skills (Yoon, 2018). This assists in the achievement of economic growth through the integrated and inclusive ICT and digital systems thereby, creating a wealthy and self - reliant nation. In addition, DE helps in providing support for the development of digital infrastructure (Zhao et al., 2014). Based on the responses from some of the key informants, DE helps in innovation through the usage of advanced technologies. According to the key informants, this creates an enabling environment for innovative solutions to maximize profits in the midst of some shocks i. e., COVID - 19 pandemic. The innovative solutions help in addressing some of the challenges experienced in the implementation of DE in Malawi (Vyas et al., 2021). For example, the use of drones is one of the useful innovative solutions.

Although DE helps in provision of digital infrastructure in Malawi, there is a challenge of lack of enough digital infrastructures. As mentioned by the study respondents, the Government of Malawi has been attempting to address the challenge of digital infrastructure through promoting development of the ICT sector and enacting technology related legislation and regulations. However, there is still a challenge of limited digital infrastructures (Makoza, 2022). This is a serious challenge because it can limit the transition and growth of digital services. Digital infrastructure greatly assists in remote learning and access to digital public services among others (Ganichev et al., 2021). Limited infrastructure affects the access of some digital economic opportunities. As such, the Government of Malawi needs to seriously consider promoting digital projects. For example, the Public Private Partnership Commission of Malawi and the Ministry of Information embarked on Digital Foundation Project (funded by the World Bank), to promote the development of digital connectivity, digital ecosystem and digital platforms (Makoza, 2013). This is one of the applications of some of the elements of the NPM model, as the Government aims at improving the service delivery to its citizens.

In addition, there is a weak and inconsistent Legal and administrative frameworks; a lack of financial resources; a loss of information control; a lack of ICT; an increase in fraud and marginalization of the people who do not have access to the digital technologies (World Bank, 2021). A review of the legal and Administrative frameworks is needed. According to the key informants, this has to be aligned to the DE strategy. In doing so, most of the challenges mentioned above, can be mitigated.

4. Conclusion

We are living in a competitive environment which requires the use of DE to remain competitive. As such, the Government of Malawi initiated the DE as one of the tools for improved public service delivery. This is in line with the technological changes in the digital era. Innovation and acquisition of new knowledge and skills are some of the great opportunities for DE in Malawi. Although the use of DE is of great significance in the public sector, there are some challenges that are limiting its impact. For example, a lack of enough digital infrastructures; a weak and inconsistent Legal and Administrative frameworks; a lack of financial resources; a loss of information control; an increase in fraud and marginalization of the people who do not have access to the digital technologies are some of the challenges affecting the successful implementation of DE in Malawi. Based on the study results, the opportunities of DE in Malawi need to be promoted to help in the achievement of economic growth and the challenges that have been hindering the full realization of the DE benefits need to be mitigated by reviewing the legal and Administrative frameworks and aligning them to the DE strategy. This can help in the full realization of the Malawi Digital Economy Strategy.

Acknowledgements

The author sincerely thanks the senior public officers from the E - government Department, Public Sector Reforms

Management Department (PSRMD) and the Ministry of Information (MoI), for participating in the study as Key Informants.

[17] Zhao F, Wallis J, & Singh M. (2014). E - government development and the digital economy: A reciprocal relationship. *Internet Research*, 25 (50), 734 - 766.

References

- [1] Brands J, & Van W. J. (2019). Connected and fearful? Exploring fear of online financial crime, Internet behaviour and their relationship. *European Journal of Criminology*, 1, 1–22.
- [2] Bryman A. (2016). *Social Research Methods* (5th ed.). London: Oxford University Press.
- [3] Bukht R, & Heeks R. (2017). Defining, conceptualising and measuring the Digital Economy. Working Paper 68. Centre for Development Informatics, Manchester, University of Manchester, UK.
- [4] Creswell J. W. (2016). *Essential skills for the qualitative researcher*. Thousand Oaks, CA: Sage.
- [5] Creswell J. W. (2014). *Research design: A qualitative, quantitative, and mixed method approaches* (4th Ed.). Thousand Oaks, CA: Sage.
- [6] Ganichev N, & Koshovets O. (2021). Forcing the Digital economy: How will the structures of Digital markets change as a result of the COVID - 19 pandemic. *Studies on Russian Economic Development*, 32 (1), 11 - 22.
- [7] Hanna N. (2020). Assessing the digital economy: aims, frameworks, pilot, results and lessons. *Journal of Innovation and Entrepreneurship*, 9 (16), 1 - 16.
- [8] Hoque Z. (2005). 'Securing Institutional Legitimacy or organizational Effectiveness? A Case Examining the impact of Public Sector Reform Initiatives in an Australian Local Authority', *International Journal of Public Sector Management*, 18 (4), 367 - 382.
- [9] Makoza F. (2022). Analysing Digital Economy strategy of Malawi against the Digital Economy Ecosystem Framework. <https://www.researchgate.net/publication/358413265> Working Paper ICTD03/22.
- [10] Makoza M. (2013). The Level of E - government Implementation: Case of Malawi. *Electronic Journal of E - government*, 11 (1): 268 - 279.
- [11] Mansell R. (2021). Adjusting to the digital: Societal outcomes and consequences. *Research Policy*, 50, 1 - 10.
- [12] Obong'o S. O. (2009). *International Journal of Public Management Review*. 10 (2) Implementation of Performance Contracting in Kenya.
- [13] Stake R. E. (1995). *The art of case study research*. Thousand Oaks, CA: Sage.
- [14] Vyas V, & Jain P. (2021). Role of digital economy and technology adoption for financial inclusion in India. *Indian Growth and Development Review*, 14 (3), 302 - 324.
- [15] World Bank. (2021) *Malawi Economic Monitor: Investing in digital transformation*. World Bank Malawi Office, Lilongwe, Malawi.
- [16] Yoon S. (2018). Servicization with skill premium in the digital economy. *Journal of Korea Trade*, 22 (1), 17 - 35.