Assessing the Impact of Digital Transformation on Public Service Delivery in Zimbabwe

Tinashe Clive Gondo¹, Ixora Lundia Suwaryono²

¹,²Faculty of Administrative Sciences, Universitas Indonesia, Jl. Prof. Dr. Selo Soemardjan Kampus Baru UI /Researcher, Depok 16424, Indonesia

Abstract
Governments worldwide increasingly recognize the need to accelerate digital transformation to enhance public service delivery, drive economic growth, and ensure societal resilience in an increasingly digital age. This study focuses on the impact of digital transformation on public service delivery in Zimbabwe, considering the country's unique socio-political and economic context. Through a comprehensive literature review, this research examines the challenges and opportunities presented by digital transformation, aiming to assess its effects on service quality, citizen engagement, and overall governance. The study contributes to the growing body of literature on digital transformation in developing countries, emphasizing best practices, key challenges, and recommendations for future interventions. Employing a quantitative methodology with stratified random sampling techniques, the research finds that the adoption of digital technologies in Zimbabwe has streamlined processes, improved resource utilization, and enhanced responsiveness to citizen inquiries and feedback. These findings underscore the importance of digital transformation in enhancing public service delivery and informing policy decisions in Zimbabwe.

Keywords: Digital transformation, Digital Infrastructure, E-Government, Public Service Delivery, Zimbabwe

Abstract
Kata Kunci: Transformasi digital, Infrastruktur Digital, E-Government, Pemberian Layanan Publik, Zimbabwe

INTRODUCTION
Governments worldwide have increasingly recognized the imperative of accelerating digital transformation to enhance public service delivery, drive economic growth, and ensure societal resilience in an increasingly digital age. In the realm of public administration, the integration of digital technologies has revolutionized service delivery paradigms, presenting both challenges and opportunities for governments worldwide. Digital technologies have made significant contributions to public administration, improving public access to information and enabling the swift delivery of essential services (Mountasser & Abdellatif, 2023). Recognizing these benefits, many governments have prioritized Digital Transformation to enhance transparency, service speed, accessibility, and efficiency, while also reducing corruption in the public sector (Milukutu & Siachisa, 2023). The integration of digitalization and ICT tools into public administration has transformed how government entities operate and how they interact with both each other and citizens (Christensen & Lægreid, 2022). These technologies have not only altered the day-to-day practices of public administration and governance but have also impacted the working environment of civil servants (Sanina et al., 2023). Public service delivery has similarly undergone profound transformations, influenced by the integration of digital technologies within public administration and governance frameworks. In the last decade, there has been a proliferation of digital public service ingenuities, developed and implemented by both public and private sectors. As of 2017, it was approximated that about 400 such initiatives had been deployed worldwide (Aker, 2017). This surge in digital public service initiatives reflects a broader trend toward the adoption of digital technologies to enhance public service delivery. In Zimbabwe, however, the pace and scale of digital public service innovations have been relatively modest compared to global trends. This is largely due to factors such as limited technological infrastructure, constrained financial resources, and a lack of comprehensive digitalization strategies at the national level. Despite these challenges, there have been some notable efforts to digitize public services in Zimbabwe, particularly in areas such as e-government, digital financial services, and telecommunication. The Procurement Regulatory Authority of Zimbabwe (PRAZ) unveiled Zimbabwe's electronic government (e-government) procurement system, aiming to bolster the efficiency and transparency of the state procurement process while addressing systemic weaknesses and combating pervasive corruption within the country's public procurement framework. As Zimbabwe continues to navigate its digital transformation journey, there is a growing recognition of the importance of leveraging digital technologies to improve public service delivery, enhance transparency, and promote economic development. Previous research has highlighted the transformative potential of digital technologies in public service delivery, citing examples from various global contexts. For instance, (Milukutu & Siachisa, 2023) examined the impact of digital transformation on employee performance in Zambia’s Ministry of Health Headquarters. The study finds that the Ministry of Health has implemented four key technologies in digital transformation artificial intelligence, the internet of Things, cloud computing, and data analytics. The study also finds that these technologies have positively influenced employee performance in terms of task, adaptive, and contextual dimensions, but there are also challenges and constraints such as connectivity issues, limited access, inadequate resources and training. (Portion et al., 2023) explores how the integration of technology and innovation into public service delivery has influenced the business landscape in African states, fostering economic growth and inclusivity, while (Li et al., 2023) explore how...
artificial intelligence affects local governance in China, especially how it creates public value in the digital era. (Sirotkina & Lazarevich, 2023) examines the challenges and implications of digitalization in the Russian public procurement sector. However, there is a need for a comprehensive analysis of the specific strategies and mechanisms through which digital technologies can be effectively integrated into Zimbabwean public service delivery. While existing research highlights the potential benefits of digitalization, there is a lack of detailed examination of the practical steps and best practices for implementing digital solutions in the context of Zimbabwe's governance challenges. This study delves into the specific case of Zimbabwe, a nation navigating complex socio-economic dynamics, to assess the impact of digital transformation on its public service delivery. By examining the adoption and implementation of digital technologies across various sectors, including health, education, and governance, this research seeks to identify the opportunities and challenges associated with this transformation. Additionally, the study will explore the extent to which digitalization has improved service quality, increased citizen engagement, and enhanced overall governance. Zimbabwe's digital transformation journey is a complex and multifaceted process, influenced by factors such as political will, institutional capacity, and public perception. By analyzing these factors and their interplay with digitalization efforts, this study aims to provide valuable insights for policymakers, practitioners, and researchers interested in leveraging digital technologies for improved public service delivery. This research seeks to contribute to the growing body of literature on digital transformation in developing countries, with a specific focus on Zimbabwe. By highlighting best practices, identifying key challenges, and offering recommendations for future interventions, this study aims to inform policy decisions and contribute to the ongoing discourse on digitalization and governance in Zimbabwe. The paper is structured as follows, an initial review of the pertinent literature is conducted, followed by a delineation of the research methodology. Subsequently, the presentation and analysis of the findings are presented, culminating in the articulation of conclusions and implications drawn from the study.

LITERATURE REVIEW
While extensive literature addresses the digitalization of the public sector, scholars have noted differences and fragmentation in conceptual and operational definitions. These challenges have impeded both theoretical and empirical progress. The absence of coherence and clarity underscores the critical need for a comprehensive and unified framework to conceptualize and operationalize key terms such as "digital transformation," "public service delivery," and "digital infrastructure," particularly within the context of Zimbabwe's unique socio-political and economic landscape.

Digital transformation
Despite the considerable global attention devoted to researching and comprehending Digital Transformation, efforts by scholars to rigorously define the concept have not yielded an established definition. Consequently, the delineation of clear boundaries that could aid in defining digital transformation remains elusive (Kraus et al., 2021). Digitalization of public services involves incorporating data-driven methodologies, technology, and inventive approaches into the conventional frameworks of administration, governance, and service delivery (Portion et al., 2023). (Fischer et al., 2021) uses the term "digitalization" to describe the adoption and integration of information and communication technologies (ICT) in public administration and uses "digital transformation" as a conceptual framework to illustrate the profound changes and impacts resulting from digitalization. (Larsson & Teigland, 2020) posit that digitalization and digital transformation are pivotal concepts in elucidating the profound changes
and ramifications of digital technology on society. These terms encapsulate the multifaceted evolution and integration of digital tools and processes into various aspects of human life, fundamentally altering how individuals interact, organizations operate, and governments govern. By distinguishing between digitalization, the adoption and use of digital technologies in existing processes, and digital transformation, the comprehensive reimagining and restructuring of activities to leverage digital technologies for innovation and efficiency, scholars and practitioners gain a nuanced understanding of the ongoing digital revolution. This understanding is essential for navigating the complexities and maximizing the benefits of the digital age, ensuring that societies are not only equipped to adapt to the digital future but also empowered to shape it. Fischer, Larsson, and Teigland agree on the importance of the terms "digitalization" and "digital transformation" in describing the changes and impacts of digital technology. They both use "digital transformation" to illustrate the broader, profound changes and impacts that result from digitalization, suggesting that these terms are essential in explaining the effects of digital technology on society. Digital transformation comprises both technological advancements and their integration into the broader social system. This integration encompasses all aspects of the technological environment and significantly influences societal elements, marking a departure from earlier perspectives on the digitalization of public administration (Sanina et al., 2023). This review of terminology in the digital government domain highlights the ongoing lack of consensus and clarity in defining key concepts. To that end, in this study, the following definition is adopted, “Digital transformation in the context of public service delivery refers to the fundamental and holistic reimagining, restructuring, and enhancement of government operations, processes, and services through the integration and utilization of digital technologies. It involves the strategic adoption and implementation of digital tools, platforms, and methodologies to drive organizational change, improve service efficiency, effectiveness, and accessibility, enhance citizen engagement, and ultimately, achieve better governance outcomes.” In the age of the Fourth Industrial Revolution (4IR), digital transformation is not just beneficial but essential for enhancing public services. Embracing digitalization is crucial for public services to stay relevant, drive economic growth, and meet the evolving needs of society (Choi & Xavier, 2021).

**Digital Infrastructure**

Recently, scholars have increasingly focused on issues related to digital technology or infrastructure. There are considerable disproportions in digital infrastructure and services across republics, within republics, and among different groups within a nation. These disparities pose significant barriers to effectively leveraging new technologies for public service delivery, particularly in developing countries where the need for such technologies is most acute (Ojo & Millard, 2017). Extensive economic literature has examined the relationship between public services and economic development, consistently revealing a positive correlation. Many studies have specifically investigated the impacts of various public services, such as infrastructure, education, and public safety, demonstrating that these services can have a positive effect on economic development in specific contexts. Among the public services studied, transportation and infrastructure services exhibit the most robust positive relationship with economic growth (Aker, 2017). In the context of modern economies, the significance of digital infrastructure, including broadband networks, digital platforms, and data analytics, is increasingly paramount, as it not only enhances the efficiency and effectiveness of traditional public services but also serves as a catalyst for innovation and economic growth. Digital infrastructure stands as a foundational pillar crucial for advancing digital transformation within the public sector. Digital infrastructure plays a crucial role in enabling equitable participation across all population segments in market labor divisions, wealth generation activities, and
the benefits of economic progress (Ndubuisi et al., 2021). Digital infrastructure offers advantages such as cheap, high efficiency, extensive coverage, and deep penetration, surpassing traditional infrastructure in inclusivity and accessibility. Digital infrastructure encompasses the physical and virtual components that form the foundation of modern information and communication technology (ICT) systems. It includes hardware such as servers, routers, and cables, as well as software applications, platforms, and networks that enable the storage, processing, and transmission of digital data. Digital infrastructure is essential for supporting digital transformation initiatives, enabling organizations and governments to leverage technology for improved efficiency, innovation, and service delivery.

**E-Government**

In the realm of digitalization, information and communication technologies (ICT), and e-government, several terms are often used interchangeably or with overlapping meanings, leading to ambiguity and confusion (Christensen & Lægreid, 2022). At the core of the examination of digitalization in the public sector lies the pivotal concept of electronic government (e-government). Scholars have delineated the concept in diverse manners within the scholarly discourse. The advent of e-government has been hailed as a pivotal reform aimed at enhancing the efficiency and responsiveness of government service delivery. However, the definitions and applications of the term 'e-government' are not straightforward, as it is a concept delineated more by its outcomes than by the specific technologies or activities employed to achieve them. Consequently, e-government has become a subject of extensive research, explored in various contexts and for diverse purposes, (Edelenbos et al., 2021). E-government, a component of e-governance, represents a technologically driven facet of governmental operations facilitating unrestricted public access to information and services. It enhances interactions between government and stakeholders, promoting accountability, efficiency, and effectiveness, while also serving as a foundational element for e-democracy (Mensah & Adams, 2020). (Terlizzi, 2021) puts forward that e-government is defined as "the process of digitally connecting citizens to their government, enabling access to information and services provided by government agencies. (Christensen & Lægreid, 2022) argues that E-government indeed tends to focus more on the internal operations of government and the delivery of services between government agencies, often using digital tools for information dissemination and management. On the other hand, e-governance emphasizes the broader interaction between government and citizens, as well as other societal actors, leveraging ICTs to enhance transparency, participation, and collaboration in addressing societal challenges. E-government initiatives are critical drivers of digital transformation in public service delivery, leveraging digital technologies to enhance the efficiency, accessibility, and transparency of government operations. E-government, or electronic government, encompasses the use of digital tools such as the Internet, mobile devices, and other digital platforms to deliver government services, information, and interactions with citizens, businesses, and other government entities. By providing convenient online access to government services and information, e-government aims to improve citizen engagement and satisfaction while streamlining government processes. The definition of e-government is not universally agreed upon, as the concept spans various fields of study, including public administration and information systems. Efficient delivery of public services through e-government does not automatically ensure its acceptance by citizens. The success of e-government initiatives depends significantly on widespread acceptance and adoption by the general public (Mensah & Adams, 2020). Susanto (2013) asserts that comprehending the factors that influence e-government acceptance from the citizens' perspective is crucial for developing citizen-centric e-government services that are broadly embraced. Further explains that citizen-centric e-government prioritizes addressing citizens' concerns
The adoption and implementation of e-government have garnered significant global attention due to their numerous benefits which include facilitating easy access to public information, enhancing the orientation and provision of public services, increasing transparency and accountability, and improving the overall efficiency and effectiveness of bureaucracy in government. Indeed, the implementation of e-government involves various stakeholders, leading to different types of e-government interactions. These include Government-to-Government (G2G), Government-to-Business (G2B), Government-to-Citizen (G2C), and Government-to-Nonprofit (G2N) interactions, each playing a crucial role in enhancing government services and engagement with different sectors of society.

**Public Service Delivery**

Effective transformation of public service delivery hinges on organizations with well-defined policies, strong leadership, skilled staff, and engaged citizens. Through transparent and relevant ICT services, public agencies can rebuild trust by offering innovative ways to interact with governments at all levels (Milakovich, 2022). (Kalonda et al., 2021) defines service delivery as a series of localized actions by agents in public agencies or private enterprises. These actions aim to provide citizens with the necessary products and services in a manner that meets established standards. Service delivery is understood as the collective interaction among policymakers, service providers, and citizens. This encompasses various services and their associated operational systems, such as social services (e.g., health and education), infrastructure (e.g., electricity, roads, and water), and citizen security (e.g., police and justice), which are typically within the purview of the state (Elayah et al., 2023). Digital Public Service Delivery (DPSD) is conceptualized as the utilization of digital technologies in the design, process, and actual delivery of services to customers or clients for increased effectiveness and efficiency (Adeola et al., 2022). Public service delivery refers to the process through which government institutions and agencies provide essential services to citizens, businesses, and other stakeholders. These services can include a wide range of activities, such as healthcare, education, infrastructure development, public safety, and social welfare. The new governance approach has transformed service delivery into a model that aligns with the local community's needs. It acknowledges citizens as integral to the supply or production process, granting them increased responsibility for delivering public services (Elayah et al., 2023). The authors further suggest that public service provision is increasingly divided among multiple providers, including the private sector, multisectoral hybrids, public-private partnerships, and the third sector. Nevertheless, ideally, these stakeholders should remain subject to monitoring and supervision by the government. Effective public service delivery is essential for ensuring the well-being of society and promoting economic development. It involves the efficient and equitable distribution of resources, the implementation of policies and programs that meet the needs of the population, and the establishment of mechanisms for citizen engagement and feedback. It's important to note that the goal of digital transformation in the public sector is to enhance the delivery of services by improving efficiency, transparency, accountability, and citizen engagement (Sanina et al., 2023).

**Impact of Digital Transformation on Public Service Delivery**

Digital transformation is revolutionizing public service delivery and public sector institutions across the globe, offering new opportunities to improve efficiency, transparency, and citizen engagement. This literature review examines recent studies focusing on the adoption and impact of digital technologies highlighting key initiatives, challenges, and recommendations to enhance digital inclusion and service delivery. By synthesizing these studies, this review aims to provide insights into the diverse effects of digital transformation on public sector institutions with a narrow focus on Zimbabwe. (Wadesango et al.,
(Giri, 2020) examined the impact of digital economy taxation on revenue generation in Zimbabwe, focusing on value-added tax (VAT) and tax administration. (Ofoma, 2021) reviews the use of digital technologies by government agencies in Nigeria to provide services to citizens. The study evaluates the impact of digital innovations on service delivery, transparency, accountability, and citizen participation. It identifies a digital divide among citizens, especially in rural areas, and recommends policy interventions to bridge this gap. The findings emphasize the significant improvement in service delivery following the adoption of digital technologies, highlighting the need for sustained efforts to enhance digital inclusion. (Farayi, 2022) studied the significance of digitalization in public sector institutions in the COVID-19 era, while (Nwozor et al., 2022) explore how digital technology can combat corruption in Nigeria's public sector, a major obstacle to development and governance. The study identifies various digital initiatives, such as e-governance, Treasury Single Account, and National Identification Number, that have enhanced transparency, accountability, and efficiency in public service delivery in Nigeria. Despite these benefits, challenges such as cultural resistance, lack of skills, and political interference hinder digital transformation's effectiveness in curbing corruption. (Meru & Kinoti, 2022) examine the Kenyan government's adoption of digital technologies to improve public service delivery in various sectors. The study discusses policy frameworks, ICT infrastructure, legal environment, and collaboration with the private sector. It analyzes the implementation and impact of digital platforms in sectors such as health, education, and judiciary. The study concludes that while digitalization has enhanced efficiency and accountability, challenges such as cost, interoperability, and privacy remain. (Maphosa, 2023) explored the impact of digital transformation on institutional growth in Zimbabwean universities. (Portion et al., 2023) explore how the integration of technology and innovation into public service delivery has impacted the business landscape in African states, fostering economic growth and inclusivity. The authors define digital transformation as the strategic integration of technology and data-driven processes into governance, administration, and service provision. They highlight the diverse impact of digital transformation on sectors such as e-commerce, fintech, agritech, and healthcare, enabling innovation, entrepreneurship, and market expansion in Africa. However, challenges such as the digital divide, cybersecurity, regulatory frameworks, and infrastructure constraints need to be addressed to fully realize the benefits of digital transformation in Africa. Digital transformation is reshaping public sector institutions in Africa, offering new opportunities for revenue generation, service delivery improvement, corruption reduction, employee performance enhancement, and economic growth. However, to fully realize these benefits, African countries must address various challenges related to skills, infrastructure, connectivity, regulatory frameworks, and cultural resistance. Collaborative efforts and investments in education, infrastructure, and institutional reforms are essential to support digital transformation across the continent. (Milukutu & Siachisa, 2023) assess the impact of digital transformation on employee performance in Zambia's Ministry of Health Headquarters. The study highlights the positive influence of digital tools such as AI, IoT, cloud computing, and data analytics on efficiency, effectiveness, innovation, and inclusivity in the public sector. However, the study also identifies challenges related to the availability of tools, skills, resources, connectivity, and training of
employees in using digital tools. The studies by Wadesango et al. (2020), Giri (2021), Ofoma (2021), Farayi (2022), Nwozor et al. (2022), Meru and Kinoti (2022), Maphosa (2023), and Portion, Chidimma, and Nwokike (2023) provide valuable insights into the impact of digital transformation on revenue generation, public service quality, corruption reduction, and economic growth in African countries such as Zimbabwe, Nigeria, Kenya, and Zambia. When it comes to the African setting, there is still a clear research gap despite the relatively large body of literature on digital transformation and its effects on developed economies. These studies highlight the benefits of digitalization, such as efficiency, transparency, and citizen empowerment, but also underline challenges like digital divide, cultural resistance, and regulatory constraints. The findings underscore the importance of developing digital government strategies, investing in key enablers, and addressing challenges to fully realize the benefits of digital transformation in Africa. The literature offers a comprehensive framework for assessing the impact of digital transformation on public service delivery in Zimbabwe, providing insights, challenges, and potential solutions to enhance the effectiveness of digitalization efforts.

**RESEARCH METHODS**

This research utilized a quantitative methodology, employing a stratified random sampling techniques to assess the impact of digital transformation on public service delivery in Zimbabwe. Stratified random sampling techniques was employed to ensure representation from various sectors and regions in Zimbabwe. The population includes government agencies, citizens, and businesses interacting with public services. The research design is cross-sectional, focusing on a single point in time to capture the current state of digitalization and its effects on service delivery. Data was collected through google forms and survey administered to government officials, citizens, and businesses. The survey instruments were designed to capture perceptions of digital transformation in public service delivery, including aspects of service quality, accessibility, and efficiency. Google forms were utilized for data collection, and subsequent data analysis was conducted. The quantitative data were initially cleaned using Microsoft Excel before being transferred to the statistical analysis software SPSS for in-depth analysis. The data presentation used graphs and pie charts to visually represent the findings.

**RESULTS, DISCUSSION, AND ANALYSIS**

The demographic characteristics of the participants are depicted in Figure 1. The majority of respondents were male, comprising 58.9% of the sample, while females accounted for 41.1%.

*Figure 1 Demographic Characteristics of the Participants*

<table>
<thead>
<tr>
<th>Gender of Respondents</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>58.9%</td>
</tr>
<tr>
<td>Female</td>
<td>41.1%</td>
</tr>
</tbody>
</table>

The demographic characteristics of the participants are depicted in Figure 1. The majority of respondents were male, comprising 58.9% of the sample, while females accounted for 41.1%.
Figure 2 illustrates the age distribution of the respondents. The largest group, consisting of 34 respondents, fell within the age range of 35 to 45 years. There were 17 respondents aged between 25 and 35, and 23 respondents aged between 45 and 55. Additionally, 3 respondents were aged between 16 and 25, and 13 were above 55 years old.

Regarding the highest level of educational qualifications, the majority (63.3%) of respondents held either a Ph.D. or a Master's degree, indicating a high level of academic attainment. Additionally, 26.7% reported having attained tertiary education qualifications, while 10% indicated possession of secondary education qualifications. The prevalence of higher educational qualifications among respondents suggests that they were well-equipped to provide informed insights into the impact of digital transformation on public service delivery in Zimbabwe. Furthermore, the diverse educational backgrounds of respondents across all fields under study indicate a broad spectrum of expertise, enhancing the credibility of the opinions provided. Figure 3 illustrates the educational background of the respondents.

In Figure 4, among the respondents, 39% were government employees, 17% worked in the private sector, 1% were councillors, 1% were self-employed, and 8% were students. Government employees as primary stakeholders in public service delivery, government employees are directly involved in implementing and utilizing digital tools and platforms. Their perspectives provide insights into the challenges, benefits, and outcomes of digital transformation within government agencies. Private sector respondents offer a valuable external perspective on public service delivery. Their experiences with digital technologies in business operations highlight best practices, potential partnerships, and innovations that could benefit
public sector digital transformation efforts. Councillors play a crucial role in local governance and can provide insights into how digital transformation impacts decision-making processes, service delivery at the local level, and interactions between local governments and citizens. Self-employed individuals provided unique perspectives as both service providers and recipients. Their experiences shed light on how digital transformation affects small businesses and individual entrepreneurs who interact with government services. Students represent the future workforce and citizenry. Their perspectives on digital technologies, service expectations, and interactions with digital platforms can inform long-term strategies for public service delivery in the digital age. Overall, the diverse representation across these sectors enriches the study by providing a holistic view of the impact of digital transformation on public service delivery, considering various stakeholder perspectives and experiences.

**Figure 4 Respondent’s Occupation**

The survey findings in Figure 5 below indicate varying levels of satisfaction with public service delivery among respondents. The largest proportion of respondents, 45.6%, expressed neutral satisfaction levels. This could suggest that a significant portion of the respondents neither strongly approve nor disapprove of the current state of public service delivery. This neutral stance might stem from a variety of factors, such as having basic needs met but not experiencing exceptional service quality or efficiency. Furthermore, 32.2% reported being highly satisfied, indicating that a considerable portion of respondents view public service delivery positively. This could reflect effective service provision in certain areas or a general perception of satisfactory service quality. On the other hand, 15.6% indicated moderate satisfaction levels, suggesting that there is room for improvement in certain aspects of public service delivery. This group might have experienced some positive aspects but also encountered areas where services fell short of expectations. The percentages of respondents who reported being moderately dissatisfied (5.6%) and highly dissatisfied (1.1%) highlight areas of concern. These respondents likely experienced significant issues or shortcomings in public service delivery, indicating areas that require immediate attention and improvement.
The survey findings in Figure 6 above regarding the effectiveness of public service delivery, as perceived by respondents, are as follows: 1% rated it as very ineffective, 3% as effective, 17% as neutral, 38% as moderately effective, and 31% as very effective. These results suggest a generally positive perception of the effectiveness of public service delivery among respondents. A significant portion of respondents rated public service delivery as moderately effective (38%) or very effective (31%), indicating a belief that public services are performing adequately or excelling in meeting the needs of the population. The 17% of respondents who rated public service delivery as neutral may indicate a lack of strong opinion or uncertainty about the effectiveness of public services. This group may have mixed experiences with public services or may not have a clear benchmark for assessing effectiveness. The small percentages of respondents who rated public service delivery as very ineffective (1%) or effective (3%) suggest that there are some who perceive significant shortcomings or areas for improvement in public service delivery. These respondents may have experienced issues such as inefficiencies, delays, or inadequacies in service provision. Overall, the findings indicate a need for continuous monitoring and improvement of public service delivery to meet the expectations and needs of the population.
The first objective of the study was to assess the impact of digital transformation on public service delivery in Zimbabwe. This objective aimed to investigate how the adoption and integration of digital technologies have influenced the efficiency, transparency, and effectiveness of public services in Zimbabwe. Figure 7 illustrates that of the respondents, 57 indicated that digital transformation has led to improved efficiency in public service delivery. This suggests that the adoption of digital technologies has streamlined processes and workflows, leading to more effective use of resources and faster service delivery. Additionally, 5 respondents mentioned enhanced responsiveness as a result of digital transformation. This indicates that digital tools and platforms have improved the ability of government agencies to respond promptly to citizen inquiries, requests, and feedback. Furthermore, 21 respondents stated that digital transformation has increased transparency in public service delivery. This suggests that digital technologies have made information more accessible to the public, promoting accountability and trust in government processes. On the other hand, 7 respondents argued that digital transformation has had no impact on public service delivery. This perspective may stem from challenges or limitations in the implementation of digital initiatives, such as inadequate infrastructure or skills gaps.

The empirical findings of this study significantly contribute to the broader literature on the impact of digital transformation on public service delivery. By examining the specific context of Zimbabwe, this study addresses a notable gap in the literature regarding the application of digitalization principles in governance within the country.

One key contribution of this study is the identification of the various ways in which digital transformation has influenced public service delivery in Zimbabwe. The finding that 57% of respondents perceive improved efficiency demonstrates the tangible benefits of digitalization in streamlining processes and enhancing service delivery. This aligns with existing literature that suggests digital technologies can lead to efficiency gains in the public sector (Baku, 2022; Osborne et al., 2022). Furthermore, the finding that 21% of respondents believe digital transformation has increased transparency adds to the literature by highlighting the role of digital tools in promoting accountability and openness in governance (Baku, 2022).
This finding extends our understanding of the impacts of digital transformation beyond efficiency gains to include broader governance outcomes. The digitalization of government activities and services has led to positive outcomes such as increased transparency, accountability, and reduced corruption. The finding that 5% of respondents perceive enhanced responsiveness as a result of digital transformation is also significant. This aligns with literature that suggests digital technologies can improve government responsiveness to citizen needs and concerns (Senyo et al., 2021). However, the relatively low percentage suggests that there is still room for improvement in this area, which could be a focus for future research and policy development. Additionally, the finding that 7% of respondents believe digital transformation has had no impact on public service delivery is important for understanding the complexities of digitalization processes. This finding suggests that there are challenges and limitations to the effective implementation of digital initiatives in Zimbabwe, which is a valuable insight for policymakers and practitioners (Maphosa, 2023).

In inference, this study contributes to the broader literature by providing empirical evidence of the impacts of digital transformation on public service delivery in Zimbabwe. The findings not only confirm some of the expected benefits of digitalization but also highlight areas where further improvements are needed. This study underscores the importance of context-specific research in advancing our understanding of digital transformation in governance and public administration.

CONCLUSIONS
This study has shed light on the impact of digital transformation on public service delivery in Zimbabwe, specifically focusing on governance perspectives and community preparedness. The findings indicate that digital transformation has led to improved efficiency, increased transparency, and enhanced responsiveness in public service delivery. However, there are still areas where further improvements are needed.

Practical implications of these findings include the need for policymakers to prioritize investments in digital infrastructure and capacity building to fully realize the benefits of digital transformation. Specifically, policymakers should consider implementing digital governance strategies that enhance citizen engagement, improve service delivery, and increase transparency.

Policy actions that could be undertaken to improve community preparedness include the development of digital literacy programs, the establishment of digital platforms for citizen feedback, and the integration of digital technologies into disaster management plans. Additionally, efforts should be made to address the digital divide to ensure that all communities have access to the benefits of digital transformation.

Limitations of this research include the relatively small sample size and the potential for response bias. While the findings provide valuable insights into the specific context of Zimbabwe, further research is needed to determine the generalizability of these results to other communities.

This study highlights the transformative potential of digital technologies in improving public service delivery and enhancing community preparedness. By addressing the identified limitations and implementing the suggested policy actions, Zimbabwe can further harness the benefits of digital transformation for the betterment of its citizens. Limitations of the study include potential biases in survey responses and the reliance on self-reported data. Additionally, the cross-sectional design limits the ability to establish causality between digital transformation and service delivery outcomes. Future studies in this area could explore several avenues to further enhance understanding of the impact of digital transformation on public service delivery in Zimbabwe. Some potential areas for future research include:
1. Longitudinal studies: Conducting longitudinal studies to track the evolution of digital transformation initiatives in Zimbabwe over time and assess their long-term impact on service delivery outcomes.

2. Comparative studies: Comparing the experiences of Zimbabwe with other countries in Africa or globally that have undertaken similar digital transformation efforts to identify best practices and lessons learned.

3. Sector-specific studies: Conducting in-depth studies focusing on specific sectors, such as healthcare or education, to understand how digital transformation has impacted service delivery in these areas.

4. Qualitative studies: Complementing quantitative research with qualitative studies to provide deeper insights into the experiences and perceptions of stakeholders regarding digital transformation and its effects on service delivery.

5. Policy analysis: Analyzing the policy frameworks and institutional arrangements that have facilitated or hindered digital transformation in Zimbabwe to inform future policy development and implementation.

References


**Acknowledgements**

We would like to extend our heartfelt gratitude to the participants of this research whose invaluable contributions made this study possible. Your time, insights, and willingness to engage in this study have been instrumental in shaping the findings and conclusions presented in this article. We would also like to express our appreciation to Perpustakaan Universitas Indonesia (UI) for providing access to their "Informasi Akses database online" and other scholarly resources. The wealth of information and academic materials available through this resource has greatly enriched our research process and has been crucial in conducting a thorough literature review and analysis. Finally, we would like to acknowledge the team of students who conducted surveys in Zimbabwe on our behalf. We are honoured to have the opportunity to share your research findings with the academic community through. Thank you once again to all who have contributed to the success of this research endeavor.