

Challenges of Digital Transformation in the 21st Century: A Study of the Gambia Postal Service Corporation (GAMPOST)

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ABSTRACT: This study examines the challenges facing the Gambia Postal Service Corporation (GAMPOST) in adopting digital transformation amid a technology-driven global environment. Focusing on ICT, e-commerce, and digital communication, the study explores structural, technological, human, and regulatory barriers that limit innovation, service delivery, and alignment with Sustainable Development Goal 9. Survey results reveal critical obstacles, including inadequate IT infrastructure (99%), insufficient staff training (97%), organizational resistance (93%), regulatory constraints (95%), and limited financial resources (97%). Despite these challenges, partial technology adoption has improved productivity (90%). The study concludes that GAMPOST requires urgent investment in ICT infrastructure, staff capacity, regulatory reforms, and funding to achieve sustainable digital transformation and enhanced service efficiency.

KEYWORDS: Digital Transformation; GAMPOST; Postal Services; Challenges; Information and Communication Technology (ICT); Organizational Barriers; Infrastructure; Human Capital; E-commerce; Public Sector Reform; Regulation; Service Delivery; The Gambia; Sustainable Development Goal 9 (SDG 9)

1. INTRODUCTION

Over the past decade, there has been increasing attention from scholars and experts regarding the significant impact of technological advancements on organizational success. It is believed that technology has the potential to redefine professional roles and, in some cases, render certain jobs obsolete. Moreover, financial performance may either improve or deteriorate as executives implement strategies to address the growing demand for technology and its impact on institutional performance (Ankrah, 2015, p. 5). Technology is no longer merely a business enabler but a key driver of organizational change. The continuous evolution of the internet, mobile technologies, and communication systems provides businesses with a broad range of opportunities. Today, information technology is leveraged to enhance customer acquisition, drive automation, increase process efficiency, and deliver greater competence to clients (Ankrah, 2015, p. 7).

Technological advancements have profound implications for individuals, businesses, governments, and entrepreneurs. These developments foster new business models, entrepreneurial opportunities, and innovations in the accessibility, utilization, and transportation of goods and services (Mathieu et al., 2011, p. 45). Similarly, Asher, Callan, and Marsh (2012, p. 32) highlight that the Internet and digital technology are revolutionizing communication and commerce worldwide. The rapid adoption of electronic alternatives to traditional mail services by both consumers and businesses accelerates this transformation, making it essential for postal services to modernize operations and adapt to the digital age.

Mail operators are increasingly transitioning from traditional hard-copy distribution models to innovative digital platforms for advertising, communication, and transactions (Buhler, 2013, p. 21). This shift presents an opportunity for the Gambia Postal Service to enhance convenience, speed, and cost-effectiveness. Globally, postal sectors are undergoing rapid transformation, as long-established business models are challenged by modern technology and social media trends. Forward-thinking operators are exploring new business models, diversifying into areas that differ from traditional mail services to improve performance. Similarly, GAMPOST is attempting to transform legacy mail networks into parcel networks to capitalize on the growing e-commerce sector. While diversification has ensured the survival of postal operators, it remains uncertain whether traditional mail services will remain profitable (Buhler, 2013, p. 23).

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As the postal sector evolves, management of national postal services must diversify into financial services and fully automate operations to improve efficiency and adapt to changing demands. However, counter automation remains a concern, exposing vulnerabilities such as fraud and mismanagement of funds stemming from outdated manual processes. Furthermore, many frontline staff members lack computer literacy, compounding challenges in implementing effective digital solutions. Transitioning toward full computerization is therefore critical for sustainability and growth, especially amid increasing competition from digital alternatives (Mathieu et al., 2011, p. 49).

2. STATEMENT OF RESEARCH PROBLEM

The Gambia Postal Service Corporation (GAMPOST) has experienced declining performance due to its failure to fully embrace digital transformation and modern technological advancements. Over the past decade, letter mail volumes have steadily decreased, largely due to faster communication methods such as email, social media, and smartphones. This technological shift has rendered traditional postal services increasingly obsolete, leaving GAMPOST struggling to adapt and resulting in substantial revenue losses that undermine its ability to modernize (Ankrah, 2015, p. 12).

Despite the growing importance of digital services in the global postal sector, GAMPOST has been slow to adopt Information and Communication Technology (ICT), limiting its competitiveness in a rapidly evolving market. Inadequate innovation and digital infrastructure have constrained the organization's ability to diversify services and meet the demands of modern consumers, particularly in the growing e-commerce sector (Buhler, 2013, p. 26).

This research seeks to examine determinants of institutional performance at GAMPOST, focusing on the role of digital transformation in driving efficiency, financial viability, and competitiveness. It explores barriers to technology adoption, the impact of digitalization on operations, and broader implications for sustainability and alignment with the United Nations Sustainable Development Goal 9 (Asher et al., 2012, p. 35).

3. METHODOLOGY

To investigate the difficulties of digital transformation in the Gambia Postal Services Corporation (GAMPOST), this study used a descriptive research methodology with hypothesis testing (Boswell & Cannon, 2014, p. 12). A methodical evaluation of current digital practices, institutional limitations, and their consequences for 21st-century service delivery was made possible by the design. In order to capture both quantifiable obstacles and employees' impressions of digital transformation, a mixed-method approach was used, combining quantitative and qualitative methodologies. While secondary data was gathered from pertinent academic literature, policy documents, and institutional reports, primary data was gathered through standardized Likert-scale questionnaires given to GAMPOST personnel. To guarantee representativeness and lessen selection bias, a straightforward random sampling method was employed. Descriptive statistics (frequencies and percentages) and content analysis for qualitative replies were used to analyze the data, which made it possible to identify important issues and new trends. To guarantee validity and dependability, the research tool was pre-tested. Throughout the study, ethical norms such as informed consent, voluntary participation, and confidentiality were rigorously upheld.

4. REVIEW OF RELEVANT LITERATURE

Digital transformation is widely acknowledged as a key strategic imperative for organizations aiming to enhance efficiency, competitiveness, and resilience in the 21st century (Vial, 2019, p. 120). It involves the integration of digital technologies into organizational processes, cultures, and customer interfaces to create value and enable innovation. However, research reveals that digital transformation is complex and multi-dimensional, often constrained by structural, cultural, regulatory, and resource-based limitations (Fitzgerald et al., 2014, p. 6).

4.1 Conceptual Foundations of Digital Transformation

Scholars argue that digital transformation is not merely about adopting technologies but about rethinking business models and organizational norms to leverage these technologies effectively (Brennen & Kreiss, 2016, p. 5). Vial (2019, p. 119) emphasizes that digital transformation requires alignment between technological investments, leadership vision, and organizational strategy. Consequently, institutions encountering deep legacy structures and resistance to change often struggle to implement meaningful transformation initiatives.

4.2 Human Capital and Skills Deficit

One of the most consistently documented challenges in the literature concerns workforce capabilities. Kane et al. (2015, p. 4) note that a shortage of digital skills and competencies significantly hampers organizational efforts to develop, deploy, and support digital services. This aligns with arguments by Schallmo et al. (2017, p. 8), who contend that insufficient digital literacy among employees creates resistance to technology adoption and limits innovation. The destabilizing effect of human capital deficits is especially

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pronounced in public sector organizations, where training systems often lag behind the pace of technological change (Westerman et al., 2014, p. 60). In the context of postal services, Rai et al. (2012, p. 279) found that institutions with weak IT training structures were less successful in developing digital offerings, a finding consistent with empirical observations at GAMPOST.

4.3 Technological Infrastructure and Resource Constraints

Another key barrier highlighted in the literature is the inadequacy of technological infrastructure. Melville (2010, p. 2) argues that limited ICT infrastructure undermines an organization's capacity to innovate, scale, and support critical digital services. Similarly, Hess et al. (2016, p. 125) maintain that outdated legacy systems often impede digital transformation efforts because they are incompatible with modern digital platforms and processes. This observation resonates with research on postal sector reform, where infrastructural inefficiencies and underinvestment are identified as major inhibitors of digital adoption (Kamau & Were, 2019, p. 60). In developing economies in particular, resource constraints — including financial, technological, and logistical — compound the challenges faced by postal institutions seeking digital transformation.

4.4 Organisational Culture and Digital Leadership

Organizational culture plays a crucial role in shaping digital transformation outcomes. Westerman et al. (2014, p. 67) emphasize that transformation requires not only technology adoption but a cultural shift toward experimentation, learning, and innovation. However, hierarchical structures, bureaucratic inertia, and resistance to change significantly slow transformation progress (Kane et al., 2015, p. 6). Digital leadership, defined as the capacity to envision, champion, and govern transformation priorities, is a critical enabler of successful implementation (Fitzgerald et al., 2014, p. 12). Cultures that tolerate risk, embrace agile practices, and empower staff have proven more successful in digital transformations. In contrast, institutions with rigid administrative frameworks often experience prolonged transition periods.

4.5 Regulatory and Policy Environment

The regulatory environment is another determinant of digital transformation success. Bhatnagar and Singh (2010, p. 4) contend that effective policies regarding data governance, e-commerce, and digital finance establish a supportive ecosystem for digital adoption. Conversely, outdated or ambiguous legal frameworks create uncertainties that dissuade investment and limit service scalability. Kane et al. (2015, p. 8) further suggest that regulatory clarity can accelerate digital transformation by reducing institutional risk and fostering inter-organizational partnerships — a point corroborated by studies on postal reform in Africa, where weak regulatory architectures have constrained digital service expansion (Kamau & Were, 2019, p. 63).

4.6 Competitive Pressures and Market Dynamics

Digital transformation is often driven by competitive necessity. The rapid growth of digital platforms and private logistics firms has pressured traditional postal operators to adapt or risk market share erosion (Maha & Fenwick, 2018, p. 180). These market dynamics have intensified competitive pressure in both domestic and international postal markets, urging legacy institutions to diversify offerings, including e-commerce support, digital tracking, and value-added services. Research suggests that postal services that fail to modernize risk losing relevance to more agile digital competitors, underscoring the urgency of strategic transformation (Rai et al., 2012, p. 281).

The literature highlights multiple interrelated challenges that constrain digital transformation, including human capital weaknesses, infrastructure gaps, cultural resistance, regulatory limitations, and competitive pressures. For institutions like GAMPOST — characterized by legacy systems, limited resources, and evolving regulatory frameworks — these barriers are particularly salient. Understanding these challenges through existing scholarship provides a strong theoretical and empirical foundation for interpreting the findings of this study.

5. FINDINGS FROM THE STUDY

The results presented in Table 1 indicate that a majority of respondents perceive significant capacity gaps within GAMPOST. Specifically, 46 respondents (63%) agreed and 25 (34%) strongly agreed that staff are not adequately trained to develop, implement, and support digital services, while only 2 (3%) disagreed. This suggests that an overwhelming 97% of respondents believe that GAMPOST has not sufficiently fulfilled its mandate to continuously train employees in the use of IT tools and systems required for digital service delivery. Similarly, 39 respondents (54%) agreed and 33 (45%) strongly agreed that GAMPOST faces limitations in its IT infrastructure, with only 1 respondent (1%) disagreeing. This implies that 99% of respondents perceive inadequate technological infrastructure as a major constraint, limiting the corporation's ability to innovate and introduce new digital services, thereby contributing to inefficiencies in its operational model. Furthermore, 57 respondents (78%) agreed and 11 (15%) strongly agreed that the transition towards a digital culture within GAMPOST is progressing slower than expected, while 5 (7%) disagreed. This indicates that 93% of respondents acknowledge the need for substantial changes in organisational processes, systems, and employee attitudes to effectively support digital transformation.

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The findings also reveal that regulatory and legal constraints significantly hinder operations. A total of 47 respondents (65%) agreed and 22 (30%) strongly agreed that the lack of an adequate legal framework restricts the scope of e-commerce operations in The Gambia, while 4 (5%) disagreed. This suggests that 95% of respondents believe that insufficient regulation in the postal sector has negatively affected GAMPOST's operational efficiency. Despite these challenges, technological advancements were generally perceived as beneficial. A majority of respondents, 51 (70%), agreed and 16 (22%) strongly agreed that technology has contributed positively to productivity, although 5 (7%) disagreed and 1 (1%) strongly disagreed. This indicates that 92% of respondents recognize the positive impact of partial digitalization efforts. However, the lack of full automation continues to limit the realization of expected revenue outcomes. In terms of resource availability, 36 respondents (49%) agreed and 35 (48%) strongly agreed that GAMPOST lacks sufficient investment resources to fully deploy e-services, with only 2 (3%) disagreeing. This reflects a strong consensus (97%) that inadequate funding is a key barrier to achieving full digital transformation.

Finally, the study found that competition from private actors is intensifying. A total of 56 respondents (77%) agreed and 15 (20%) strongly agreed that e-merchants and private delivery services are increasingly utilizing alternative logistics networks, while 2 (3%) disagreed. This implies that 97% of respondents believe that regulatory gaps have enabled private competitors to encroach on GAMPOST's mandated role, thereby weakening its position in the logistics and postal market both within The Gambia and beyond.

Table 1 Investigation of challenges faced by GAMPOST in embracing digital transformation.

		Frequency	Percent
GAMPOST staff are not properly trained to develop, implement and support digital services.	Agree	46	63
	Disagree	2	3
	Strongly Agree	25	34
	Total	73	100
Limitation of our IT infrastructure restricts our ability to launch new digital services	Agree	39	54
	Disagree	1	1
	Strongly Agree	33	45
	Total	73	100
It takes time for GAMPOST to move forward with a digital culture	Agree	57	78
	Disagree	5	7
	Strongly Agree	11	15
	Total	73	100
Legal framework and lack of regulation restrict the scope of the e-commerce operation in the Gambia	Agree	47	65
	Disagree	4	5
	Strongly Agree	22	30
	Total	73	100
Advancements in technology was observed to contribute significantly to the productivity of the national postal services in the Gambia	Agree	51	70
	Disagree	5	7
	Strongly Agree	16	22
	Strongly Disagree	1	1
	Total	73	100
Our investment resources are not yet sufficient to ensure full deployment of E-services	Agree	36	49
	Disagree	2	3
	Strongly Agree	35	48
	Total	73	100
The e-merchant has started (or may start) to use their own delivery thus, affecting GAMPOST.	Agree	56	77
	Disagree	2	3
	Strongly Agree	15	20
	Total	73	100

Source: Fieldwork, 2026

6. CONCLUSION

The findings of this study reveal that the Gambia Postal Service Corporation (GAMPOST) faces significant challenges in embracing digital transformation, which collectively constrain its operational efficiency, innovation capacity, and competitiveness. The study highlights critical gaps in human capital, with 97% of respondents indicating that staff lack adequate training to develop, implement, and support digital services. Insufficient IT infrastructure, identified by 99% of respondents, further restricts GAMPOST's ability to innovate and introduce new digital services. Organizational culture and employee readiness for digital adoption remain key obstacles, as 93% of respondents recognize the need for substantial changes in processes, systems, and attitudes to support a digital transition.

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Regulatory and legal shortcomings also emerged as major impediments, with 95% of respondents noting that weak legal frameworks limit e-commerce operations and hinder the corporation's ability to assert its mandated role. Resource constraints are equally significant, as 97% of respondents reported that inadequate investment prevents full deployment of digital services. Despite these barriers, the study indicates that partial adoption of technology has contributed positively to productivity, with 92% acknowledging the benefits of existing digital initiatives. However, the lack of full automation continues to impede revenue growth. The rise of private delivery services exploiting regulatory gaps further intensifies competition, with 97% of respondents perceiving these actors as encroaching on GAMPOST's market position.

In conclusion, while digital transformation presents substantial opportunities for GAMPOST to enhance efficiency, diversify services, and strengthen its competitive position, systemic challenges in human capacity, infrastructure, regulation, and financing must be urgently addressed. To realize the full potential of digital transformation, GAMPOST requires targeted investment in ICT infrastructure, comprehensive staff training programs, supportive legal and regulatory frameworks, and strategic resource allocation to ensure sustainable growth and resilience in the evolving postal and logistics sector.

RECOMMENDATION

GAMPOST should implement a phased digital transformation strategy supported by partnerships with technology firms to address infrastructure and capacity gaps. Emphasis should also be placed on continuous staff training to build digital skills. This combined approach will enable gradual modernization, improved service efficiency, and enhanced competitiveness.

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