

# Evaluating Effects of Digital Transformation on Quality of Financial Reporting in Nairobi City County Government, Kenya

## ABSTRACT

Despite the Nairobi City County Government's implementation of policies designed to ensure high-quality financial reporting and enhance accountability and transparency, these measures have not fully achieved their intended outcomes. Persistent deficiencies in financial reporting quality, coupled with an increase in deceptive practices, have undermined public trust. While digital transformation holds promise for improving financial reporting, existing empirical research is limited by conceptual, methodological, and contextual gaps. This study evaluates the impact of digital transformation on financial reporting quality within Nairobi City County Government. The target population comprised 287 officers from the Finance and Economic Planning Department, from which a sample of 105 respondents was purposively selected. Utilizing both descriptive and explanatory research designs, the study employed structured questionnaires to collect primary data, which were analyzed to produce descriptive and inferential statistics. The study concludes that big data technology has a significantly positive effect on quality of financial reporting ( $p < 0.01$ ;  $r = 0.618$ ;  $\beta = 0.185$ ) as block chain technology has a significantly positive effect on the quality financial reporting ( $p < 0.01$ ;  $r = 0.447$ ;  $\beta = 0.254$ ) and cloud computing technology has a significantly positive effect of quality of financial reporting in Nairobi City County Government ( $p < 0.01$ ;  $r = 0.696$ ;  $\beta = 0.599$ ). Additionally, there is a positive significant effect of robotic process automation on the quality of financial reporting in Nairobi City County Government ( $p < 0.01$ ;  $r = 0.525$ ;  $\beta = 0.368$ ). Furthermore, readiness to innovate significantly moderates the relationship between digital transformation indicators and financial reporting quality, with a moderating effect of 5.07%, which negatively impacts financial reporting quality in Nairobi City County Government. The research would provide decision-makers in Nairobi City County Government with valuable insights into the dynamics of digital transformation. This information would be used to formulate regulations aimed at enhancing the quality of financial reporting.

Key words: Big Data Technology, Block Chain Technology, Cloud Computing Technology, Digital Transformation, Quality Financial Reporting, Robotic Process Automation.

## INTRODUCTION

### Background of the Study

Globally, there is an increasing concern regarding public financial accountability and transparency (Musa, 2019). Consequently, the quality of financial reports has become crucial for ensuring responsibility and openness in the management of public resources and for facilitating informed decision-making (Cohen & Karatzimas, 2019). To meet the escalating demands for financial accountability and transparency, the public sector is undergoing reforms, including the adoption of International Public Sector Accounting Standards (IPSAS), which align with global trends in government accounting (Ulaya, Rahul, & Kiwia, 2023). These standards are designed to guarantee that financial reports provide reliable information that accurately represents the entity's financial position and economic reality at the end of the reporting period (Shuraki et al., 2021).

In Kenya, the critical role of high-quality financial reports in ensuring governmental accountability to its citizens and effective management of financial responsibilities is well established. To enhance governmental operations, promote budgetary transparency and accountability, facilitate access to accurate financial data, and improve public service delivery, the Integrated Financial Management Information System (IFMIS) was implemented (Iravonga, Alala, Maingi, & Ngala, 2023). Thus, the significance of quality financial reporting as a gauge of accountability and transparency within County Governments is well-documented (Breen, Cordery, Crawford, & Morgan, 2018). Accordingly, accurate and reliable accounting data, as provided by high-quality financial reports, is crucial for informed decision-making by County Government officials (Hasan, 2023). Such reports offer pertinent and actionable information that aids in evaluating the financial status of facilities at the end of the reporting period and their economic performance during the reporting period.

Despite the extensive adoption of the IFMIS as a digitized financial tool by County Governments in Kenya, intended to enhance transparency and accountability in financial reporting, performance analysis reveals persistent challenges in financial reporting practices. Issues related to the quality of financial reporting have been exacerbated by several accounting scandals within certain county governments (Oyugi, 2020). The failure to leverage technological advancements effectively can undermine the quality of financial reporting and potentially mislead stakeholders who rely on this information for decision-making (Abdi, 2021). A key factor in improving transparency and ensuring high-quality financial reporting is the increasing reliance on digital technologies. These technologies facilitate the tracking of financial transactions and the detection of potential fraud or misconduct (Saleem, 2023). The transition to a digital economy necessitates the evolution of professional domains such as accounting, auditing, and financial reporting to align with technological advancements, a process often termed as digital transformation (Peter, Kraft, & Lindeque, 2020). Digital transformation involves the integration of digital innovations and technologies into operational models, including big data analytics, blockchain, cloud computing, and robotic process automation (RPA) (Vial, 2019; Akter, 2020).

Big data encompasses vast sets of both structured and unstructured information that are traditionally managed in non-conventional ways (Lapsley et al., 2019). Its application in financial reporting enhances accuracy, identifies errors, and ensures the generation of more comprehensive and detailed financial reports (Andreassen, 2020; Hamood & Dammak, 2023). Blockchain technology provides a secure and verifiable electronic ledger across a distributed network, offering enhanced data integrity and traceability (Karman & Kurt, 2020; Begum, 2019; Abed et al., 2022). By establishing an immutable record of transactions, blockchain technology addresses concerns related to data tampering and fraud, thereby contributing to the reliability of financial reporting. Cloud computing improves the quality of financial reports through the centralization of data and increased accessibility, achieved by delivering computing resources over the internet (Haryati, 2019; Kamdjoung, Bawaak, & Tayou, 2020). This technology facilitates real-time data processing and storage, enhancing the timeliness and accuracy of financial information. Robotic Process Automation (RPA) enhances financial reporting by automating rule-based tasks, thereby ensuring consistency and minimizing human errors (Sulistyo et al., 2020; Anggaraeni, Purnamawati, & Atmadja, 2019). RPA supports the automation of repetitive and time-consuming tasks, which not only improves accuracy but also ensures adherence to regulatory standards (Oncioiu & Suriyati, 2019). Through these technologies, financial reporting processes are streamlined, thereby improving overall efficiency and reliability.

Although a relationship between digital transformation and financial reporting has been established, the readiness to adopt digital transformation may influence the quality of its financial reporting (Moron & Diokno, 2023). Consequently, the inclination to embrace innovation can affect the extent to which digital transformation impacts the quality of financial reporting. This underscores the necessity of considering organizational readiness as a potential moderating factor when evaluating how the digital transformation efforts of the Nairobi City County Government (NCCG) might affect the standards of its financial reporting.

#### **Statement of the Problem**

Despite having policies and procedures intended to ensure high-quality financial reporting, the Nairobi City County government continues to face deficiencies in this area. The Auditor General's report for the Financial Year 2021/2022 reveals issues such as unsupported balances, unreconciled variances, and discrepancies between financial statements and IFMIS records. The accuracy of budget and actual amount comparisons remains unverified, further weakening financial reporting. These problems lead to inconsistencies in financial statements, including discrepancies in payment information, incomplete payment records, transactions not processed in IFMIS, unresolved suspense accounts, and incomplete bank balances. As a result, verifying the completeness and accuracy of financial accounts becomes challenging. Weak financial reporting produces inconsistent, unreliable, and untrustworthy information, impeding effective decision-making and public accountability. While prior research has recognized the potential of digital transformation to enhance transparency, existing studies have methodological, contextual, and conceptual limitations that require a more tailored investigation for Nairobi City County Government. To better understand the impact on the county's financial reporting quality, it is important to consider readiness as a moderating variable and to examine specific digital transformation initiatives such as big data analytics, blockchain, cloud computing, and robotic process automation.

#### **Objectives of the Study**

##### **General Objective of the Study**

To investigate effects of digital transformation on quality of financial reporting in Nairobi City County Government, Kenya.

##### **Specific objectives of the Study**

- i. To investigate the effect of big data technology on quality of financial reporting in Nairobi City County Government, Kenya.
- ii. To establish the effect of block chain technology on quality of financial reporting in Nairobi City County Government, Kenya.
- iii. To assess the effect of cloud computing technology on quality of financial reporting in Nairobi City County Government, Kenya.
- iv. To investigate the effect of Robotic Process Automation on quality of financial reporting in Nairobi City County Government, Kenya.
- v. To establish the moderating effects of readiness to innovation adoption on the relationship between digital transformation and quality of financial reporting in Nairobi City County Government, Kenya

## **LITERATURE REVIEW**

### **Theoretical Literature**

#### **Technology–Organization–Environment**

Technology–Organization–Environment (TOE) Theory was developed by Depietro, Wiarda, and Fleischer in 1990 to explain how different factors, such as the technology itself and the organisational context in which it is used, influence the adoption and use of new technologies (DePietro, Wiarda & Fleischer, 1990). It provides a framework for examining how institutions adopt novel ideas (Prakasa & Fauzan, 2024). It has been shown to be a useful tool for comprehending the intricate interactions between technology, organisation, and environment. The primary dimensions of this theory are technological context, organizational context, and environmental context. The TOE theory takes into account both external and

internal technologies that have an impact on the organization when making technological decisions (Chege & Wang, 2020). The TOE theory can therefore be used to clarify how the adoption of digital transformation affects the operationalization of financial reporting. In this case, it emphasizes the importance of understanding how digital transformation, as a technological innovation, interacts with the organizational context and with impact financial reporting processes as it environmental contexts.

#### **Agency Theory**

Agency theory, originally articulated by Jensen and Meckling in 1976, addresses the potential conflicts that arise due to the separation between shareholders and managers. The theory elucidates the interactions between the principal (shareholders) and the agent (managers or accounting staff), highlighting the inherent conflict of interest between these two parties. According to Devita (2021), a significant information asymmetry exists between the agents, who possess a comprehensive understanding of the organization's daily operations and performance, and the shareholders, who seek greater insight into the business. This disparity can result in agents withholding critical information, thereby undermining the integrity of financial reporting. The conflict arises when managerial interests diverge from those of the shareholders, potentially leading to unethical practices such as falsifying financial statements or concealing essential information. In the realm of financial reporting, agency theory provides a valuable framework for understanding why financial reporting can be compromised. The theory suggests that conflicts of interest between executives and shareholders may foster dishonest practices aimed at presenting a more favorable performance than is accurate. Such practices might include manipulating financial figures, obscuring true information, or making misleading statements, ultimately deceiving owners.

#### **Dynamic Capability Theory**

Dynamic Capability Theory (DCT), first proposed by David Teece and Gary Pisano in 1994, provides a framework for understanding how firms can achieve and sustain competitive advantage by being adaptable and responsive to evolving market conditions. According to this theory, organizations that possess the ability to swiftly and flexibly adapt, engage in technological experimentation, and leverage firm-specific resources are better positioned to gain a competitive edge (Teece, 2018; Liu, An, & Liu, 2022). Dynamic capabilities are categorized into three main types: sensing capabilities, seizing capabilities, and reconfiguring capabilities (Soluk & Kammerlander, 2021). In the context of digital transformation, these dynamic capabilities facilitate organizations in enhancing their innovation processes, integrating internal resources to effectively reduce operational costs, and reconfiguring business models to improve customer satisfaction. Therefore, Dynamic Capability Theory provides a robust analytical framework for examining how organizations, through their dynamic capabilities, can navigate and leverage the opportunities and challenges presented by the digital revolution, with particular relevance to financial reporting and customer-focused strategies

#### **Empirical Review**

Several studies have explored the relationship between big data and the quality of financial reporting. Younis (2020) examined how big data analytics could enhance financial reporting standards in Saudi Arabia, concluding that big data analytics is crucial for improving institutional competitiveness. Similarly, Saleh et al. (2022) employed a qualitative methodology to investigate the impact of big data analytics on the quality of financial reporting among Canadian accounting firms, finding a notable enhancement in reporting quality. Winoto et al. (2023) also reported that the quality of financial reporting was significantly influenced by big data (Falana, Igbekoyi, & Dagunduro, 2023).

Research has also examined the effects of blockchain technology on financial reporting quality. Borhani, Barbajani, Vanani, Anaqiz, and Jamaliyanpour (2021) investigated the impact of blockchain on Iran's financial reporting standards, revealing positive effects on the qualitative properties of financial information, though they noted methodological limitations related to sampling techniques. This study aims to address these gaps by employing stratified random proportionate sampling. Conversely, Dyball and Sythamraju (2021) found that blockchain implementation led to increased inherent and control risks, while Rehab, Al-Rifai, and Ahmad (2023) identified a significant connection between blockchain technology and enhanced audit quality.

Research into the impact of cloud computing on financial reporting has produced notable findings. Akai et al. (2023) demonstrated that cloud computing significantly influences financial reporting standards. Shakatreh, Mohammed, Orabi, and Faouzan (2023) further revealed that the attributes of cloud computing contribute to the delivery of high-quality financial reports. Additionally, Akpan, Igbekoyi, Ogunbade, and Bankole (2023) found that cloud accounting methods substantially enhance the effectiveness of financial information quality. Empirical research has also investigated the effects of Robotic Process Automation (RPA) on financial reporting quality. Jedrzejka (2019) indicated that while RPA might lead to the loss of entry-level accounting positions, it also creates new roles and positions accounting professionals as consultants in RPA transformation and business consulting. Mookerjee and Rao (2021) illustrated that RPA can automate accounting processes, significantly improving financial reporting by streamlining accountants' work. Similarly, Dahiyat (2022) examined RPA's impact on audit quality within Jordanian companies, while Nwaneka (2023) explored how RPA affects accounting and finance services in Nigeria.

Furthermore, the readiness to adopt innovations has been studied in relation to the quality of financial reporting. Moron and Diokno (2023) identified positive correlations between the readiness to adopt and the

quality of financial reporting concerning various AI technologies. In contrast, Mahmud, Joarder, and Sakib (2023) highlighted that Bangladeshi customers are less prepared for fintech adoption compared to their counterparts. Additionally, Sudaryanto et al. (2022) revealed that the independent variable significantly impacts the adoption of AI technologies.

## RESEARCH METHODOLOGY

### Research Design

According to Kothari (2008), research design encompasses a set of protocols for data collection and analysis, aimed at achieving a balance between the significance of study objectives and the efficacy of the processes employed. In line with this definition, the current study utilized both explanatory and descriptive research designs. The descriptive research design was employed to offer detailed insights into the research problem and to delineate the characteristics of the current phenomenon (Gupta & Rangi, 2014). Conversely, the explanatory research design facilitated the analysis of trends and the formulation of hypotheses, which can inform future research endeavors (Akhtar, 2016).

### Target Population

The target population refers to the entire set of individuals or entities that a researcher aims to investigate and analyze. It represents the group of interest from which the researcher seeks to draw conclusions or make inferences. The target population was the 287 senior managers of NCGG which comprised; 19 Directors of Departments, 69 Internal Auditors, 109 Accountants, 57 Finance officers, and 34 IT System developers

### Sampling Technique and Sample Size

In this study the formula suggested by Saunders, Lewis, and Thornhill (2012) was used and this expressed as;  $n = \frac{(X^2 NP(1-P))}{\sigma^2(N-1) + X^2(1-P)}$

n = required sample size

$\sigma^2$  = the degree of accuracy;

$\sigma$  value is 0.05

N = the given population size from the sampling frame

P = Population proportion, assumed to be 0.50

$X^2$  = Table value of chi-square for one degree of freedom, which is 3.841

Thus,

$$n = \frac{3.841 \times 287 \times 0.5 \times (1-0.5)}{[0.05 \times 0.05 (287-1)] + [3.841 \times (1-0.5)]} = \frac{3.841 \times 287 \times 0.5 \times 0.5}{[0.0025 \times 286] + [3.841 \times 0.25]} = 104.57; n = 105$$

Selecting the sample size and technique was necessary for sampling.

### Data Collection Instruments

Data for this study were collected using a self-administered, structured questionnaire. The distribution of the questionnaire was managed through the drop-and-pick technique, as recommended by Adrian, Mark, and Phillip (2009).

Pilot testing was conducted to identify potential issues, ensure the clarity of the instrument, and assess the appropriateness of the language used, in accordance with Kvale's (2007) guidelines. The pilot test was designed to evaluate the comprehensibility of the research tool and its relevance to the study's objectives. This iterative process facilitated the refinement of the instrument to enhance its effectiveness for data collection and analysis. Content validity was used to assess validity of the questionnaire; where the supervisor and an expert in accounting assessed the content validity. The reliability of the research instrument was evaluated using the Cronbach Alpha coefficient. The resulting Cronbach Alpha value is presented in Table 1.

### Table 1:: Reliability Statistics

| Item   | Cronbach's Alpha | N  |
|--|------------------|----|
| Quality financial reporting                  | 0.748            | 6  |
| Big data technology                          | 0.938            | 5  |
| Block chain technology                       | 0.943            | 13 |
| Cloud computing technology                   | 0.923            | 10 |
| RPA  | 0.745            | 3  |
| Readiness to innovation                      | 0.884            | 4  |
| Cronbach's Alpha ( $\alpha$ ) = 0.876; N = 6 |                  |    |

Source: Research Data (2024)

Examination of Table 1 reveals that the Cronbach's Alpha value obtained was 0.876, exceeding the recommended threshold of 0.7 established by Kothari (2012). This high Alpha value indicates excellent internal consistency and reliability of the research tool. Consequently, all items within the tool were retained for data collection. The results demonstrated that each variable exhibited high reliability: quality financial reporting ( $\alpha = 0.748$ ), big data technology ( $\alpha = 0.938$ ), blockchain technology ( $\alpha = 0.943$ ), cloud computing technology ( $\alpha = 0.923$ ), Robotic Process Automation (RPA) ( $\alpha = 0.745$ ), and readiness to innovate ( $\alpha = 0.884$ ). Given the tool's strong consistency, it was utilized in its original form for data collection in the study.

## Data Analysis

The collected data were subjected to quantitative analysis to generate descriptive statistics. These descriptive statistics included means and standard deviations, which depicted the primary characteristics of the research variables. For inferential statistics, regression and correlation analyses were employed to analyze the qualitative data. Correlation analysis was used to identify and quantify associations between the study variables, while regression analysis was applied to establish and evaluate the relationships between these variables. These inferential statistical methods facilitated a comprehensive understanding of the interconnections among the variables under investigation.

### Direct Model

Multiple Regression Analysis (MRA) was used to estimate the Quality of Financial Reporting, the DV in terms of the Digital transformation measures; big data technology, block chain technology, cloud computing technology and Robotic Process Automation using the model;

$$QFR = \beta_0 + \beta_1 BDT + \beta_2 BCT + \beta_3 CCT + \beta_4 RPA + \epsilon \dots \dots \dots (3.1)$$

Where:

QFR = Quality of Financial Reporting

BDT = Big Data Technology

BCT = Block Chain Technology

CCT = Cloud Computing Technology

RPA = Robotic Process Automation

$\beta_0$  = value of QFR when each of big data technology, block chain technology, cloud computing technology and Robotic Process Automation is zero (0)

$\beta_1 - \beta_4$  = Coefficients of big data technology, block chain technology, cloud computing technology and Robotic Process Automation respectively

$\epsilon$  = Error term

### Moderating effect

The concept of moderation involves examining interaction effects, wherein the inclusion of a moderating variable alters the direction or strength of the relationship between two primary variables. This study aims to investigate how the quality of financial reporting in Nairobi City County Government (NCCG), Kenya, is influenced by the moderating effect of innovation adoption readiness. Specifically, the research seeks to understand how varying levels of readiness for innovation adoption may affect the relationship between financial reporting quality and other relevant variables. The research was to;

- Approve significance of the relationship between the initial IV and DV (digital transformation → quality of financial reporting) using the model (Significance of  $b_{11}$  in the model)  
 $Y = \beta_{10} + \beta_{11}X_{11} + e \dots \dots \dots (3.2)$
- Approve whether moderator variable is an explanatory variable  
 $Y = \beta_{20} + \beta_{21}X_{21} + \beta_{22}X_{22} + \beta_{23}(X_{21} * \beta_{22}) + e \dots \dots \dots (3.3)$
- Approve whether Moderator variable has a moderating effect (effect of  $\beta_{23}$ )

Where:

$\beta_{10}$  and  $\beta_{20}$  are constant (which is the value of performance of Quality of financial reporting in Nairobi City County Government, Kenya and readiness to innovation adoption are 0).

$\beta_{11}$ ,  $\beta_{21}$ ,  $\beta_{22}$  are regression coefficients or change induced by digital transformation and readiness to innovation adoption.

## RESEARCH FINDINGS AND DISCUSSIONS

### Response Rate

In this study, a sample of 105 respondents was drawn, with 97 individuals providing responses. This resulted in a response rate of 97 out of 105, or 92%, which is substantially higher than the threshold of 69% considered high according to Mugenda and Mugenda (2008). As noted by Mugenda and Mugenda (2008), a response rate exceeding 69% is indicative of a very high level of engagement. Consequently, the high response rate achieved in this study ensures that the results are likely to be accurate, reliable, and credible.

### Descriptive Analysis

The research employed a quantitative approach to analyze data collected on key concepts, aiming to derive descriptive statistics. Specifically, the study examined the behaviors of the independent variables (IVs) and their relationships with the dependent variable (DV), which is the quality of financial reporting in Nairobi City County Government (NCCG), Kenya. These descriptive statistics in terms of means (M) and standard deviations (SD) were captured in tables and interpreted. Since the results were from ordinal data, the study obtained composite indices using Mean of Means. Data collected using the scale; strongly Disagree = 1: disagree = 2: neutral = 3: agree = 4: strongly agree = 5 was interpreted as; 1 to 1.8 to mean strongly Disagree, above 1.8 to 2.6 implied disagree; Above 2.6 to 3.4 to mean neutral; Above 3.4 to 4.2 meant agree, and above 4.2 to 5 implies strongly agree. Meanwhile data collected using the scale; Not at all = 1: Low = 2: Moderate = 3: High = 4: Very high = 5 was interpreted as, 1 to 1.8 to mean Not at all, above 1.8 to 2.6 implied Low; Above 2.6 to 3.4 to mean Moderate; Above 3.4 to 4.2 meant High, and above 4.2 to 5 implies Very High.

### Quality of financial reporting in NCCG, Kenya

The study then evaluated the status employee quality of financial reporting in NCCG, Kenya to produced results Tabel 2.

**Table 2: Analysis by quality of financial reporting in NCCG, Kenya**

| Parameter   | M    | SD   |
|---|------|------|
| There is transparency in financial reporting                                    | 3.82 | 0.68 |
| The financial staff ensure that they are accountable for every record presented | 3.60 | 0.86 |
| Financial reports are produced in the prescribed timeliness                     | 3.65 | 0.76 |
| There are effective verifications of the financial reports                      | 3.73 | 0.82 |
| All reports are understandable  | 3.70 | 0.72 |
| All reports are reliable  | 3.70 | 0.79 |
| The county produces relevant reports only                                       | 3.68 | 0.74 |
| Quality financial reporting   | 3.70 | 0.77 |

Source: Field Data (2024)

Instituted on Table 2, the respondents agreed that there was transparency in financial reporting (M= 3.82; SD=0.68). the financial staff ensured that they were accountable for every record presented (M= 3.60; SD=0.86) and that the financial reports were produced in the prescribed timeliness (M= 3.65; SD=0.76). They further agreed that there were effective verifications of the financial reports (M= 3.73; SD=0.82) as they also agreed that all reports were understandable (M= 3.70; SD=0.72). As they agreed that they produced reliable reports (M= 3.70; SD=0.79), they also agreed that the reports were relevant (M= 3.68; SD=0.74). On average, it was shown that there was quality financial reporting (M= 3.70; SD= 0.77). The investigation established a high level of quality financial reporting is occasioned by transparency in financial reporting, the financial staff ensured that they were accountable for every record presented and the financial reports being produced in the prescribed timeliness. Other important factors for characterizing quality financial reporting include; effective verifications of the financial reports, ensuring that reports were understandable ensuring that reports are relevant.

### Big data technology

The study assessed the firth objective to investigate the effect of big data technology on quality financial reporting in NCCG, Kenya. Then the research sought to establish the level of big data technology where it obtained Table 3.

**Table3: Analys by Big data technology**

| Parameter  | M    | SD   |
|--|------|------|
| Sourcing and collection of big data is as ensure quality of financial reporting                    | 4.04 | 0.63 |
| Real-time reporting is a vital aspect implementation of financial reporting                        | 4.04 | 0.64 |
| Data processing and integration is an essential measure of financial reporting                     | 4.08 | 0.57 |
| Data governance and quality enhances the effective financial reporting                             | 3.98 | 0.61 |
| Effective utilization of big data technology measures enhances the quality of financial reporting. | 3.96 | 0.63 |
| Big Data Technology  | 4.02 | 0.62 |

Source: Field Data (2024)

The results indicate that big data technology has a profound impact on the quality of financial reporting. Specifically, the sourcing and collection of big data significantly enhance the quality of financial reporting, while real-time reporting emerges as a crucial component in the implementation of financial reporting. Furthermore, the integration and processing of big data are essential for improving financial reporting practices. The study found that effective data governance and quality measures are instrumental in enhancing financial reporting efficacy, with the utilization of big data technology being a key factor. These findings are consistent with Saleh et al. (2022), who reported significant improvements in financial reporting quality attributable to big data analytics. Similarly, Winoto et al. (2023) demonstrated that big data notably impacts financial reporting quality. Andreassen (2020) asserts that leveraging big data in financial reporting substantially improves report quality by identifying errors and inconsistencies, thereby enhancing accuracy and reliability. Hamood and Dammak (2023) further highlight that big data facilitates the collection and analysis of extensive financial data, resulting in more comprehensive and detailed financial reports. Moreover, big data enhances transparency in financial reporting by providing stakeholders with a broader array of financial information, thereby fostering greater accountability in financial management. As noted by Nirwana and Hahab (2019), the County Government can leverage big data to make more informed, data-driven decisions by analyzing financial trends, revenue sources, and spending patterns. Additionally, big data improves fraud detection and prevention by identifying anomalies and potentially fraudulent activities in financial transactions (Alzeban, 2020). However, given the sensitivity and legal regulations surrounding financial data, it is crucial to ensure robust data security and privacy measures (Bananuka et al., 2019)

### Block chain technology

The research sought to assess objective two to investigate the effect of block chain technology on quality of financial reporting in NCCG, Kenya. The study then assessed the manner in which block chain technology was being applied in Nairobi County to yield Table 4.

**Table4: Block chain technology**

| Parameter   | M    | SD   |
|---|------|------|
| Blockchain enhances fraud detection and preventing capabilities in the auditing procedure   | 3.85 | 0.81 |
| Blockchain helps analyse any transactional data in the real time basis  | 3.80 | 0.80 |
| Blockchain help use identify any anomalies or suspicious activities that point to fraudulent behaviour  | 3.80 | 0.61 |
| Automating the predefined audit procedure through blockchain helps, improving the detection and prevention of fraudulent activities             | 3.75 | 0.65 |
| Block chain enhances the security and reliability of the auditing procedure, making it more resistant to the cyber threat                       | 3.85 | 0.65 |
| Blockchain improves audit efficiency by providing auditors the direct access to reliable and transparent transactional data                     | 3.93 | 0.67 |
| Blockchain independently verifies the accuracy and the completeness of the financial information by accessing the data stored on the Blockchain | 3.96 | 0.66 |
| Using Blockchain reduce the reliance on the manual procedure and any kind of third-party intermediaries   | 3.87 | 0.70 |
| Blockchain has ability to make sure the data integrity and security   | 3.92 | 0.67 |
| Blockchain enhances the reliability of audit evidence   | 3.81 | 0.60 |
| Blockchain reduces the risk of any kind of data manipulation or fraud   | 3.89 | 0.61 |
| cryptogenic technique used in the Blockchain technology also provides a robust security   | 3.89 | 0.61 |
| There is protection of the integrity and confidentiality of the data stored on the Blockchain system  | 4.02 | 0.66 |
| Block Chain Technology  | 3.87 | 0.67 |

Source: Field Data (2024)

The findings indicate that blockchain technology significantly impacts the quality of financial reporting. It notably enhances fraud detection and prevention capabilities within the auditing process by enabling real-time analysis of transactional data and identifying anomalies or suspicious activities indicative of fraudulent behavior. Blockchain technology automates predefined audit procedures, thereby improving the detection and prevention of fraud. Its implementation enhances the security and reliability of the auditing process, making it more resilient to cyber threats and improving audit efficiency by providing auditors with direct access to reliable and transparent transactional data. Furthermore, blockchain technology independently verifies the accuracy and completeness of financial information by accessing data stored on the blockchain. This reduces reliance on manual procedures and third-party intermediaries. The technology ensures data integrity and security, thereby enhancing the reliability of audit evidence and minimizing the risk of data manipulation or fraud. The cryptographic techniques employed by blockchain technology offer robust security, safeguarding the integrity and confidentiality of the data stored within the blockchain system. These findings align with the research of Sari and Fadli (2019), who noted that the transparent and auditable nature of blockchain technology simplifies the auditing of financial reports. The immutable and comprehensive record of financial transactions accessible to auditors facilitates adherence to accounting standards and guidelines. Suhardjo (2019) also highlighted that blockchain technology can reduce costs associated with record-keeping and verification by eliminating the need for intermediaries and centralized authorities. Abed et al. (2022) emphasized that the irreversible recording of financial transactions on the blockchain helps preserve the integrity of financial data, thereby reducing the risk of fraud and data tampering. Moreover, real-time updates via blockchain enable stakeholders to access more timely and accurate financial reports, supporting better-informed decision-making (Nalukenge, Nkundabanyanga, & Ntayi, 2019).

### Cloud computing technology

The sought to assess objective three which was to find out the effect of cloud computing technology on quality financial reporting in NCCG, Kenya.

This led to an assessment of cloud computing technology use, which generated Table 5.

**Table5: Cloud computing technology**

| Parameter  | M    | SD   |
|--|------|------|
| All information financial reporting is stores in a fast speed single data base | 4.16 | 0.62 |
| Cloud storage authorized user from any location                                | 4.12 | 0.68 |
| Users can collaborate more easily through online data storage                  | 4.08 | 0.70 |
| cloud accounting ensures up to date quality of financial reporting information | 4.13 | 0.70 |
| internal transaction matching makes it easy to flag errors                     | 4.18 | 0.63 |

|  |      |      |
|--|------|------|
| Through cloud accounting there is data consistency across all financial reports          | 4.19 | 0.67 |
| Cloud software automates reconciliation process.   | 4.16 | 0.66 |
| Data is always available for decision making to everyone consumer of the cloud computing | 4.13 | 0.67 |
| Financial reporting process is made faster while forecasting is simplified               | 4.15 | 0.64 |
| Cloud computing provides real time financial analytics.                                  | 4.16 | 0.70 |
| Cloud Computing Technology   | 4.15 | 0.67 |

Source: Field Data (2024)

It was shown that the impact of cloud computing technology on the quality of financial reporting within Nairobi City County Government (NCCG), Kenya, has been substantial. Cloud computing enables the storage of financial information in a high-speed, centralized database, which is accessible to authorized users from various locations. This capability facilitates enhanced collaboration through online data storage, ensuring that financial reporting information is consistently up-to-date. The cloud-based system also simplifies internal transaction matching, aiding in the identification and correction of errors. Moreover, cloud accounting promotes consistency across financial reports by automating the reconciliation process. This system ensures that data is readily available for decision-making, accelerates the financial reporting process, and simplifies forecasting through real-time financial analytics. These findings corroborate Ibrahim and Suraati's (2021) assertion that the integration of cloud computing into financial reporting procedures significantly enhances the quality of financial reports (Haryati, 2019).

Cloud computing allows Nairobi City County Government to centralize financial data securely and efficiently, leading to more transparent financial reporting. It improves data consistency and simplifies access for relevant stakeholders, as noted by Kamdjoung, Bawaak, and Tayou (2020). Real-time updates facilitated by cloud-based solutions ensure that decision-makers have access to the most current and accurate financial data. Additionally, cloud service providers implement robust security measures, including frequent backups and data encryption, which protect financial data from theft, unauthorized access, and breaches, thereby enhancing the accuracy and security of financial reporting (Mulia, 2019). According to Ahmad, Masud, and Suriyati (2020), the accessibility of financial data by authorized personnel from any location improves communication and streamlines the overall reporting process. The study evaluates aspects such as data processing, storage, integration, resource allocation, cost management, and cloud service models, further highlighting the benefits of cloud computing in financial reporting.

#### Robotic Process Automation

The fourth objective was to investigate the effect of Robotic Process Automation on quality financial reporting in NCCG, Kenya. The study established the status of Robotic Process Automation where Table 6 was obtained.

**Table 6: Robotic Process Automation**

| Parameter  | M    | SD   |
|--|------|------|
| Financial reporting simplified by automation of repetitive and time-consuming email processes, such as sorting, filtering, and responding to messages.   | 4.03 | 0.85 |
| mail automation provides customers' experiences in financial reporting   | 4.10 | 0.74 |
| With email automation customers receive prompt replies to their inquiries or requests  | 4.05 | 0.73 |
| Email automation allows track responses to collect more information  | 4.05 | 0.58 |
| Email automation empowers to optimize email management, resulting in improved financial reporting  | 3.95 | 0.71 |
| Integrate systems: Integration with other software applications, or even use programming languages enhance perform advanced financial reporting data analysis and automation add-ins enhance data visualization and integrate of spreadsheets with other software applications | 4.03 | 0.68 |
| Scenario Calls: Financial reporting uses personalized messages for specific situations   | 4.10 | 0.65 |
| pre-recorded message helps in quality of financial reporting   | 3.96 | 0.63 |
| Automated calls are used for sharing Useful Feedback financial Reports   | 3.91 | 0.71 |
| Robotic Process Automation   | 4.02 | 0.70 |

Source: Field Data (2024)

The findings indicate that the implementation of Robotic Process Automation (RPA) significantly enhances the quality of financial reporting. Automation simplifies various functions, such as email processing, which plays a crucial role in improving the efficiency of financial reporting. By automating email processes, organizations can provide more timely and accurate responses to customer inquiries or requests, thereby enhancing the overall customer experience. Moreover, this automation enables the tracking of responses, facilitating the collection of additional information and optimizing email management, which, in turn, contributes to the improved quality of financial reporting.

Additionally, the integration of RPA with other software applications has advanced data analysis capabilities in financial reporting. The use of automation tools, such as add-ins, has enhanced data visualization and allowed for the seamless integration of spreadsheets with other software applications. This integration not only improves the efficiency of financial data management but also enables more personalized

communication through the use of automated messages, pre-recorded messages, and automated calls. These technological advancements collectively contribute to the enhancement of financial reports, making them more accurate, timely, and tailored to the needs of stakeholders.

The application of Robotic Process Automation (RPA) in financial reporting, as outlined by Oncioiu and Suriyati (2019), ensures uniformity in data processing and standardizes reporting formats across various financial documents, thereby enhancing the overall coherence of financial reports. RPA executes high-accuracy validation tasks, significantly reducing the likelihood of human error in financial reporting. This enhancement provides stakeholders with timely and relevant information essential for informed decision-making (Ahrisah & Yuliati, 2021). Moreover, the ability of stakeholders to track and verify the processes used in report compilation enhances the transparency and accountability of financial reporting (Kamdjoung et al., 2020). Mookerjee and Rao (2021) further demonstrated how RPA can automate accounting procedures, which constitute a significant portion of accountants' work, thereby contributing to the improvement of financial reporting.

#### Readiness to innovation

The fifth objective was to establish the moderating effect of readiness to innovation on the relationship between digital transformation on the quality of financial reporting in NCCG, Kenya, Kenya. Nevertheless, the research sought first to assess the level of readiness to innovation to yield Table 7.

**Table7: Readiness to innovation**

| Parameter   | M    | SD   |
|---|------|------|
| Our county is always optimistic on using digital transformation for financial reporting | 3.87 | 0.76 |
| We are always ready to adopt new Innovation for financial reporting                     | 3.76 | 0.80 |
| Our firm is comfortable when using digital transformation for financial reporting       | 3.85 | 0.78 |
| Our firm feels insecure when digital transformation for financial reporting             | 3.77 | 0.77 |
| Readiness to innovation   | 3.81 | 0.78 |

Source: Field Data (2024)

The results indicate that respondents generally agreed that the County consistently maintained an optimistic outlook toward utilizing digital transformation in financial reporting (M = 3.87, SD = 0.76) and exhibited a readiness to adopt new innovations in this area (M = 3.76, SD = 0.80). Furthermore, respondents concurred that the County was comfortable with the use of digital transformation for financial reporting (M = 3.85, SD = 0.78), despite expressing some feelings of insecurity regarding its implementation (M = 3.77, SD = 0.77). The findings also demonstrate that readiness to adopt innovation significantly impacts the quality and effectiveness of financial reporting (M = 3.81, SD = 0.78).

#### Inferential Analysis

##### Correlation Analysis

In order to determine whether there was a significant relationship between the independent variables (IVs); big data technology, block chain technology, cloud computing technology, RPA, and DV (the quality of financial reporting in NCCG, Kenya), the study conducted a correlation analysis using Pearson's product moment correlation where Table 8 displays the results of the correlation.

**Table8: Correlation Analysis Results**

|                                |                 | Correlations                   |          |                       |                 |     |
|--------------------------------|-----------------|--------------------------------|----------|-----------------------|-----------------|-----|
|                                |                 | Quality of Financial Reporting | Big data | Blockchain technology | Cloud computing | RPA |
| Quality of Financial Reporting | Pearson         | 1                              |          |                       |                 |     |
|                                | Correlation     |                                |          |                       |                 |     |
|                                | Sig. (2-tailed) |                                |          |                       |                 |     |
| Big data                       | N               | 97                             |          |                       |                 |     |
|                                | Pearson         | .618**                         | 1        |                       |                 |     |
|                                | Correlation     |                                |          |                       |                 |     |
| Blockchain technology          | Sig. (2-tailed) | .000                           |          |                       |                 |     |
|                                | N               | 97                             | 97       |                       |                 |     |
|                                | Pearson         | .447**                         | .354**   | 1                     |                 |     |
| Cloud computing                | Correlation     |                                |          |                       |                 |     |
|                                | Sig. (2-tailed) | .000                           | .000     |                       |                 |     |
|                                | N               | 97                             | 97       | 97                    |                 |     |
| RPA                            | Pearson         | .696**                         | .450**   | .184                  | 1               |     |
|                                | Correlation     |                                |          |                       |                 |     |
|                                | Sig. (2-tailed) | .000                           | .000     | .071                  |                 |     |
|                                | N               | 97                             | 97       | 97                    | 97              |     |
|                                | Pearson         | .525**                         | .387**   | .148                  | .153            | 1   |
|                                | Correlation     |                                |          |                       |                 |     |

| Correlation     |      |      |      |      |
|-----------------|------|------|------|------|
| Sig. (2-tailed) | .000 | .000 | .149 | .136 |
| N               | 97   | 97   | 97   | 97   |

\*\* . Correlation is significant at the 0.01 level (2-tailed).

In accordance to these correlation results, each of the IVs; big data technology ( $r=0.618$ ,  $p=.001$ ), block chain technology ( $r=0.447$ ,  $p<0.01$ ), cloud computing technology ( $r=0.696$ ,  $p<0.01$ ), and RPA ( $r=0.525$ ,  $p<0.01$ ); was significantly correlated with the DV, quality financial reporting in NCCG, Kenya, at the 0.05 level of significance. This is because each of the relationships had p-value less than 0.005, indicating a significant relationship between each IV and the DV. Moreover, the moderating variables also showed a significant relationship with the DV.

### Regression Analysis

ANOVA was then carried out to establish how best each of; big data technology, block chain technology, cloud computing technology and RPA would be predictor of quality financial reporting in NCCG, Kenya and the results obtained were captured in Table 9. The goal was to evaluate the model's fit and determine if the coefficients for; digital transformation ( $\beta_1$ ), block chain technology ( $\beta_2$ ), cloud computing technology ( $\beta_3$ ), and robotic process automation ( $\beta_4$ ) were all zero. Based on this, if at least one  $\beta_i \neq 0$ , the model is fit; if not, it is not fit.

**Table9: ANOVA**

| ANOVA <sup>a</sup> |                |    |             |        |                   |  |
|--------------------|----------------|----|-------------|--------|-------------------|--|
|                    | Sum of Squares | df | Mean Square | F      | Sig.              |  |
| Regression         | .425           | 4  | .106        | 71.216 | .000 <sup>b</sup> |  |
| Residual           | .137           | 92 | .001        |        |                   |  |
| Total              | .563           | 96 |             |        |                   |  |

a. Dependent Variable: Quality of Financial Reporting

b. Predictors: (Constant), Robotic Process Automation, Blockchain technology, Cloud computing, Big data

Source: Field Data (2024)

Table 9 results indicate that the p-value is less than 0.05 ( $p<0.01$ ). At a significance level of 5% ( $\alpha = 0.05$ ), this indicates that at least one of the coefficients,  $\beta_1$  or  $\beta_2$ , or  $\beta_3$  or  $\beta_4$ , is not equal to zero, meaning that at least  $\beta_i \neq 0$ . Big data, blockchain, cloud computing, and robotic process automation (RPA) technologies are therefore useful in predicting the caliber of financial reporting in NCCG, Kenya, either in part or in full. Thus, at least one of; big data technology, block chain technology, cloud computing technology and RPA aids in describing the quality of financial reporting in NCCG, Kenya. These variables were used in a regression analysis against the quality of financial reporting in NCCG, Kenya because all the IVs all predict that quality. The results are displayed in Table 10.

**Table10: Direct Model Regression Coefficients**

| Coefficients <sup>a</sup>  |                             |            |                           |  |       |      |
|----------------------------|-----------------------------|------------|---------------------------|--|-------|------|
|                            | Unstandardized Coefficients |            | Standardized Coefficients |  | t     | Sig. |
|                            | B                           | Std. Error | Beta                      |  |       |      |
| (Constant)                 | .001                        | .004       |                           |  | .198  | .844 |
| Big data                   | .185                        | .074       | .162                      |  | 2.510 | .014 |
| Blockchain technology      | .254                        | .058       | .242                      |  | 4.393 | .000 |
| Cloud computing            | .599                        | .066       | .525                      |  | 9.099 | .000 |
| Robotic Process Automation | .368                        | .059       | .347                      |  | 6.206 | .000 |

a. Dependent Variable: Quality of Financial Reporting

Source: Field Data (2024)

The results ( $t = 2.510$ ,  $p = 0.014$ ) show the p-value was less than 0.05 which implies that there is enough evidence that the big data technology is not zero and, hence, big data technology is a predictor of quality of financial reporting in NCCG, Kenya. The findings agree with those in the study by Falana et al. (2023) where regression analysis showed significant improvement of accounting information timeliness occasioned by application of big data analytics. These findings confirm those in the study by Saleh et al. (2022) which found a significant effect of data analytics on improvement in financial reporting quality as they conform those in the research by Winoto et al. (2023) that quality of financial was significantly impacted by big data. In results ( $t = 4.393$ ; p-value  $<0.01$ ) p-value was less than 0.05. This suggests that at a significance level of 5% there is sufficient data to draw the conclusion that block chain technology is not zero, suggesting that block chain technology can be used to predict quality of financial reporting in Kenya's NCCG. The results align with the study conducted by Rehab et al. (2023), which demonstrated a significant correlation between blockchain technology and audit quality reporting.

In accordance with the data ( $T= 9.099$ ;  $p<0.01$ ), there is strong evidence that cloud computing technology is not zero at the 5% significance level because the p-value is less than 0.05. This suggests that the quality of financial reporting in NCCG, Kenya, may be predicted using cloud computing technologies. The results are consistent with the study conducted by Akai et al. (2023), which demonstrated that cloud computing has a substantial impact on financial reporting standards.

With respect to the data ( $T= 6.206$ ;  $p<0.01$ ), there is strong evidence that, at the 5% significance level, RPA is not zero because the p-value is less than 0.05. Consequently, NCCG, Kenya's financial reporting quality can be predicted by RPA, supporting Jedrzejka's (2019) conclusion that RPA has a significant impact on accounting.

The coefficient for digital transformation ( $\beta_1= 0.185$ ), block chain technology ( $\beta_2 = 0.254$ ), cloud computing technology ( $\beta_3= 0.599$ ) and RPA (0.368) were in the estimation model

$$Y = 0.001 + 0.185X_1 + 0.254X_2 + 0.599X_3 + 0.368X_4 \dots\dots\dots (4.1)$$

Thus, it can be concluded that, prior to implementing digital transformation, the NCCG in Kenya had constant levels of financial reporting quality of 0.001.

Yet the quality of financial reporting in NCCG, Kenya was positively impacted by digital transformation, as evidenced by the coefficient of 0.185, which suggests that a unit change in digital transformation can lead to a 0.185 unit change in the same direction in the quality of financial reporting in NCCG, Kenya. With a coefficient of 0.254, block chain technology also had a positive effect on the quality of financial reporting in NCCG, Kenya. This means that a change of one unit in block chain technology can affect the quality of financial reporting in NCCG, Kenya by 0.254 units. With a coefficient of 0.599, cloud computing technology also had a positive impact on the quality of financial reporting in NCCG, Kenya. This means that a change of one unit in cloud computing technology can also result in a change of 0.599 units in the same direction in NCCG, Kenya's financial reporting quality. With a coefficient of 0.368, RPA also had a positive impact on the quality of financial reporting in NCCG, Kenya. This means that a one-unit change in RPA can cause a 0.368-unit change in the same direction in the quality of financial reporting in NCCG, Kenya.

The results of Table 10 show that the quality of financial reporting in NCCG, Kenya is directly correlated with the positive coefficients of digital transformation, block chain technology, cloud computing technology, and RPA. Accordingly, the quality of financial reporting in NCCG, Kenya increases with a growth in any one of these factors: digital transformation, block chain technology, cloud computing technology, and RPA, and vice versa.

Table11: Model Summary for QPR in NCCG, Kenya

**Model Summary<sup>b</sup>**

| R                 | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------------------|----------|-------------------|----------------------------|
| .869 <sup>a</sup> | .7559    | .7453             | .0386439                   |

a. Predictors: (Constant), Robotic Process Automation, Blockchain technology, Cloud computing, Big data

b. Dependent Variable: Quality of Financial Reporting

Source: Field Data (2024)

The analysis of the results presented in Table 11 demonstrates that the coefficient of determination is 0.7559, indicating that big data, blockchain, cloud computing, and robotic process automation (RPA) collectively explain 75.59% of the variations observed in the quality of financial reporting within the Nairobi City County Government (NCCG) of Kenya. These findings underscore the significance of these technological factors in influencing the caliber of financial reporting in this context. The inference drawn from these results is that the adoption and integration of big data, blockchain, cloud computing, and RPA technologies are substantial and positive determinants of financial reporting quality in NCCG, Kenya. These outcomes are consistent with the findings of previous research. For instance, Winoto et al. (2023) identified a significant impact of big data on financial reporting quality, while Saleh et al. (2022) demonstrated the influential role of data analytics in enhancing the quality of financial reporting. Similarly, Falana et al. (2023) employed regression analysis to reveal that big data analytics notably improved the timeliness of accounting information.

Moreover, these results corroborate the findings of Akai et al. (2023), who showed that cloud computing significantly affects the standard of financial reporting. They also align with the research of Akpan et al. (2023), where ordinary least squares (OLS) regression analysis indicated that cloud accounting methods significantly improved the effectiveness of financial information quality. Furthermore, the findings of Rehab et al. (2023) revealed a substantial relationship between blockchain technology and audit quality, while Mookerjee and Rao (2021) emphasized the essential role of RPA in enhancing financial reporting. Thus, the convergence of these studies affirms the critical role that emerging technologies such as big data, blockchain, cloud computing, and RPA play in advancing the quality and effectiveness of financial reporting, particularly in the public sector context of NCCG, Kenya..

Using objective number 5 as a guide, this study sought to determine how innovation adoption preparedness affects the relationship between digital transformation and high-quality financial reporting in NCCG, Kenya to produce Table 12.

**Table12: Significance of Relationship Digital Transformation and Quality of Financial Reporting Coefficients<sup>a</sup>**

|                        | Unstandardized Coefficients |            | Standardized Coefficients Beta | t      | Sig. |
|------------------------|-----------------------------|------------|--------------------------------|--------|------|
|                        | B                           | Std. Error |                                |        |      |
| (Constant)             | .002                        | .004       |                                | .476   | .635 |
| Digital transformation | 1.364                       | .090       | .841                           | 15.131 | .000 |
| <b>ANOVA</b>           | 0.000                       |            |                                |        |      |
| R Square               | .7068                       |            |                                |        |      |

a. Dependent Variable: Quality of Financial Reporting

Source: Field Data (2024)

The results presented in Table 12 reveal a significant association between digital transformation and the quality of financial reporting. This is supported by the Analysis of Variance (ANOVA), which indicates a highly significant relationship ( $p < 0.01$ ), alongside a p-value of less than 0.05. Furthermore, the coefficient of determination ( $R^2$ ) is 0.7068, suggesting that digital transformation accounts for 70.68% of the variance in the quality of financial reporting. The regression coefficient ( $\beta$ ) is 1.364, signifying that for every unit increase in digital transformation, there is a corresponding 1.364-unit improvement in the quality of financial reporting. Subsequent analysis focused on evaluating the role of innovation readiness as a potential moderating variable, to ascertain whether it serves as an explanatory factor. The results of this analysis are presented in Table 13.

**Table13: Moderating role of Readiness to innovation Coefficients<sup>a</sup>**

|                         | Unstandardized Coefficients |            | Standardized Coefficients Beta | t      | Sig. |
|-------------------------|-----------------------------|------------|--------------------------------|--------|------|
|                         | B                           | Std. Error |                                |        |      |
| (Constant)              | .000                        | .004       |                                | .060   | .952 |
| Digital transformation  | .984                        | .120       | .607                           | 8.207  | .000 |
| Readiness to innovation | -.261                       | .096       | -.234                          | -2.713 | .008 |
| Iv x Moderator          | .507                        | .118       | .467                           | 4.293  | .000 |
| <b>ANOVA</b>            | 0.000                       |            |                                |        |      |
| R Square change         | 0.0507                      |            |                                |        |      |
| R Square                | 0.7574                      |            |                                |        |      |

a. Dependent Variable: Quality of Financial Reporting

Source: Field Data (2024)

The ANOVA results ( $p < 0.01$ ) demonstrate that the link between the digital transformation indicators and the quality of financial reporting in NCCG, Kenya, Kenya was significantly moderated by readiness to innovate. The moderating effect was 5.07% given that the coefficient of determination was 0.0507. Nonetheless, the effect was negative considering that the coefficient of readiness to innovation was negative and that of readiness to innovation was negative too. However, the p-value of the coefficient were all less than 0.05 to show significant effect of the coefficients. In accordance with Moron and Diokno (2023), businesses often understand the financial advantages of implementing new technologies. County governments and other organizations that embrace digital transformation can get an advantage over rivals (Lin & Hazelbaker, 2019).

## CONCLUSIONS AND RECOMMENDATIONS

### Conclusions

The study concludes that big data technology has a post give significantly high affected on quality of financial reporting ( $p < 0.01$ ;  $r = 0.618$ ;  $\beta = 0.185$ ) where one unit change in big data technology leads to 0.185 rate change of quality of financial reporting. This is occasioned by; sourcing and collection of big data, real-time reporting during implementation of financial reporting, processing and integration data governance, information quality, effective financial reporting and effective utilization of big data technology

The s research concluded that at 5% significance level, block chain technology has a significantly positive effects of affected the quality financial reporting ( $p < 0.01$ ;  $r = 0.447$  =0.254) where a unit increase in block chain technology caused a rate of 0.254 increase of quality financial reporting and vice versa.; This is achieved through enhancing; fraud detection and prevention, analysing transactional data in the real time basis, and detection of associated anomalies or suspicious activities as well as enhancing data and information security and reliability. Blockchain assist provide the appropriate resistant to the cyber threat in addition to audit efficiency. This allows for providing auditors the direct access to reliable and transparent transactional data which make it easier to independently verifies the accuracy and the completeness of the

financial information. So, with blockchain, the County does not need to rely manual procedure since blockchain provides data integrity and security, reliability of audit evidence, In conclusion, cloud computing technology has a positive significant strong effect of quality financial reporting in NCCG, Kenya ( $p < 0.01$ ;  $r = 0.696$ ;  $\beta = 0.599$ ). This enhanced by; cloud storage which is a fast speed single data base that allows access across different consumers in different locations. Such users are able to collaborate more easily through the online real-time arrangement. The cloud accounting ensures provision of quality financial reporting as it easy to flag errors. The automated reconciliation process had an allowance for decision making feature to everyone consumer of user of the system. These arrangement in cloud computing provide to quality financial reporting process which is then made faster, simplified and more.

In accordance with the study findings, Robotic Process Automation has had a significant effect on the quality of financial reporting at NCCG in Kenya ( $p < 0.01$ ;  $r = 0.525$ ;  $\beta = 0.368$ ). RPA simplifies financial reporting through automation of functions such as email processes which provide customers' experiences in financial reporting. These automations provide for prompt receipt of replied to inquiries/requests, track responses, collecting more information, personalizing messages, pre-recorded message, optimizing email management, add-ins and integration of systems.

It was revealed that readiness to innovation has a significant moderating role on the relationship between the indicators of digital transformation on the quality of financial reporting in NCCG, Kenya, Kenya. The moderating effect was 5.07% and negatively affecting quality of financial reporting in NCCG.

### **Practical implications**

The research would provide decision-makers in Nairobi City County Government with valuable insights into the dynamics of digital transformation. This information would be used to formulate regulations aimed at enhancing the quality of financial reporting; raising the standard of financial reporting and increase transparency.

### **Recommendations**

The study recommends that the Nairobi City County Government ensure the proper sourcing and collection of big data and employ real-time reporting during the implementation of financial reporting. It is crucial to guarantee the accurate processing and integration of data while maintaining effective data governance to enhance information quality.

To ensure robust cybersecurity and audit efficiency, the study also recommends that the Nairobi City County Government leverage blockchain technology to achieve high levels of fraud detection and prevention. This will facilitate the effective detection of anomalies or suspicious activities.

Additionally, the study suggests that the Nairobi City County Government ensure their cloud computing technology consistently provides well-protected cloud storage capable of delivering access across all users for ease of collaboration, as well as easily flagging errors.

Finally, the study recommends that the Nairobi City County Government expand its use of Robotic Process Automation to simplify financial reporting through the automation of functions such as email processes, thereby enhancing customer experience in financial reporting..

### **Suggestions for Further Research**

The study found that using digital transformation while financial reporting are adopted which affects their performance. But the study was conducted using quantitative approach which could not address qualitative concerns. So, the same study should be done using a combination of quantitative and qualitative approaches to verify the findings

The study was confined to Nairobi City County Government, which limited its generalization which means other studies should done for other jurisdictions.

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## REFERENCES

- Abdi, F. A. (2021). Determinants of quality financial reporting in County Governments in Kenya (Masters Research Project, University of Nairobi).
- Abed, I. A., Nazimah, H., Mostafa, A. A., Hossam, H., Maha, S., & Elina, F.H. (2022). Creative accounting determinants and financial reporting quality: Systematic literature review. *Risks*, 10(76), 1-25.
- Ahmad, I., Masuud, M., & Suriyanti. (2020). Competencies of apparatus and internal control system effect on the quality of financial statement information and good governance. *European Journal of Business and Management Research*, 5(4), 1-6.
- Akhtar, D. (2016). *Research Design*.  
[https://www.researchgate.net/publication/308915548\\_Research\\_Design](https://www.researchgate.net/publication/308915548_Research_Design)
- Alzeban, A. (2020). Influence of internal audit reporting line and implementing internal audit recommendations on financial reporting quality.
- Anggaraeni, M., Purnamawati, I. G. A., & Atmadja, A. T. (2019). Pengaruh pengawasan keuangan, penerapan sistem akuntansi keuangan, dan komitmen manajemen terhadap keterandalan pelaporan keuangan pemerintah daerah (Studi kasus pada SKPD Kabupaten Badung). *Jurnal Ilmiah Mahasiswa Akuntansi UNDIKSHA*, 3(1), 1-12.
- Bananuka, J., Nkundabanyanga, S. K., Nalukenge, I., & Kaawaase, T. K. (2019). Internal audit function, audit committee effectiveness and accountability in the Ugandan statutory corporations. *Journal of Financial Reporting and Accounting*, 16(1), 138-157.
- Breen, O. B., Cordery, C. J., Crawford, L., & Morgan, G. G. (2018). Should NPOs follow international standards for financial reporting? A multinational study of views. *Voluntas: International Journal of Voluntary and Nonprofit Organizations*, 29(6), 1330-1346.
- Chege, S. M., & Wang, D. (2020). The influence of technology innovation on SME performance through environmental sustainability practices in Kenya. *Technology in Society*, 60, 101210.
- Cohen, S., & Karatzimas, S. (2019). Accounting information quality and decision-usefulness of governmental financial reporting: Moving from cash to modified cash. *Meditari Accountancy Research*, 25(1), 95-113.
- DePietro, R., Wiarda, E., & Fleischer, M. (1990). The processes of technological innovation. *Massachusetts, MA: Lexington Books*.
- Haryati, T. (2016). Antecedents kualitas laporan keuangan pemerintah daerah. *Indonesian Treasury Review*, 1(3), 1-18.
- Hasan, M. S. (2023). The impact of digital transformation on the quality of financial reports a field study in a sample of banks listed in The Iraqi Stock Exchange. *American Journal of Business Management, Economics and Banking*, 8, 101-120
- Iravonga, J. J., Alala, P. B. O., Maingi, M., & Ngala, C. (2023). Effect of Integrated Financial Management Information Reporting System on Financial Management in County Governments, Kenya. *African Journal of Empirical Research*, 4(2), 14–22. <https://doi.org/10.51867/ajernet.4.2.6>
- Kaawaase, T. K., Nairuba, C., Akankunda, B. & Bananuka, J. (2021). Corporate governance, internal audit quality and financial reporting quality of financial institutions. *Asian Journal of Accounting Research*, 6(3), 348-366.
- Lapsley, I., Mussari, R., & Paulsson, G. (2019). On the Adoption of accrual accounting in the public sector: a self-evident and problematic reform. *European Accounting Review*, 18(4), 719-723.
- Lin, P., & Hazelbaker, T. (2019). Meeting the Challenge of Artificial Intelligence. *CPA Journal*, 89, 48-52.
- Mahmud, K., Joarder, M. A. & Sakib, K. (2023) Customer Fintech Readiness (CFR): Assessing customer readiness for fintech in Bangladesh, *Journal of Open Innovation: Technology, Market, and Complexity*, 9(2). 1-21.
- Moron, C. E. & Diokno, C.O. B. (2023). Level of Readiness and Adoption on the Use of Artificial Intelligence Technologies in the Accounting Profession. *Open Journal of Accounting*, 12(3), 37-54. <https://www.scirp.org/journal/ojacct>.
- Mulia, R. A. (2019). Analisis faktor-faktor yang mempengaruhi kualitas laporan keuangan pemerintah daerah (Studi pada Pemerintah Kabupaten Pasaman Barat). *Jurnal El-Riyasah*, 9(1), 7-21
- Musa, A. (2019). The Role of IFRS on Financial Reporting Quality and Global Convergence: A Conceptual Review. *International Business and Accounting Research Journal* 3 (1). 67-76 <http://ibarj.com>
- Nalukenge, I., Nkundabanyanga, S. K., & Ntayi, J. M. (2019). Corporate governance, ethics, internal controls and compliance with IFRS. *Journal of Financial Reporting and Accounting*, 16(4), 764-786
- Ngala, B. M., Musau, S. (2022). Integrated financial management information system and quality of financial reporting in Nairobi city county government, Kenya. *International Academic Journal of Economics and Finance*, 3(7), 453-473.
- Nirwana, H., & Haliah, A. (2019). Determinant factor of the quality of financial statements and performance of the government by adding contextual factors; Personal factor, system/administrative factor. *Asian Journal of Accounting Research*, 3(1), 28-40.
- Oyugi, E. A. (2020). Effect of financial reporting quality on performance of companies listed at the Nairobi securities exchange (Masters Research Project, University Of Nairobi).

- Peter, M. K., Kraft, C., & Lindeque, J. (2020). Strategic action fields of digital transformation: An exploration of the strategic action fields of Swiss SMEs and large enterprises. *Journal of Strategy and Management*, 13(1), 160–180.
- Saleem, T. (2023). Impact of Digital Transformation on Financial Reporting in Pakistan. <https://www.linkedin.com/pulse/impact-digital-transformation-financial-reporting-pakistan-saleem/>.
- Saleh, I., Marei, Y., Ayoush, M. & Malik, A. A.. (2022). Big Data analytics and financial reporting quality: qualitative evidence from Canada. *Journal of Financial Reporting and Accounting*. 21(1), 83-104.
- Sari, G. I., & Fadli, F. (2019). Analisis faktor-faktor yang mempengaruhi kualitas laporan keuangan daerah. *Jurnal Akuntansi*, 7(3), 17-34.
- Shuraki, M. G., Pourheidari, O., & Azizkhani, M. (2021). Accounting comparability, financial reporting quality and audit opinions: evidence from Iran. *Asian Review of Accounting*, 42-60 .
- Soyemi, K. A., & Olawale, L. S. (2019). Firm characteristics and financial reporting quality: Evidence from non-financial firms in Nigeria. *International Journal of Economics, Management and Accounting*, 27(2), 445-472.
- Sudaryanto, M. R., Hendrawan, M. A. & Andrian, T. (2022) The Effect of Technology Readiness, Digital Competence, Perceived Usefulness, and Ease of Use on Accounting Students Artificial Intelligence Technology Adoption. *E3S Web of Conferences*, 38, 1-9.
- Suhardjo, Y. (2019). Faktor-faktor yang mempengaruhi kualitas laporan keuangan pemerintah daerah (Studi kasus Pemerintah Kota Semarang). *Jurnal Ilmiah Solusi*, 17(4), 1-22.
- Ulaya, P. L., Rahul, N. A. & Kiwia, D.D. (2023). Impact of International Public Sector Accounting Standards (IPSAS) Adoption on Accountability and Transparency in the Tanzanian Public Sector Organizations. *International Journal of Management and Commerce Innovations*, 11(1), 1-9.
- Vial, G. (2019). Understanding digital transformation: A review and a research agenda. *The journal of strategic information systems*, 28(2), 118-144.
- Prakasa, Y., & Fauzan, N. (2024). Understanding the Technological-Organizational-Environmental Concepts on SMEs' Performance in Emerging Market. *KnE Social Sciences*, 43-66.