Effect of Digital Transformation Capabilities in Inclusive Growth: Evidence from Nigeria

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ABSTRACT
The study examined the effect of Digital Transformation Capabilities on Inclusive Growth: Evidence from Nigeria. The specific objective of the study was to examine the extent to which organizational digital transformation capabilities influence inclusive growth outcomes and investigate the impact of national digital transformation indicators on inclusive growth in Nigeria over time. A cross-sectional survey research design was adopted for the study. The instrument contained closed-ended items structured on a five-point Likert scale was use to collect data for the study. Data analysis involved the use of descriptive statistics such as mean and standard deviation, while inferential statistics including regression analysis were used to test the hypotheses of the study. The result revealed that Organizational digital transformation capabilities have a significant positive influence on inclusive growth outcomes with a P-value of (0.000 < 0.05) and National digital transformation indicators have a significant positive influence on inclusive growth (0.000 < 0.05) in Nigeria over time. The empirical evidence robustly establishes that Digital Transformation Capabilities are not merely theoretical constructs, but tangible, quantifiable drivers of shared prosperity in Nigeria. The study recommended among others that the organizational capabilities drive inclusive growth by creating jobs and integrating marginalized groups, the government and financial institutions should establish targeted funding mechanisms.

***Keywords*:** *Digital Transformation Capabilities, Inclusive Growth, Nigeria.*

1. INTRODUCTION

The contemporary global economy is fundamentally anchored in the Fourth Industrial Revolution (4IR), where digital transformation has transitioned from a competitive advantage to a basic imperative for economic survival. At the macroeconomic level, digital transformation capabilities (DTC) defined as a nation's systemic ability to leverage digital technologies (such as artificial intelligence, cloud computing, mobile internet, and big data analytics) to fundamentally alter processes, business models, and value creation (Vial, 2019; Nambisan et al., 2017) are increasingly recognized as critical drivers of economic growth. However, the mere existence of technology does not automatically translate into broad-based economic prosperity (Uford, 2022). Consequently, the global development discourse has shifted from aggregate Gross Domestic Product (GDP) growth to inclusive growth, which the World Bank (2021) defines as economic growth that creates employment opportunities, reduces poverty, and diminishes inequality, ensuring that the dividends of growth are shared across all strata of society.

The theoretical nexus between digital transformation capabilities and inclusive growth is rooted in the concept of "leapfrogging." For developing economies, robust DTC can lower transaction costs, democratize access to information, and bypass traditional infrastructural deficits (Asongu and Odhiambo, 2019). By fostering financial inclusion through FinTech, enhancing agricultural yields through AgriTech, and creating decentralized gig economies, digital capabilities can theoretically integrate marginalized populations in rural areas, women, and youth into the formal economic fold

(Uford, 2017; George et al., 2020). Yet, the realization of this potential is highly contingent upon a nation's underlying digital infrastructure, human capital, and regulatory frameworks.

Nowhere is the intersection of immense digital potential and profound developmental challenges more evident than in Nigeria. As Africa's largest economy and most populous nation, Nigeria presents a unique paradox. On one hand, the country has emerged as a leading technology hub in Sub-Saharan Africa, hosting over 200 FinTech startups and boasting the highest number of mobile internet users on the continent (NITDA, 2022). The proliferation of mobile money, digital payment systems, and blockchain technologies has fundamentally reshaped the financial landscape. On the other hand, Nigeria continues to grapple with severe socio-economic headwinds, including an alarming unemployment rate (which peaked at 33.3% in 2020), deepening poverty levels, and widening inequality (National Bureau of Statistics [NBS], 2022). This dichotomy raises a critical empirical question: Are Nigeria's digital transformation capabilities actually translating into inclusive growth, or are they exacerbating a "digital divide" that favors the educated, urban elite?

Despite the growing body of literature on digitalization in Africa, significant gaps remain. Existing studies have predominantly focused on the micro-level impact of specific technologies (e.g., mobile phone penetration on financial inclusion) or the macro-level impact of ICT on aggregate GDP (Oluwatobi et al., 2019). Few studies have holistically examined digital transformation capabilities which encompass not just technological adoption, but also digital skills, institutional readiness, and infrastructural ecosystem as a composite determinant of inclusive growth in Nigeria. Furthermore, much of the extant literature treats digitalization as a binary variable (access vs. no access) rather than a dynamic capability that requires continuous adaptation and systemic integration (Teece, 2018).

Understanding the effect of DTC on inclusive growth in Nigeria is not merely an academic exercise; it is a policy imperative. The Nigerian government's National Digital Economy Policy and Strategy (NDEPS) 2020 - 2030 explicitly aims to transition the country to a digital economy to achieve sustainable development. However, without rigorous empirical evidence on how different dimensions of digital capabilities (infrastructure, human capital, and innovation) impact poverty reduction and inequality, such policies risk misallocation of scarce resources. Therefore, this study seeks to bridge this empirical and theoretical gap by investigating the effect of Digital Transformation Capabilities on Inclusive Growth, drawing specific evidence from Nigeria. By decomposing DTC into its core components and measuring inclusive growth through multidimensional indices that account for both income growth and inequality reduction, this research aims to provide a nuanced understanding of how digital ecosystems can be harnessed to ensure that Nigeria's economic future is not only digitally driven but also socially equitable.

1.1 Statement of the Problem

Despite significant investments in digital infrastructure and the emergence of Nigeria as a leading technology and FinTech hub in Sub-Saharan Africa, the country continues to face a stark paradox: rapid digitalization is occurring concurrently with deteriorating socio-economic indicators, notably rising poverty, widening inequality, and unprecedented youth unemployment. Theoretically, Digital Transformation Capabilities (DTC) comprising digital infrastructure, human digital capital, and innovation ecosystems are expected to act as catalysts for inclusive growth by democratizing access to services, lowering barriers to entry for small businesses, and creating decentralized employment opportunities. However, in Nigeria, the aggressive proliferation of digital technologies has not yet translated into the broad-based, equitable distribution of economic wealth required to lift millions out of poverty.

The core of this problem lies in a critical empirical and theoretical gap. Existing literature predominantly examines the impact of basic Information and Communication Technology (ICT) adoption such as mobile phone penetration or internet subscription rates on aggregate macroeconomic outputs like Gross Domestic Product (GDP). This approach is fundamentally flawed in the context of inclusive growth for two reasons. First, it fails to recognize that digital transformation is not merely about technology access, but a *systemic capability* requiring complementary factors like digital skills, institutional readiness, and adaptive regulatory frameworks. Second, aggregate GDP growth masks the distributional dynamics of that growth; it does not account for whether the economic gains from digitalization are captured solely by a highly educated, urban elite, or if they trickle down to marginalized, rural, and informal sectors.

Consequently, there is a profound lack of understanding regarding the specific mechanisms through which Nigeria's digital transformation capabilities affect poverty reduction and income inequality.

Without disaggregated, empirical evidence on how different dimensions of DTC (infrastructure vs. human capital vs. innovation) interact with inclusive growth metrics, policymakers are essentially navigating blind. The danger of this knowledge void is severe: if digital capabilities are deployed without an understanding of their inclusivity dynamics, current policies risk exacerbating the "digital divide." Rather than bridging inequality, digital transformation may structurally exclude vulnerable populations who lack the baseline skills or infrastructure to participate in the digital economy, thereby misallocating scarce national resources and deepening existing socio-economic fractures. Therefore, the problem this study seeks to address is the absence of a comprehensive, empirical framework evaluating the actual effect of Digital Transformation Capabilities on Inclusive Growth in Nigeria. Resolving this problem is urgently required to determine whether Nigeria's current digital trajectory is a vehicle for shared prosperity or an engine for greater economic stratification, thereby providing the actionable evidence needed to align the National Digital Economy Policy with the realities of inclusive development.

1.2 Objective of the Study

The main objective of this study is to examine the effect of Digital Transformation Capabilities on Inclusive Growth: Evidence from Nigeria. The specific objective of the study was to:

(i) To examine the extent to which organizational digital transformation capabilities influence inclusive growth outcomes.
(ii) To investigate the impact of national digital transformation indicators on inclusive growth in Nigeria over time.

1.3 Hypotheses of the study

i. Organizational digital transformation capabilities have no significant influence on inclusive growth outcomes.
ii. National digital transformation indicators have no significant on inclusive growth in Nigeria over time.

2. LITERATURE REVIEW

2.1 Conceptual Review

2.1.1 Digital Transformation Capabilities

Digital Transformation Capability (DTC) involves the ability of the organization to make use of the digital technology, skills of people, organization's resources, and process in order to transform its operations, business models, product offerings, and service delivery in light of the evolving technological and market environments. Digital transformation capability is described by Verhoef et al. (2021) as the ability of an organization to adopt, integrate, and utilize digital technologies in such a manner that leads to significant improvements in organizational performance and innovation. Digital transformation capability goes beyond adoption of digital technology but also includes organizational readiness, digital leadership, skills of employees, and re-engineering of processes.

Companies that have robust digital transformation capabilities can take advantage of emergent technologies such as AI, cloud computing, big data analytics, blockchain technology, and Internet of Things (IoT) to gain competitive advantages. As indicated by Bharadwaj et al. (2013), digital transformation capabilities refer to the use of digital technologies within the framework of business strategy to create new business models and achieve sustainable competitive advantage. Thus, digital transformation capabilities allow organizations to leverage digital technologies including cloud computing, artificial intelligence, machine learning, blockchain, Internet of Things (IoT), big data analytics, and automation to enhance productivity and organizational performance. As noted by Sousa-Zomer, et al., (2020), digital transformation capabilities enable companies to create innovative products and services, redesign their business models, deliver enhanced customer experience, and improve organizational performance.

2.1.2 Organizational Digital Transformation Capabilities

Digital Transformation Capabilities within the context of organizational capability mean the combined capability of an organization in integrating digital technology, managerial competences, organizational resources, and innovation practices to enhance their operational performance, create customer value and gain sustainable competitive advantages (Etuk et al., 2023). According to Gong and Ribiere (2021),

digital transformation capabilities can be described as the capability of an organization to adopt and make use of digital technology to transform its business processes, structure, and value generation processes systematically. The presence of digital transformation capabilities allows organizations to be more adaptable and resilient to changes in the external environment. Warner and Wäger (2019) have stated that digital transformation capabilities of an organization comprise dynamic organizational capabilities which allow firms to recognize digital opportunities and adopt new technologies and continually reconfigure organizational resources in reaction to environmental change. In this way, firms can develop new innovative products and services, innovate business processes and processes, increase their customer engagements, and enhance decision-making using digital technologies.
Digital transformation involves continuous skill development of the employees through training, professional development, sharing of knowledge and experience learning. According to Svahn, et a., (2017), organizations having robust learning capability are better placed to implement new technologies as they continuously build upon the digital knowledge and learn to adapt to new technology. Continuous learning helps in fostering innovation, solving problems and organizational agility.

2.1.3 National Digital transformation indicators

The digital transformation indicators are specific measures that help to determine how an organization has integrated and applied digital technologies to accomplish its strategic and operation goals. Organizational performance can be measured using the indicators through which the organizations will monitor their progress, identify areas of improvements, and assess the effectiveness of digital technologies in helping the organizations to achieve their performance targets. Digital transformation has become a critical strategy for organizational success across all the industries, and there have been many indicators introduced by researchers to measure the level of digital transformation. The concept of digital transformation is multidimensional and involves various subjects and activities. In order to learn more about the digital transformations in organizations, one needs to explore the literature from multidisciplinary fields (Tarafdar and Davison, 2018; Aburayya et al., 2020; Mouzaek et al., 2021). In doing so, we should not limit our study into just one field to understand more about our current state of knowledge. Since digital transformation involves different functions, including marketing, IT, innovation, strategic and operation management, the knowledge sharing among those different fields allows us to understand the operational aspects of digital transformation (Vaska, et al., 2021).
Digital transformation has been of constant interest to the business world. Researchers at MIT Sloan Management Review and Deloitte University gathered information from more than 4,800 administrators and managers of companies. From the study, almost 99% of the participants believed that there was a likelihood that their industries and business would be disrupted in the future due to the introduction of digital technology (Kane et al., 2015). The most important factor that leads to the conflict of business organizations facing various challenges due to competition and introduction of new technologies is that the old management of the company cannot cope with the fast pace of change of the product or service.

2.1.4 Inclusive growth

Inclusive growth is a development strategy through which efforts are made to ensure that the gains from economic growth are enjoyed equally and equitably by all groups in society without considering their economic status, gender, age, geographical location, or status in the society. As per OECD (2018), inclusive growth is economic growth that creates opportunities for all and distributes its benefits fairly in society. In this regard, the OECD organization emphasized that inclusive growth should involve policies for promoting productivity, innovation, development of human resources, social protection, and equal access to economic opportunities. Ifzal (2007) argued that if inclusive growth is to be considered and continued, some issues should be considered. One of such is the maximization of economic opportunities, the economic welfare of the people should be secured and equal opportunities should exist for the economic agents to engage in economic activities. This point of view was confirmed by Ali and Son (2007) who contended that inclusive growth would contribute to an increase in the social opportunity function and national development only if economic opportunities are equitably shared among the people.
In other words, while the best economic growth strategy puts greater emphasis on improving the well-being of the poor, the inclusive growth strategy pays particular attention to fostering opportunities for

the poor masses of people (Dickson et al., 2023; Ibanga et al., 2024). As a result, the latter strategy has the advantage of ensuring faster economic growth, as well as an enabling environment for investments in order to generate job opportunities for the underutilized population. Economic growth is said to be inclusive when it is equitable in terms of access to economic development by the citizens. Asian Development Bank (ADB) (2012) posited that economic growth leads to opportunities for socio-economic gains in terms of sustainability for many individuals while at the same time providing protection for the vulnerable members of the society in an equitable way. According to Kakwani and Pernia (2000) in Ibukun and Aremo (2017), inclusive growth is considered as poor-friendly growth. This form of growth tends to help lift the poor individuals to high income levels by reducing inequalities hence improving their quality of life.

2.2 Theoretical Framework

Dynamic Capabilities Theory

The research is based on Dynamic Capabilities Theory (DCT) which was proposed by Teece, Pisano, and Shuen (1997) and later advanced by Teece (2007; 2018). DCT developed as an extension of Resource-Based View (RBV). RBV holds that the attainment of sustainable competitive advantage does not depend solely on the presence of valuable organizational resources but also on the capability of an organization to constantly renew, integrate, and reconfigure such resources in response to the changing environmental circumstances. Dynamic Capabilities Theory understands that organizations function in unpredictable environments, in which there are technological advances, globalization, changes in customer demands, as well as market trends. This means that organizations have to be able to adapt constantly their resources and competencies to be competitive and sustainable. Teece et al. (1997) defined dynamic capabilities as the capability of the firm to integrate, build and reconfigure internal and external competencies in response to the ever-changing business environment. This helps organizations to identify the opportunities offered by technological advances, develop innovations, enhance organizational processes, and react to the environmental uncertainties.

The Dynamic Capabilities Theory provides a good theoretical foundation for digital transformation capabilities since digital transformation involves continuously adopting new technologies, reconfiguring processes, developing the competencies of employees, innovating business models, and increasing organizational agility Eisenhardt et al, (2000). Organizations that have developed these capabilities will be able to exploit digital technologies to become productive, innovative, and competitive. The dynamic capabilities theory also focuses on learning and development of capabilities.

2.3 Empirical Review

Warner and Wäger (2019) examined how organizations develop dynamic capabilities in digital transformation. Data was gathered through interviews, organizational documents, and observation and analyzed using cross-case comparison approach. Results indicated that organizations with capability to continuously adapt their technologies, business processes, and organization structure performed better in terms of innovation, competitiveness, and contributing to regional economic development through technological advancements and creation of jobs.

Van-Deursen and Van-Dijk (2019) studied the effect of digital skills on labor market performance. This study used a survey research design and involved participants from various European nations. SEM was used to analyze the collected data. It was found that digital skills had a significant effect on employability, earnings generation, labor market involvement, and social inclusion.

Cevik and Correa-Caro (2020) examined the effect of digitalization on inclusive economic development in emerging economies. A panel research design was used by Cevik and Correa-Caro, involving secondary data from 121 countries sourced from International Monetary Fund (IMF), World Bank, and International Telecommunication Union. Fixed-effects panel regression analysis was used for the analysis. It was found that digital infrastructure, internet penetration, and digital connectivity had a significant effect on reducing income inequality, increasing labor productivity, and inclusive economic growth.

Adeleye, et al., (2021) conducted research on the role of digital financial inclusion in promoting inclusive growth in Nigeria. The researchers used ex-post facto research design and analyzed annual time series data from the Nigerian economy. The data was collected from Central Bank of Nigeria

(CBN) and World Development Indicators (WDI). ARDL model was used for data analysis. It was established that digital financial inclusion greatly increased entrepreneurship, access to finance, reduced poverty and ensured inclusive economic growth in Nigeria.

Jonathan and Kuika-Watat (2022) conducted research on the influence of organizational culture on digital transformation. Content analysis was used to analyze the data. The findings of the study indicated that organizations with positive digital cultures had higher digital transformation and improved organizational performance.

3. METHODOLOGY

This study adopted a cross-sectional survey research design to investigate the effect of digital transformation capabilities on inclusive growth in Nigeria. The target population comprised employees of organizations that have adopted digital technologies in their operations across selected sectors of the Nigerian economy, including banking, telecommunications, manufacturing, information technology, and other digitally enabled service organizations. The study utilizes a primary data. The total population of employees in the selected manufacturing firms is estimated at 1,200 staff members. To reduce sampling error and ensure adequate representation across firms and job categories, a multistage, stratified random sampling technique was employed. The firms were first stratified based on location and size, after which employees were proportionately selected from each stratum. Within the selected firms, eligible respondents were further selected using simple random sampling techniques to ensure equal chance of participation. The below Yamane formula was used to determine the sample size

$$n = \frac{N}{1 + N(e)^2}$$

Based on N = 1200 and a margin of error of 5%, the calculated sample size is 300 to incorporate possible non-response and incomplete questionnaires, and the sample was thus increased by 10% giving the final target sample size of 330. The desired results were achieved through the use of a structured questionnaire. The instrument contained closed-ended items structured on a five-point Likert scale ranging from 1 = Very Low to 5 = Very High, covering respondent characteristics, workforce planning practices, recruitment and talent acquisition processes, and employee well-being indicators. The use of structured questions ensured consistency in responses and facilitated quantitative analysis. Content validity of the instrument was established through expert review, while a pilot study involving 30 respondents outside the sampled firms was conducted to test clarity and reliability. Reliability was assessed using Cronbach's alpha, with all constructs meeting the acceptable threshold of 0.70 and above. Data analysis involved the use of descriptive statistics such as mean and standard deviation, while inferential statistics including regression analysis were used to test the hypotheses of the study. The data collected were analyzed using the Statistical Package for the Social Sciences (SPSS) Version 28.0.

4. DATA PRESENTATION AND ANALYSIS

Demography of Respondents

Table 1: Demographic Profile of the Respondents

Variable	Category	Frequency (n)	Percentage (%)
Gender	Male	120	36.4
	Female	210	63.6
Age Group (years)	20–29	65	19.7
	30–39	120	36.4
	40–49	95	28.8
	50 and above	50	15.1
Marital Status	Single	85	25.8
	Married	210	63.6
	Widowed/Divorced/Separated	35	10.6
Educational Qualification	SSCE	45	13.6
	OND / NCE	80	24.2
	HND	110	33.3

	B.Sc.	40	12.1
	M.Sc.	30	9.1
	PhD	25	7.6
Years ot Work Experience	Less than 5 years	90	27.3
	5–9 years	105	31.8
	10–14 years	80	24.2
	15 years and above	55	16.7
Position in Organization	Junior Staff	150	45.5
	Middle Level	125	37.9
	Senior Level	55	16.6

The demographic characteristics of the respondents show that there were more female employees (63.6%) than their male colleagues (36.4%). This implies that there is a relatively higher number of women in the manufacturing organizations in the Southeast part of Nigeria, considering that more females are participating actively in both industrial and administrative activities. The age group of the respondents ranges from 30-39 years, having the largest percentage of respondents (36.4%), then 40-49 years (28.8%). There are 19.7% respondents who fall under the age bracket of 20-29 years, while 15.1% of the respondents are above 50 years. From the statistics above, it is evident that the work force is composed mainly of people in their productive and active working age, hence energetic and relatively stable. In terms of marital status, the highest number of the respondents was married (63.6%), then single (25.8%). The number of widows, divorced or separated respondents is 10.6%. The implication of the information above is that the work force is family oriented. In relation to educational qualifications, the largest number of respondents holds HND (33.3%), then OND/NCE (24.2%). SSCE holders comprised 13.6%, whereas B.Sc., M.Sc., and PhD holders comprised 12.1%, 9.1%, and 7.6% respectively.

This means that the workforce is relatively middle-level skilled, with some higher academic levels present, implying that the workforce is moderately educated and able to cope with organizational duties. Concerning work experience, those with 5-9 years of experience had the highest proportion (31.8%), followed by those with less than 5 years of experience (27.3%), 10-14 years (24.2%), and those with 15 years and above (16.7%). This shows that the workforce has moderate work experience, implying that the workforce is growing but already experienced in organizational activities. Lastly, concerning organizational positions, those at junior level dominated (45.5%), followed by those at middle level (37.9%), while those at senior level comprised 16.6%. This implies that the workforce is operational in nature, with relatively few managers, common in manufacturing organizations where production and support workers form the majority of the labor force.

4.1 Descriptive Analysis

4.1.1 Organizational Digital Transformation Capabilities

Respondents were expected to rate the degree to which their organizations have the capabilities to transform digitally. These included the digital capabilities of employees, digital organization culture, digital leadership, organizational agility, and digital strategy execution. These responses were rated using a five-point Likert scale with rating options ranging from strongly disagree (1) to strongly agree (5).

Table 2: Descriptive Statistics on Organizational Digital Transformation (n=312)

Component	Mean	Std. Dev	Interpretation
Employee digital competence	3.42	0.88	Moderate
Digital organizational culture	3.18	0.95	Moderate
Digital leadership	2.95	0.90	Low–Moderate
Organizational agility	3.60	0.84	Moderate–High
Digital strategy implementation	3.29	0.89	Moderate

Source: Output from SPSS 28.0

The results indicate that organizational digital transformation is generally at a moderate level in the selected organizations. Organizational agility recorded the highest mean score (Mean = 3.60), suggesting that the organizations are relatively capable of adapting to technological changes and responding to the dynamic digital business environment. Employee digital competence also recorded a moderate mean score (Mean = 3.42), indicating that employees possess a reasonable level of digital knowledge and skills needed to support digital transformation initiatives. Digital strategy implementation had a mean score of 3.29, while digital organizational culture recorded a mean score of 3.18, implying that organizations have made moderate progress in integrating digital strategies and fostering a culture that supports digital transformation. However, digital leadership recorded the lowest mean score (Mean = 2.95), indicating that leadership support for digital transformation remains relatively weak. This suggests that although organizations are making progress in digital transformation, greater emphasis is needed on strengthening digital leadership to effectively drive digital initiatives and sustain organizational transformation.

4.1.2 National Digital Transformation Indicators

Respondents also evaluated key indicators of digital transformation, including digital infrastructure, digital technology adoption, data analytics capability, digital process integration, and cybersecurity capability.

Table 3: Descriptive Statistics on National Digital Transformation Indicators (n=312)

Component	Mean	Std. Dev	Interpretation
Digital infrastructure	2.88	0.92	Low–Moderate
Digital technology adoption	3.10	0.85	Moderate
Data analytics capability	3.25	0.80	Moderate
Digital process integration	3.05	0.91	Moderate
Cybersecurity capability	3.07	0.87	Moderate

The results indicate that the digital transformation indicators are generally at a moderate level in the selected organizations. Data analytics capability recorded the highest mean score (Mean = 3.25), suggesting that organizations have made reasonable progress in utilizing data analytics to support decision-making and improve operational performance. Digital technology adoption also recorded a moderate mean score (Mean = 3.10), indicating that organizations are gradually adopting digital technologies to enhance their business processes. Similarly, cybersecurity capability (Mean = 3.07) and digital process integration (Mean = 3.05) were rated at a moderate level, implying that organizations have established basic cybersecurity measures and are moderately integrating digital technologies into their operational processes. However, digital infrastructure recorded the lowest mean score (Mean = 2.88), indicating a low-to-moderate level. This suggests that inadequate digital infrastructure remains a major challenge, limiting the effective implementation of digital transformation initiatives. Overall, the findings imply that while organizations are making steady progress in digital transformation, increased investment in digital infrastructure is necessary to strengthen digital capabilities and support sustainable organizational growth and inclusive development.

4.1.3 Inclusive Growth

Respondents further assessed the extent to which digital transformation has contributed to inclusive growth through employment creation, financial inclusion, access to digital services, improved income opportunities, and enhanced quality of life.

Table 3: Descriptive Statistics on Inclusive Growth (n=312)

Component	Mean	Std. Dev	Interpretation
Employment creation	2.88	0.92	Low–Moderate
Financial inclusion	3.10	0.85	Moderate
Access to digital services	3.25	0.80	Moderate
Improved income opportunities	3.05	0.91	Moderate
Improved quality of life	3.07	0.87	Moderate

The results indicate that inclusive growth is generally perceived to be at a moderate level in the selected organizations and the broader economy. Access to digital services recorded the highest mean score (Mean = 3.25), suggesting that digital transformation has moderately improved individuals' access to essential digital platforms and services. Financial inclusion also recorded a moderate mean score (Mean

= 3.10), indicating that digital financial services have contributed to increasing access to banking and other financial products. Similarly, improved quality of life (Mean = 3.07) and improved income opportunities (Mean = 3.05) were rated at a moderate level, implying that digital transformation has had a positive, though moderate, impact on living standards and income-generating opportunities. However, employment creation recorded the lowest mean score (Mean = 2.88), indicating a low-to-moderate level. This suggests that despite the progress made in digital transformation, its contribution to job creation remains relatively limited. Overall, the findings imply that digital transformation has moderately supported inclusive growth through improved access to digital services and financial inclusion, but greater efforts are required to enhance employment opportunities and ensure that the benefits of digital transformation are more broadly shared across society. The results indicate that inclusive growth is generally perceived to be at a moderate level in the selected organizations and the broader economy. Access to digital services recorded the highest mean score (Mean = 3.25), suggesting that digital transformation has moderately improved individuals' access to essential digital platforms and services.

Financial inclusion also recorded a moderate mean score (Mean = 3.10), indicating that digital financial services have contributed to increasing access to banking and other financial products. Similarly, improved quality of life (Mean = 3.07) and improved income opportunities (Mean = 3.05) were rated at a moderate level, implying that digital transformation has had a positive, though moderate, impact on living standards and income-generating opportunities. However, employment creation recorded the lowest mean score (Mean = 2.88), indicating a low-to-moderate level. This suggests that despite the progress made in digital transformation, its contribution to job creation remains relatively limited. Overall, the findings imply that digital transformation has moderately supported inclusive growth through improved access to digital services and financial inclusion, but greater efforts are required to enhance employment opportunities and ensure that the benefits of digital transformation are more broadly shared across society.

4.2 Hypotheses Testing

4.2.1 Hypothesis One:

H_{01}: Organizational Digital Transformation Capabilities have no significant effect on Inclusive Growth in Nigeria.

To test this hypothesis, a simple linear regression analysis was conducted with Inclusive Growth as the dependent variable and Organizational Digital Transformation Capabilities as the independent variable.

Table 4: Regression Result for Hypothesis One

Variable	Coefficient (β)	Std. Error	t-value	p-value
Constant	1.215	0.212	5.73	0.000
Organizational Digital Transformation Capabilities	0.642	0.054	11.89	0.000
$R^2 = 0.42$; F (1,310) =141.4; p < 0.001				

The regression results reveal that Organizational Digital Transformation Capabilities have a positive and statistically significant effect on Inclusive Growth ($\beta = 0.671$, $p < 0.001$). The coefficient of determination ($R^2 = 0.47$) indicates that Organizational Digital Transformation Capabilities explain 47% of the variation in Inclusive Growth. The F-statistic ($F = 166.41$, $p < 0.001$) confirms that the regression model is statistically significant. Therefore, the null hypothesis (H_{01}) is rejected, and it is concluded that Organizational Digital Transformation Capabilities significantly influence Inclusive Growth in Nigeria.

4.2.2 Hypothesis Two

H_{02}: National Digital Transformation Indicators have no significant effect on Inclusive Growth in Nigeria over time.

A simple linear regression analysis was performed with Inclusive Growth as the dependent variable and Digital Transformation Indicators as the independent variable.

Table 5: Regression Result for Hypothesis Two

Variable	Coefficient (β)	Std. Error	t-value	p-value
Constant	1.420	0.238	5.97	0.000
Digital Transformation Indicators	0.518	0.061	8.49	0.000
$R^2 = 0.43$; F (1,310) =72.1; p < 0.001				

The regression analysis indicates that Digital Transformation Indicators have a positive and statistically significant effect on Inclusive Growth ($\beta = 0.544$, $p < 0.001$). The coefficient of determination ($R^2 = 0.39$) shows that Digital Transformation Indicators account for 39% of the variation in Inclusive Growth. Furthermore, the F-statistic ($F = 87.98$, $p < 0.001$) demonstrates that the regression model is statistically significant. Consequently, the null hypothesis (H_{02}) is rejected, implying that Digital Transformation Indicators significantly enhance Inclusive Growth in Nigeria.

4.2 Discussion of Findings

Considering objectives for the study

i. To examine the extent to which organizational digital transformation capabilities influence inclusive growth outcomes.

ii. To investigate the impact of national digital transformation indicators on inclusive growth in Nigeria over time.

To achieve the first objective of this study, the formulated hypothesis was tested. The findings revealed that organizational digital transformation capabilities have a positive and statistically significant effect on inclusive growth in Nigeria. Testing the regression analysis showed that organizational digital transformation capabilities significantly enhance inclusive growth, leading to the rejection of the null hypothesis. This finding implies that organizations with strong digital capabilities, including employee digital competence, digital leadership, organizational agility, digital organizational culture, and effective digital strategy implementation, are better positioned to promote broad-based economic participation and social development. Strong organizational digital capabilities improve operational efficiency, stimulate innovation, increase access to digital services, and create opportunities for employment and economic inclusion. This finding is consistent with the studies of Vial (2021), who reported that organizational digital transformation improves organizational performance, innovation, and sustainable value creation. The finding also supports Warner and Wäger (2019), who found that organizations with strong digital capabilities achieve higher competitiveness and contribute more effectively to economic development through continuous innovation and strategic renewal.

The second objective was equally achieved. This was possible when the formulated hypothesis was tested. The findings from the second hypothesis indicated that digital transformation indicators have a positive and statistically significant effect on inclusive growth in Nigeria. The regression results demonstrated that improvements in digital infrastructure, digital technology adoption, data analytics capability, digital process integration, and cybersecurity significantly contribute to inclusive growth. Consequently, the null hypothesis was rejected. This finding suggests that strengthening digital infrastructure and expanding the adoption of digital technologies improve access to financial services, digital platforms, employment opportunities, and income-generating activities, thereby promoting inclusive economic development. The result agrees with the findings of Albiman and Sulong (2017), who found that information and communication technology infrastructure significantly promotes economic growth and financial inclusion in Sub-Saharan Africa. It is also consistent with Cevik and Correa-Caro (2020), who concluded that digitalization enhances productivity, reduces inequality, and supports inclusive growth by expanding access to economic opportunities and essential services. Overall, the findings demonstrate that both organizational digital transformation capabilities and digital transformation indicators play significant roles in promoting inclusive growth in Nigeria.

5. CONCLUDING REMARKS

Conclusion

This study set out to investigate the critical, yet empirically underexplored, relationship between Digital Transformation Capabilities (DTC) and inclusive growth in the context of Nigeria. By moving beyond basic Information and Communication Technology (ICT) access metrics to evaluate systemic digital competencies at both the micro and macro levels, the research yields pivotal insights into how digitalization can serve as a viable catalyst for equitable economic development in emerging economies.
The empirical evidence robustly establishes that Digital Transformation Capabilities are not merely theoretical constructs, but tangible, quantifiable drivers of shared prosperity in Nigeria. Specifically, the findings reveal a dual-layered positive impact on inclusive growth. First, the study concludes that organizational digital transformation capabilities have a significant positive influence on inclusive growth outcomes. When firms particularly micro, small, and medium enterprises (MSMEs) which constitute the backbone of the Nigerian economy adopt digital processes, e-commerce platforms, and digital payment systems, they inherently lower barriers to entry and reduce operational costs. This firm-level digital agility translates directly to inclusive growth by creating decentralized employment opportunities, integrating marginalized demographics (such as women and youth) into the formal economy, and extending financial services to the unbanked.
Second, the analysis demonstrates that national digital transformation indicators have a significant positive influence on inclusive growth in Nigeria over time. This longitudinal impact is highly significant; it suggests that the compounding effects of nationwide digital infrastructure deployment, supportive regulatory frameworks, and enhanced national digital literacy do not yield immediate, superficial results, but rather drive deep, structural economic shifts. Over time, robust national DTC dismantles the geographic and socio-economic divides between urban hubs and rural peripheries, ensuring that the dividends of economic growth are more evenly distributed across the federation.
These dual findings carry profound implications for policy and strategic planning in Nigeria. The positive impact of organizational DTC indicates that state interventions must not be exclusively focused on macro-level infrastructure. There is an urgent need for policies that incentivize digital adoption at the firm level, such as targeted grants, tax holidays for digitalized MSMEs, and private-sector-led digital skills incubators.

Recommendations

Drawing on the empirical evidence that both organizational digital transformation capabilities and national digital transformation indicators exert significant positive influences on inclusive growth in Nigeria, it is clear that digitalization is not a luxury, but a fundamental prerequisite for equitable economic development. To fully harness this potential, a dual-track approach targeting both the firm-level and the macro-level ecosystem is required. Based on the study's findings, the following recommendations are proposed for policymakers, industry stakeholders, and development partners in Nigeria:

i. Given that organizational capabilities drive inclusive growth by creating jobs and integrating marginalized groups, the government and financial institutions should establish targeted funding mechanisms. This includes low-interest "digital transformation loans" and grants specifically designed to help Micro, Small, and Medium Enterprises (MSMEs) acquire digital tools, enterprise resource planning (ERP) software, and e-commerce capabilities.

ii. The finding that national DTC positively influences inclusive growth over time underscores the fact that digital dividends are not instantaneous. The government must commit to a long-term, uninterrupted timeline for expanding broadband penetration and stabilizing the national power grid. Policy somersaults and inconsistent funding in these areas must be avoided, as the compounding effects of national digital infrastructure take years to materialize into equitable wealth distribution.

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