

## Effects of Covid-19 on Digitalisation of Workspace in Nigeria

*Babayo Sule, National University of Lesotho*

*Stephen Chinedu Chioke, Legacy University*

**Abstract:** Based on the way governments and organisations responded to the COVID-19 pandemic, it appears that the world will never be the same again in terms of its impact on sovereign entities such as Nigeria. To identify how the pandemic impacted on digitalisation of the workplace, we adopted conceptual approach, utilising documented sources, interprets them empirically and presents a new dimension to the study of the COVID-19 pandemic in Nigeria. It is certain that immediately after the outbreak of the pandemic, an interstate travel ban was imposed in addition to a lockdown while a work at home policy was introduced. This process has not only changed the pattern of jobs in Nigeria through increased digitalisation, but has also encouraged continuous digital activities in the new normal. However, loss of jobs is a negative consequence of post-COVID-19 digitalisation process in Nigeria. Conclusively, COVID-19 is a rare example of a negative factor leading to diverse positive changes in the area of digitalisation in Nigeria.

**Keywords:** COVID-19; Digitalisation; Functionalist Theory; Globalisation; Modernisation Theory

### 1 Introduction

COVID-19 is one of the most devastating global pandemics with far-reaching consequences for socio-economic and political processes in all parts of the world. The pandemic, which broke out in the city of Wuhan at the end of 2019, spread aggressively despite all medical measures, like a wildfire or a lightning bolt that affected all parts of society (Lupton & Willis, 2021). Officially declared a global pandemic by the World Health Organisation (WHO) in 2020, the world is paralysed, the economy grinds to a halt, social mobility is frozen and the world is effectively in lockdown (Hampden-Turner & Trompenaars, 2021). All local and international travel came to an abrupt halt. Unlike previous pandemics such as HIV/AIDS, which changed sexual lifestyles, the Ebola virus disease, which challenged health services and measures, and bird flu, which affected the environment of humans and animals, COVID-19 emerged in the era of a digital world in which many activities are increasingly shifting to cyberspace (Schwab & Malleret, 2024). Governments around the world immediately took measures to freeze movements and social relations in order to contain the spread of the pandemic. Nevertheless, the pandemic managed to quickly spread to all corners of the world (Rana & Govender, 2022).

While countries in the Americas, Asia, Europe and South America have been hit the hardest, African countries such as Nigeria have suffered more economic and social losses than deaths (Puplampu et al. 2023). Before the COVID-19 pandemic, Nigerians were hesitant to adopt digitalisation in the workplace and other areas of social life. The rate of mobile phone ownership, internet penetration and social media usage was low compared to countries in Northern and Southern Africa despite the possibility of a huge population (Attah & Sule,

2022). However, COVID-19 shows a completely different pattern in Nigeria as shown by statistics where the rate of internet penetration, social media usage and digital activities continues to rise at a remarkable percentage of no less than an average annual growth rate of 5 per cent (Statista, 2025). This was particularly evident in the work areas of public and private organisations as well as in personal interactions. This opened up a great opportunity for an improved digital workspace, which is sometimes more effective, cost- and time-saving and more eccentric. But this development is not without its challenges. With the increasing digitalisation of the workplace in Nigeria, cybercrime and fraud have also increased.

This study uniquely presents a new perspective on COVID-19 and its impact on social lifestyles in Nigeria. It examines how the consequences of the pandemic have motivated the increasing digitalisation of the country and its attendant consequences. Many studies reviewed in the literature section examined the phenomenon from various angles but failed to examine the role of COVID-19 in changing the social lifestyle of Nigerians. This gap is important and thus motivated this study. The paper is organised into sections consisting of an introduction, the method, a framework for analysis, a literature review divided into COVID-19 from a global perspective and COVID-19 from a Nigerian perspective, and discussions of the findings. The main drivers of this study is the need to analyse the ways in which the COVID-19 outbreak increased digital mindset in Nigeria, caused migration from physical to digital workplaces and the challenges this social change poses in terms of harassment by fraudsters and cybercriminals.

The transformative implications of COVID-19 on workplace digitisation have been studied globally; however, most research focuses on developed economies or industries with pre-existing digital infrastructures. There is no empirical data on how the pandemic in Nigeria affected the adoption of digital tools in many sectors, especially public institutions, Small and Medium-Sized Enterprises (SMEs), and informal workspaces. Previously, rather than viewing digitalisation as a crisis-driven adaptation process shaped by socioeconomic disparities, infrastructure deficiencies, and policy readiness, Nigerian studies have often regarded it as a technological or managerial innovation issue. There is also a lack of interdisciplinary research combining labour studies, organisational behaviour, and digital policy perspectives to understand how remote work, automation, and digital communication have affected productivity, employment relations, and work-life balance during and after the pandemic. Additionally, most evaluations overlook regional and sectoral differences in digital preparedness, particularly the gap between rural and urban areas, gendered access to digital tools, and the role of public and private sector policies in sustaining digital transformation after the pandemic.

## Aim and Objectives

To understand how the pandemic accelerated digital transformation, changed work patterns, and affected organisational efficiency, employee productivity, and work culture in both public and private sectors, the primary goal of this study is to investigate how COVID-19 influenced the digitalisation of workspaces in Nigeria. To achieve this goal, the study aims to:

1. Determine the extent to which COVID-19 affected the adoption of digital technologies in Nigerian workplaces.
2. Analyse the impact of digitilisation on communication, productivity, and work procedures during and after the pandemic.

3. Identify the main obstacles and constraints that businesses and workers face in adapting to digital work environments.
4. Examine how digital skills, internet access, and infrastructure preparedness support or hinder workplace digitilisation in Nigeria.
5. Assess the potential long-term effects of post-COVID digital practices on work and employment relations in Nigeria.
6. Provide guidelines and practical recommendations for sustaining and enhancing digital transformation in Nigerian workplaces.

## 2 Literature Review

### COVID-19: A Global Outlook

At the end of 2019, a mysterious flu broke out in Wuhan, China. Within a few days, it spread to all parts of the country and in less than two months it had spread to many countries. In less than three months, the virus became a global pandemic as it spread to every continent and virtually every country in the world. From December 2019, when the virus, the coronavirus (COVID-19) broke out, it became clear that the world was facing another global epidemic. Between December 2019 and April 2024, 704,753,890 cases, 7,010,681 deaths and 675,619,811 recoveries were recorded worldwide, affecting 231 countries around the world (Worldometer, 2025). The countries most affected by the pandemic are the USA, India, France, Germany, Brazil, South Korea, Japan, Italy, the UK and Russia. In these ten countries, there were a total of 418,700,244 cases, or 59.41 percent of the total number of cases recorded. The number of deaths in these ten countries totalled 3,757,089 (53.59 percent) (Worldometer, 2025). Africa is less affected in terms of the number of deaths. With a total number of 5,382,790 cases, a total number of 140,682 deaths and a recovery of 4,728,804, the world could breathe a sigh of relief as the low level of health infrastructure on the continent worried global health experts and policy makers (Africa CDC, 2025).

The first response to the devastating impact of COVID-19 was the WHO's confirmation and declaration that it was a global pandemic. The WHO immediately established a protocol for prevention and response to the pandemic and intensified collaboration with regional health authorities such as the African Centre for Disease Control (CDC) and other related agencies. As part of the protocol, international and local travel bans were imposed; social distancing and lockdown were recommended for strict compliance. In addition, the WHO embarked on a search for a recognised and standardised vaccination (Knezevic et al. 2022). Within a few months in 2020, international travel was banned, most or almost all countries ordered a lockdown, and a social distancing policy was activated (Haleem et al. 2020).

COVID-19 has impacted the global political economy and overall lifestyle in 2020 and beyond. The global economy crashed so hard that the International Monetary Fund (IMF) and the World Bank came to the aid of many countries to avoid a total economic standstill (Naseer et al. 2023), with the energy sector being severely affected (Priya et al. 2021). Movements and migration were halted (Chakraborty & Maity, 2020), and the phenomenon of globalisation itself suffered a setback as worldwide connectivity came to a standstill in awe of the virus (Shrestha et al., 2020). The entire socio-economic system and politics have been negatively affected by COVID-19. However, there are also some positive developments brought about by COVID-19. One of these is the increasing digitalisation of social activities

and jobs. Before the pandemic, digitalisation varied greatly depending on the country, industry and company. The average growth of digitalisation in advanced economies was six percentage points. Small companies, which are traditionally less digitalised, benefited the most. Similarly, the least digitise industries have invested more in digitisation. Many companies were spared during the epidemic by the boom in digitalisation, which allowed them to adapt to the lockdowns by working online and remotely. When comparing the 75th and 25th percentiles of digitalisation at the height of the pandemic in 2020, greater digitalisation in one sector reduced labour productivity losses by a substantial 20 percent (Jaumotte et al. 2023). In the case of Africa, Contreras (2022) notes that the COVID-19 shock has accelerated the digitalisation of the public and private sectors in many countries, including in the form of improved broadband connectivity, the introduction of online business models, the promotion of online payments and the improvement of digital skills.

## COVID-19 in Nigeria

Nigeria experienced the COVID-19 pandemic, which was caused by the Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2). An Italian national tested positive for the virus in Lagos on 27 February 2020, marking the first confirmed case in Nigeria. A second case of the virus was documented on 9 March 2020 in Ewekoro, Ogun State, when a Nigerian came into contact with the Italian national. Since these first two cases, the virus spread rapidly in all 36 states and the Federal Capital Territory Abuja (Akande-Sholabi & Adebisi, 2020). Nigeria recorded a total of 267,188 infections, 3,155 deaths and 259,953 recoveries (Worldometer, 2025). The Nigerian government responded by adopting the WHO and CDC's protocols for Africa, and by putting the National Centre for Disease Control (NCDC) into action by lifting the interstate travel ban, lockdown and social distancing (Jacobs & Okeke, 2022). Nigeria also received logistical support from the WHO (Kofi, 2021) and financial support from the IMF to cover the loss of revenue due to the sharp drop in the price of oil on the world market (IMF, 2020).

COVID-19 has various impacts on the socio-economic and cultural aspects of livelihood in Nigeria. Some studies (Chioke, et al 2021; Ossai, 2020; Ebohon et al, 2021; Nneji et al, 2022) focused on how much education sector was affected, while others (Abulude & Abulude, 2020; Ahmed et al, 2020; Akande-Sholabi & Adebisi, 2020; Mbachu et al, 2020) emphasised the impact on the health sector and health service delivery in terms of response. The transport sector was affected by the lockdown (Mogaji, 2020), just as Amare et al. (2020), Andam et al. (2020) and UNDP (2020) argue that agricultural systems, agricultural production and food security were affected by the lockdown and travel ban (Ajide et al., 2020). Other studies (Aderemi et al. 2020; Farayibi & Asongu, 2020; Inegbedion, 2021; Usman et al. 2024) examined how the Nigerian economy was negatively affected by the crash in the price of oil on the world market, the decline in agriculture, the collapse of trade and commerce and other activities. One study, Ezeibe et al. (2020), focused on the political mistrust between citizens and those in power, which led to a lack of cooperation in the fight against the virus.

All the above studies focused on education, health, and agriculture, politics and the social environment, but none minimally addressed how the virus changed the process of digitalisation of workspace in Nigeria. This represents a gap in the literature, provides an opportunity to contribute to knowledge, and has policy implications.

### 3 Framework of Analysis: Social Change Models

There is a whole range of theories that explain what social change is, how it takes place, what influence it, what processes take place and what effects can be expected in the future (Leat, 2005). In this section, they have been examined and analytically linked to the Nigerian context to underpin the arguments that will be explored.

The cyclical theory of change was developed by Spengler (2014) and Toynbee (1989) and explains that societies experience changes that are typical of the human life cycle. They rise, decline, fall and then die. Each society has its own predetermined life cycle in which it goes through a circular stage and then returns to its initial stage, only to begin the cycle anew. Spengler (2014) argues that the Egyptian, Babylonian, Byzantine, Persian, Greek, Roman and Islamic empires repeat their processes of rise, decline and fall, just as the West is currently experiencing its own decline. Sorokin (1990) deepens the theory of cyclical change by suggesting that societies are subject to two major processes that resemble a pendulum swing, in which they put their weight in the direction in which the pendulum swings, but gradually return to its original point. The cyclical theory of social change assumes that all societies are bound to the potential of upward mobility, decline and then fall to pave the way for new world powers. In this regard, Nigeria and Africa have good news of an imminent future. Having the oldest civilisation in world history, Africa has been vulnerable to domination by other parts of the world due to the vicissitudes of history past and present. As the pendulum of the cycle now swings towards the stage of deprivation, there is hope that positive social change will allow Africa to rise as it swings to the other side, especially if we take Spengler (2009) more seriously, who asserts the decline of the West, which as imperialist, colonialist and neo-colonialist is the most restrictive to Africa's freedom (Nigeria included) and progress, as Mazrui (1986) asserts. Ibn Khaldum (2020) already foresaw this when he asserted that all empires and civilisations those who rise to power carry within them from the beginning the seeds of their downfall that are inherent in the process of growth.

The functionalist theory of social change is a sociological view of the concept. Functionalists believed that societies have various independent but interdependent functions and roles that must support each other, and that any internal or external interference can lead to adjustments that in turn lead to changes that determine the way society reacts and functions in the future. Parson (1991) insists that a social equilibrium must be maintained, although he argues that no society can maintain an absolute equilibrium and that all parts of a society must respond through interdependence and adaptation for change to occur. The process of social change is therefore, according to Parson (1991), a moving equilibrium. In applying this theory to the African context, it should be noted that Nigeria experienced three major social transformations in the pre-colonial, colonial and post-colonial eras, each of which brought about a significant change in equilibrium and adaptation. Pre-colonial Nigeria and Africa, according to Nyerere (1986), was communal and stable until colonialism created divisions, classes and the seeds of discord to which the African continent responded by decolonising to restore equilibrium. In post-colonial Africa, enormous adjustments are being made to position the continent as a major player in the global political economy and social structures through various endeavours. This is a good example of functionalism in relation to social change in Nigeria.

The Marxist theory of social change, also known as the economic theory of change, assumes that economy will fundamentally continue to dominate the struggles of humanity and is the main engine of social change. The struggles for control of the means and manner of production will lead to the desire to gain access to the superstructure and this will result in the

competing contradictory classes of the bourgeoisie and the proletariat clashing in an antagonistic relationship that may lead to social movements and social changes to the status quo (Boudon, 1986). In Nigeria, the antagonistic classes described by Marx emerged dialectically during the slave raids and internal wars of conquest, but were consolidated and expanded by colonialism, where a consciously orchestrated class structure was created along European lines. This laid the foundation for the struggles of the working class against the national bourgeoisie as observed by Fanon (1972) and Nkrumah (1965) throughout Africa. The struggles for material benefits continue to characterise Nigeria politically, economically and socially and will continue to do so for many centuries to come.

Modernisation Theory postulates that social change has gone through various processes, from primitivism through feudalism to pre-industrial and industrial society. Coleman (1990) argues that European societies experienced unprecedentedly rapid political changes that led to a stable political system to be emulated by the other developing countries of the world. Levy (1965), on the other hand, argued that society in Europe underwent an inevitable social process that influenced today's social system in Europe, while McClelland (1961) believed that today's Europe is the result of long historical experiences of gradual and persistent change. Rostow (2004) argues that modernisation has played a major role in the transformation of European societies into an economic boom through some structural social changes that include certain linear processes of the traditional/communal phase, the precondition for take-off and the take-off phase, maturation and the age of mass production and mass consumption. Rostow (2004) further argues that currently emerging societies such as Africa should follow these phases in order to achieve positive development through the modernisation of political, social and economic institutions. Africa naturally yearns for development and modernisation as proposed by the theorists, but the Eurocentric and ethnocentric chauvinistic arrogance of the assumptions has led African scholars to overlook the theory as an attempt to justify or deflect the effects of history, especially colonialism and other exploitative relationships as a means of social backwardness of the continent due to the negative changes introduced by the colonialists.

In contrast, the Underdevelopment Dependency Theory assumes that a change has taken place in the world that has created an exploitative relationship between the developed and underdeveloped countries. According to Frank (2008), the structural changes in social, economic and political institutions in the colonised states led to the development of underdevelopment. Frank (2008) attacked Modernisation Theory as a cover for the dialectic of what is actually hidden under the alibi of modernised institutions as the distinguishing feature of development and underdevelopment. Amin (1977) substantiated the above point that uneven development took place leading to social change and economic imbalance. To understand how the effects of exploitative relationships led to influential negative change in Africa, Rodney (1972) and Siollun (2021) presented some logical arguments that African societies were fully and evenly developed before the arrival of Europeans under colonisation. The advent of colonialism changed the evolutionary destiny of Africa by creating classes, institutions, structures and systems that became subservient to global capitalism (Ake, 1981).

Globalisation is a significant process that has brought about social change throughout the world. Globalisation integrates the world, universalises and harmonises the global political economy. The development of science and technology facilitates the unprecedented movement of goods and people across the planet, later aided by the invention of computers, the internet revolution and social media. The entire world is undergoing an inevitable transformation that is shaping the social environment across the planet. The future of politics,

economics and social activities is shifting to the digital space (McMichael, 2017). Africa is one of the geopolitical zones strongly affected by the impact of globalisation, leading to significant changes that are reshaping the continent. Internal and external migration, resettlement, digital adaptation, social media and internet activities influence the way of life in Africa both positively and negatively. Postmodernism is related to globalisation as a theory of social change. Postmodern scholars are concerned with the concept of the post-truth era, in which the acceptance or rejection of an idea or story as valid in modern times becomes difficult. Postmodernism assumes that society is in a constant and continuous state of change. Social change, according to postmodernists, can only be understood by exploring the historical, cultural and social activities that have shaped and influenced societies based on their values and antecedents (McMichael, 2017).

Based on the various discourses mentioned above, it is important to establish the link between COVID-19 and the critical change in the digitalisation of the world of work in Nigeria. Thus, all the theories of various scholars assume that societies will constantly and continuously experience changes in various dimensions, both negative and positive. These changes can either advance a culture and a social way of life, reverse the processes or mediate them. Nigeria experienced internal changes during the pre-colonial era, witnessed structural changes socially, economically and politically during colonialism and is now experiencing rapid changes under post-colonialism. Some changes are readily embraced, others are reluctantly accepted, while some have found their way into society unnoticed at first, but their effects are being felt. This clearly explains the role of COVID-19 in the transformation of Nigerian society from an analogue to an increasingly digitalised society, especially in the world of work. This is evident in the changing nature of meetings, work processes, the increasing paternalism of the digital space and other related procedures, as outlined in the previous sections.

From the theoretical perspectives based on the various theories examined above, one of the main drivers of social and economic change in the twenty-first century is the increasing use of social media, smartphones, and the internet in Nigeria's ongoing digital revolution. These technologies act as adaptive mechanisms that help society maintain equilibrium during disruptions such as COVID-19. In Nigerian society, the digital domain has become a new subsystem where governance, business, education, and communication find alternative ways to function. Digitisation has reinterpreted the structure of labour relations and production. The growth of online entrepreneurship, fintech advances, and remote work platforms has created new digital elites and increased job and financial inclusion prospects for young people, thereby changing class relations.

This trend is immediately situated within the broader global network of social and economic interaction. Nigerian firms and residents can access international markets, ideas, and value chains through digital connectivity. The pandemic highlighted how social media and internet platforms can maintain interpersonal relationships, encourage civic participation, and facilitate international cooperation. Furthermore, Nigeria's youth-led digital activism (such as EndHunger/BadGovernance) demonstrates the sociopolitical empowerment resulting from global digital integration. Nigeria's extensive use of digital tools signifies a shift towards a fluid, decentralised social reality in which digital experiences increasingly mediate identity, enjoyment, and purpose. In the digital era, citizens' conceptions of happiness and belonging are shaped by virtual communities, online entrepreneurship, and content production, all of which contribute to economic well-being, psychological fulfilment, self-expression, and social connection.

Ultimately, incorporating digitalisation into these theories highlights how Nigerians' increasing use of social media, smartphones, and the internet is both a cause and a consequence of social change. Psychologically, it enhances citizens' sense of agency, connection, and satisfaction; socially, it improves communication, empowerment, and access to information; and economically, it fosters productivity, creativity, and inclusion. In addition to disrupting work schedules, COVID-19 accelerated Nigeria's shift towards a new socioeconomic era in which social progress and collective well-being are closely tied to digital connectivity.

#### 4 Method

The study uses a conceptual framework approach in which documented sources are consulted, empirically analysed and translated for interpretations and insights. An important process guiding the literature search is the consultation of relevant data on the topic of the study from different perspectives. In this way, the study identified the areas covered and discovered the knowledge gap. Data were obtained from global, regional and national perspectives and the comparative statistical technique is used to measure the increase in the use of digital space in Nigeria before, during and after COVID-19 to justify the objective of the study. The personal participant observation by the researchers also helps to explain the increasing digitalisation in Nigeria in the time of COVID-19 and after COVID-19.

In particular, Simon Kemp's research on Nigeria's digital outlook from 2020 to 2025, with an emphasis on 2025, is heavily referenced in the empirical section of the study. The Nigerian editions of the national reports draw on a wide range of sources, including news media, individuals, government and public entities, internet and social media companies, and market research firms. They also estimate "social media users" or "social media identities" using advertising reach data from social media companies' ad planning tools. For example, the 2024 Nigeria report states, "data published in the ad planning tools of top social media platforms indicates that there were 36.70 million users aged 18 and above using social media in Nigeria." Data on mobile connections comes from sources such as GSMA Intelligence. For example: "In early 2024, Nigeria had 205.4 million cellular mobile connections."

The methodological notes identify modifications and extrapolations, and population data (for penetration rates, etc.) are derived from well-cited demographic sources. The authors note that source modifications may affect comparisons over time and that certain figures are extrapolated or obtained from incomplete data. For example, "we advise caution when comparing, because changes in reported values may result from both changes in actual user behaviour and 'corrections' in source data." In the absence of more comprehensive national survey data, social media data are used as proxies to measure broader ICT adoption, according to the larger methodological overview (see "Tracking ICT Trends Using Social Media Data" presentation).

Three main factors make Simon Kemp's method dependable: immediacy, transparency about caveats, and broad coverage and comparability. The reports collect data from numerous countries using comparable templates and sources, achieving broad coverage and comparability, and providing useful comparative snapshots of digital adoption worldwide. Timeliness is demonstrated by the use of platform and ad-tool data, which allows for more up-to-date figures compared to traditional household surveys, which often lag behind. The reports clearly state the limitations (e.g., ad reach versus active users; multiple connections per user), enabling users to interpret the data with caution due to the clarity regarding

constraints. For example, the ad-reach figures "may not represent monthly active user figures."

Participant observation was conducted in several Nigerian workplaces that underwent significant digital transformations during and after the COVID-19 outbreak. These included Small and Medium-Sized Enterprises (SMEs) and tech start-ups that integrated digital platforms for sales, collaboration, and marketing; public institutions (ministries, universities, and parastatals) that adopted online communication and service delivery; corporate organisations (such as banking, telecoms, and media firms) that implemented remote work systems; and educational institutions that transitioned from physical to virtual learning environments. The selected locations – Lagos, Abuja, Kano, Kaduna, and Port Harcourt – were chosen to represent Nigeria's formal and informal sectors, metropolitan and semi-urban regions, and varying levels of digital maturity.

## 5 Results

Using empirical evidence of the statistical increase and a theoretical realisation, the study found that the workspace in Nigeria, both public and private, especially in health, education, religion, political process and e-commerce, witnessed significant improvement and expansion of the digital space. However, this study posits that this development would not have been possible had it not been for the outbreak of COVID-19 and the response to it in the form of lockdowns and travel bans. There is a significant lack of both empirical evidence and conceptual understanding of workplace digitilisation in Nigeria's post-COVID period due to the scarcity of complex, context-specific research. The study offers a multifaceted perspective on digital transformation by linking digitalisation to worker capability, legal frameworks, infrastructure readiness, and technology acceptance. The study offers unique empirical insights into how Nigerian workers adapted to remote and hybrid work models by collecting data on employee experiences, productivity levels, and digital skill development. The results provide practical suggestions for institutionalising digital behaviours, closing the digital divide, and increasing resilience to future upheavals for legislators, businesses, and educators. The research advances understanding of technological adaptation, organisational resilience, and digital inequality in developing economies by conceptually reframing workplace digitisation as both a crisis response and a structural transformation.

## 6 Findings and Discussions

This section discusses two important topics as key findings of the study: how digital activities and enrolment have increased significantly in the wake of the COVID-19 pandemic and the associated consequences of the digitalisation of the workplace.

### 6.1 COVID-19 and Increased Digital Enrolment

Statistics before, during and after the COVID-19 pandemic show that the use of mobile phones, access to the internet, social media and digital paternalism have increased considerably and significantly. In 2018, internet penetration was 49 per cent and the proportion of active social media users was 19 per cent. Smartphone penetration is 56 per cent and 23 per cent have a desktop or laptop computer. The frequency of internet use is 22 per cent (Kemp, 2018). These statistics were only available one year before the outbreak of COVID-19. The 2019 statistics show that 75 per cent of the population subscribe to mobile devices (an increase of 7.4 per cent), 50 per cent use the internet (an increase of 3.8 per cent) and 12 per cent use social media (an increase of 26 per cent). The frequency of internet use is 30 per cent (an increase of 11 per cent) (Kemp, 2019). 2019 is the year of the pandemic. To understand whether COVID-19 is helping to increase digital usage in Nigeria, a statistical

comparison between 2019 and 2020 and beyond is important here. In 2020, 83 per cent of the population owns a mobile phone, an increase of 7.7 per cent compared to 2019. 52 per cent of the population uses the internet, an increase of 2.6 per cent, and 13 per cent uses social media, an increase of 14 per cent. Ownership of laptops or desktops is 52 per cent, an increase of 11 per cent. The proportion of internet users is 42 per cent, an increase of 36 per cent (Kemp, 2020). In 2020, the share of e-commerce increased by 2.6 per cent due to credit card ownership, a mobile money account by 5.6 per cent and online purchases by 6.3 per cent (Kemp, 2020). The growth of e-commerce in 2020 by category shows fashion and beauty (+43 per cent), electronics and physical media (+32 per cent), food and personal care (+50 per cent), furniture and household appliances (+39 per cent), toys and hobbies (+37 per cent), digital music (+16 per cent) and video games (+16 per cent) (Kemp, 2020).

In the post-COVID-19 period, from 2021, digital presence and digital activities in Nigeria continues to increase significantly. Figures for 2021 show that 90 per cent (+10 per cent) are mobile connected, 50 per cent (+22.1 per cent) are internet users and 15.8 per cent (+22.2 per cent) use social media. Owners of laptops or desktops are at 54.1 per cent, and smartwatches at 15.4 per cent (Kemp, 2021). Compared to 2020, the percentage of those who own credit cards is still 2.6 per cent, mobile money 5.6 per cent and online purchases 6.3 per cent (Kemp, 2021). This shows no growth in this area. E-commerce growth by category from 2020 is fashion and beauty (+44 per cent), electronics and physical media (+34.5 per cent), food and personal care (+59.6 per cent), furniture and household appliances (+40.3 per cent), toys and hobbies (+42.4 per cent), digital music (+39.8 per cent) and video games (+35.4 per cent). Digital marketing reaches an average of 50 per cent, an average increase of 10 per cent compared to 2020 (Kemp, 2021).

Internet penetration in Nigeria was 51.0 per cent of the total population at the beginning of 2022. The analysis shows that the number of internet users in Nigeria increased by 4.8 million (+4.6 per cent) between 2021 and 2022 (Kemp, 2022). Kemp (2022) notes that issues related to COVID-19 continue to influence research on internet usage and penetration in Nigeria. The number of social media users in Nigeria in early 2022 represented 15.4 per cent of the total population, a decrease of 4 per cent from 2021. The number of mobile connections in Nigeria in January 2022 was 82.4 per cent of the total population, a decrease of 14 million (-7.3 per cent) between 2021 and 2022 (Kemp, 2022). Device ownership increased by +0.8 per cent compared to 2021, while smartwatch ownership increased by +34.4 per cent. Total spending on digital media amounts to 1.95 billion dollars, an increase of +18.9 per cent compared to 2022. The share of digital marketing rose to 55.5 per cent, an increase of 4.4 per cent compared to 2021 (Kemp, 2022). In comparison, some of the data decreases in 2023, while others increase compared to 2022.

In 2024, a total of 205.4 million mobile connections were active in Nigeria, representing 90.7 per cent of the total population. There were 103.0 million internet users in Nigeria at the beginning of 2024. Internet penetration was 45.5 per cent, an increase of +1.8 per cent. In January 2024, there were 36.75 million social media users in Nigeria, which corresponds to 16.3 per cent of the total population, an increase of 5.6 per cent. In January 2024, there were 103.0 million internet users in Nigeria (+2.2 per cent) (Kemp, 2024). Device ownership remains unchanged with 100 per cent of mobile phones recorded. Smartwatch ownership is at 18.7 per cent, an increase of +65.5 per cent. Around 31.8 per cent use banking and investment insurance websites, a decrease of -10.7 per cent; 8.1 per cent use mobile payment services, a decrease of 52.1 per cent; and 14.6 per cent own money platforms or digital currencies such as crypto or Bitcoin, an increase of +12.3 per cent (Kemp, 2024). In 2024, 30.8 per cent

bought a product or service online, 12.9 per cent ordered food online and 11.1 per cent bought some specific items online (Kemp, 2024). The e-commerce amount in 2024 shows \$2.53 billion worth of electronics, \$1.25 billion worth of fashion, \$290 million worth of food, \$90 million worth of beverages, \$520 million worth of furniture, \$350 million worth of physical media, \$450 million worth of beauty and personal care, \$80 million worth of household goods, \$30 million worth of luxury goods and \$30 million worth of eyewear (Kemp, 2024). Digital healthcare increases to 31 million Nigerians (+12.6 per cent) from 2023 and is worth \$160.2 million annually (Kemp, 2024).

Although Nigeria's population continues to increase, for example 198.4 million in 2019, 203.6 million in 2020 (+2.6 per cent over 2019), 208.8 million in January 2021 (+2.6 per cent between January 2020 and January 2021), 214.1 million in January 2022 (+2.5 per cent between 2021 and 2022), 221.2 million in January 2023 (+2.4 per cent between 2022 and 2023), 226.5 million in January 2024 (+2.4 per cent) between early 2023 and early 2024 (Kemp, 2024), indicating how digital prospects continue to rise and fall over the years, especially the increasing percentage of internet penetration, mobile ownership, mobile users, internet users, digital marketing and patronage, from the time of COVID-19 to 2024 (digital data for 2025 is not available as it is released in February every year and data for 2025 was not yet available online as at the time of writing this report), show a huge increase in digital activities of Nigerians due to the impact of COVID-19. However, Statista (2025) data reveals that the 4G network coverage in Nigeria is estimated to amount 100.00% in 2025. The average broadband connection speed in Nigeria is estimated to amount 27.10k kbit/s in 2025. The 3G network coverage in Nigeria is estimated to amount 90.32% in 2025. The export in ICT services per capita in Nigeria is estimated to amount US\$0.93 in 2025. The total consumer spending in ICT equipment in Nigeria is estimated to amount US\$1.35bn in 2025. The Internet penetration in Nigeria is estimated to amount to 37.38% in 2025. The number of households with internet access at home in Nigeria is forecast to amount to 21.85m in 2025 (Statista, 2025). This has implications for the labour sector as shown in the next section.

Drawing from the above data sets provided by Kemp, there exists a huge marketing value and prediction for digital transformation in Nigeria's workspace and marketing. Instead of relying solely on "monthly active users," the Digital 2025 study extensively uses metrics such as "social media ad reach" and audience sizes from platform advertising tools (for example, social media user IDs identified via ad tools). For instance, 38.7 million Nigerians aged 18 and over used social media, according to data from the ad planning tools of major social media networks. These figures may reflect market advertising reach rather than just usage or behavioural analytics, as they are sourced from platforms' marketing and advertising dashboards. Therefore, the report is slightly more oriented towards marketers and advertisers, rather than being focused exclusively on public policy experts.

The research draws on information from commercial and third-party sources, including platform ad tools from major social media companies, speeds from Ookla, and mobile connections from GSMA Intelligence. Rather than strictly impartial academic measurement, these commercial data providers may have interests aligned with commercial markets such as telecoms, marketers, and platforms. The research adopts a tone that highlights Nigeria's "digital opportunity"— characterised by high growth, a large youthful population, and significant connectivity gaps that suggest commercial potential. This approach aligns with a target audience of marketers, companies, and investors. For example, the "state of digital" section emphasises metrics that are attractive to market participants, such as mobile connections, internet users, and social media users. The selection and presentation of these

measurements may be shaped by this framing, for instance, by highlighting growth and scale rather than structural constraints or inequality.

The development described above and the changes in the data on Internet penetration reveal a process of social change. As can be observed in the various frameworks and models of social change discussed in the analysis, all the views of the scholars discussed point to one notable position: change is an inevitable social phenomenon that must occur continuously. Change is driven by events, factors and other related factors such as pandemics, as in the case of this study. Sometimes changes are noticeable, sometimes they are accepted only after some hesitation and in other cases they are readily accepted. Some changes are triggered by positive factors, but the outcome can be negative and vice versa.

## 6.2 Digitalisation of Work Space

COVID-19 is linked to the increasing digitalisation of jobs in Nigeria, as some statistics show. For example, the International Labour Organisation (2022) reports: "The COVID-19 pandemic has led to remarkable changes in the workspace worldwide, and Nigeria is no exception. The impact has been significant and far-reaching, reshaping the organisation of production, workplace design, industrial relations, etc". The workspace in Nigeria has been affected in many ways. One of them is the shift or move away from face-to-face presence to remote working and improved digital displays and online patronage. The Nigerian government itself, both federal and state, has introduced what is known as, 'work from home'. The Federal Government, through the Presidential Task Force on COVID-19 in the country, had directed that civil servants in grade 12 and below should work from home to curb the spread of COVID-19 in Nigeria. The state governments followed suit a few days after the Federal Government's guidelines (Lassa, 2021). As part of the work from home guidelines, meetings were held online. Various social media applications such as Zoom, WhatsApp, Google Meet and other applications were used for public meetings, interviews, office meetings and other workplace activities. As in the public sector, the following people in the private sector were also instructed to work from home: Managers, experienced employees, skilled employees and employees with a high level of education (International Labour Organisation, 2022).

The International Labour Organisation (2022) reports that during the COVID-19 induced remote work or digital workplace, several private companies in Nigeria, namely 46 percent of companies, paid for certain items such as computers, internet connections and printers to cover the cost of employees working remotely. One important area that has seen rapid digitalisation during and after COVID-19 is the education system. Educational institutions, especially universities and private colleges, instructed all lecturers and students to resort to digital learning to avoid missing regular semesters. This allowed students to save an entire semester from March 2020 to July 2020 during the lockdown and travel ban (Ossai, 2020; Ebohon et al., 2021; Nneji et al., 2022). Unfortunately, due to the poor and inadequate facilities for learning, the Academic Staff Union of Universities (ASUU) strike and other related factors, public universities and other tertiary institutions, and the public schools missed this opportunity (Nneji et al. 2022). Although public institutions later caught up after the introduction of COVID-19 learning from home, it was slower and students lost a considerable amount of time from their studies. Spiritual or religious activities are another area that never recovered and experienced a high degree of digitalisation. During the lockdown, Ramadan fasting was observed without the usual 'Tafsir', 'Taraweeh' and 'Tahajjud' (Quranic exegesis, early and midnight prayers). Sunday church services and other

programmes were also abruptly halted. The prayers were broadcast live on social media such as Facebook, TikTok, WhatsApp, YouTube and mainstream media stations. After the ban was lifted in the post-COVID period, religious teachings are broadcast live and recorded continuously on these media channels. This is based on the researchers' personal experiences and observations of everyday life in Nigeria during and after COVID-19.

In addition, digital business, such as e-commerce, has increased online purchases of various goods by Nigerians and increased additional account opening and online transactions by at least 46 percent from 2020, according to Kemp (2020, 2021, 2022, 2023, 2024). This, Kemp (2024) notes, is directly related to the impact of COVID-19 and the politics of motivating digital technology. Politically, the electoral process, even if not directly related to COVID-19, is rapidly changing towards a digital process. This process already started in 2011 and was improved in 2015 with the introduction of Smart Card Readers (SCRs) and later with the Bimodal Verification Accreditation System (BVAS) in 2022 and 2023. It cannot be said that COVID-19 was the main motivation for the digitalisation of the electoral process in Nigeria. But the process must be seen as part of the increasing digital system and proliferation in the country. It is expected that Nigerians will be able to vote from home and in the diaspora in the next fifteen years thanks to the digitalisation of elections. Theoretically, the various views of the social change mantra as espoused by scholars are applicable here. The increasing paternalism in the workspace and the digitalisation of governmental and non-governmental processes are associated with the outbreak of COVID-19. To find alternatives, governments at various levels and private organisations resorted to changes in the digital workspace. This resulted in the landscape of the world of work in Nigeria changing consciously or unconsciously. This brought an increase in revenue and turnover for many companies.

However, as much as the digitalisation of workspace in Nigeria is a blessing, it also has negative consequences that are currently affecting the Nigerian digital space. As the digital workspace in Nigeria has increased since COVID-19 and the post-COVID-19 era, so has the incidence of cybercrime. According to the Nigerian Communications Commission (NCC), cybercrime costs the country an estimated 500 million dollars annually. The Economic and Financial Crimes Commission (EFCC), Nigeria's top anti-corruption agency, has seen a steady increase in the number of cybercrime prosecutions. Despite this, "The activities of corrupt individuals engaged in crimes still persist (Chioke, et al, 2023)." The EFCC's conviction rates have more than tripled in just three years. In 2020, the EFCC recorded 976 convictions. This figure rose to 2,220 convictions in 2021. This figure rose to 3,785 convictions by 2022. Even if not all of these figures can be linked to cybercrime, most of them are. According to the EFCC, for example, 80% of all convictions in 2021 were related to cybercrime (Sibe, 2024). This, according to Sule et al. (2024), discourages many Nigerians from patronising the digital space. The study (Sule et al.) further states that Nigeria, as the sixth most populous country, would have to record ten times its current digital performance if cyberspace was appropriately secured.

The loss of jobs is another consequence of the post-COVID-19 digitalisation process in Nigeria. Both government institutions and private organisations have discovered the direct benefits of using technology in the workplace, effectively replacing humans. With a youth unemployment rate already at 34 per cent, the trend is gradually increasing as financial institutions, online shops, public offices and digital marketers adopt digital processes and social media platforms for the workplace (Statista, 2025). Statista (2025) estimates that about 15 percent of jobs in Nigeria in the private sector was lost to digitalisation after COVID-19,

while several public offices have refused to fill vacancies because the digital workspace is now taking over.

## 7 Conclusion

Ultimately, the study perceived that the digital space and the transition from the analogue to the digital workspace are important, but not well captured by any study in the Nigerian context. To remedy this, work at home and the digital space were utilised, changing the world of work in Nigeria forever. In conclusion, COVID-19 is a rare example of a negative factor leading to positive changes in the area of digitalisation in Nigeria.

The study therefore recommends some practical policy measures. First, the government needs to strengthen cybercrime prevention measures and sanctions to make cyberspace safe and motivate the expansion of the digital space. Secondly, broadband and blockchain technology should be promoted to accelerate digital penetration in Nigeria and meet the requirements of the increasing demand for digital usage. This paper has contributed to the understanding of the subject matter of this paper. We therefore learned that COVID-19 pandemic has changed many aspects of social and economic life in Nigeria. Despite the worthy contributions of this paper, the paper is somewhat limited given that the views of critical stakeholders in Nigeria were not sampled to strengthen the arguments of the paper. Thus, future researches on this could adopt a mixed method approach in understanding the cardinal objectives of this paper.

## References:

**Abulude, F.O., & Abulude, I.A.** (2020). Impact of the COVID-19 Pandemic: Lessons from Nigeria. *UBRU Journal for Public Health Research*, 9(2), 160-173. <https://he02.tci-thaijo.org/index.php/ubrphjou/article/view/242590>.

**Aderemi, T. A., Ojo, L. B., Ifeanyi, O. J., & Efunbajo, S. A.** (2020). Impact of Corona Virus (COVID-19) Pandemic on Small and Medium Scale Enterprises (SMEs) in Nigeria: A Critical Case Study. *Acta Universitatis Danubius Economica*, 16(4). <https://www.ceeol.com/search/article-detail?id=936210>.

**Africa CDC** (2025). COVID-19 Surveillance Dashboard. *African Union*. Retrieved from <https://au.int/en/covid19> on 23rd February 2025.

**Ahmed, S. A. S., Ajisola, M., Azeem, K., Bakibinga, P., Chen, Y. F., Choudhury, N. N., & Yusuf, R.** (2020). Impact of the Societal Response to COVID-19 on Access to Healthcare for Non-COVID-19 Health Issues in Slum Communities of Bangladesh, Kenya, Nigeria and Pakistan: Results of pre-COVID and COVID-19 Lockdown Stakeholder Engagements. *BMJ Global Health*, 5(8), e003042. <https://gh.bmjjournals.org/content/5/8/e003042>.

**Ajide, K. B., Ibrahim, R. L., & Alimi, O. Y.** (2020). Estimating the Impacts of Lockdown on Covid-19 Cases in Nigeria. *Transportation Research Interdisciplinary Perspectives*, 7, 100217. <https://doi.org/10.1016/j.trip.2020.100217>.

**Akande-Sholabi, W., & Adebisi, Y. A.** (2020). *The Impact of COVID-19 Pandemic on Medicine*. Security in Africa: Nigeria as a Case Study. *The Pan African Medical Journal*, 35(Suppl 2), 73. <https://doi.org/10.11604/pamj.suppl.2020.35.2.23671>.

**Ake, C.** (1981). *A Political Economy of Africa*. London: Longman.

**Amare, M., Abay, K. A., Tiberti, L., & Chamberlin, J.** (2020). Impacts of COVID-19 on Food Security: Panel Data Evidence from Nigeria. *IFRI Discussion Paper 01956*, August 2020 (Vol. 1956). Intl Food Policy Res Inst.

**Amin, S.** (1977). *Imperialism and Unequal Development*. New York: Monthly Review Press.

**Andam, K., Edeh, H., Oboh, V., Pauw, K., & Thurlow, J.** (2020). Impacts of COVID-19 on Food Systems and Poverty in Nigeria. In *Advances in Food Security and Sustainability* (Vol. 5, pp. 145-173). Elsevier. <https://doi.org/10.1016/bs.af2s.2020.09.002>.

**Attah, N.E., & Sule, B.** (2022). "Social Media and Social Change in Africa". In Baikady, R., Sajid, S., Nadesan, V., Przeperski, J., Islam, M.R., & Gao, J. (Eds.), *The Palgrave Handbook of Global Social Change*, pp.1-20. Cham: Palgrave Macmillan. [https://doi.org/10.1007/978-3-030-87624-1\\_18-1](https://doi.org/10.1007/978-3-030-87624-1_18-1). Boudon, R. 1986). Theories of Social Change. Berkeley: University of California Press.

**Chakraborty, I., & Maity, P.** (2020). COVID-19 Outbreak: Migration, Effects on Society, Global Environment and Prevention. *Science of the Total Environment*, 728, 138882. <https://doi.org/10.1016/j.scitotenv.2020.138882>.

**Chioke, S.C., Agbodike, F.C & Nnaji, I.L.** (2021). Breaking the jinx of academic corruption for educational development in Enugu State: A focus on the COVID-19 ordeal. *Sapientia Foundation Journal of Education, Sciences and Gender Studies*, 3(3); 101 – 121 <https://www.sfjesgs.com/index.php/SFJESGS/article/view/208>.

**Chioke, S.C., Nwankwo, B.C., Okonkwo, I.V. & Agbodike, F. C** (2023). Economic and Financial Crimes Commission (EFCC) and war against White-collar Crimes in Nigeria. *Journal of Public Administration, Finance and Law*, 29: 97-110. <https://doi.org/10.47743/jopafl-2023-29-09>.

**Coleman, J.** (1990). *Foundations of Social Theory*. Harvard: Belknap Press.

**Contreras, R.R.** (2022). *COVID-19 and Digitalisation*. Eurofound. Retrieved from <https://www.eurofound.europa.eu/en/COVID-19-and-digitalisation> on 23rd February 2025.

**Ebohon, O., Obieno, A.C., Irabor, F.** (2021). Evaluating the Impact of COVID-19 Pandemic Lockdown on Education in Nigeria: Insights from Teachers and Students on Virtual/Online Learning. *Bull Natl Res Cent*, 45, 76. <https://doi.org/10.1186/s42269-021-00538-6>.

**Ezeibe, C. C., Ilo, C., Ezeibe, E. N., Oguonu, C. N., Nwankwo, N. A., Ajaero, C. K., & Osadebe, N.** (2020). Political Distrust and the Spread of COVID-19 in Nigeria. *Global Public Health*, 15(12), 1753-1766. <https://doi.org/10.1080/17441692.2020.1828987>.

**Fanon, F.** (1972). *The Wretched of the Earth*. London: Panaf Publishers.

**Farayibi, A., & Asongu, S.** (2020). The Economic Consequences of the COVID-19 Pandemic in Nigeria. *European Xtramile Centre of African Studies*, WP/20/042 (2020). <https://dx.doi.org/10.2139/ssrn.3637668>.

**Frank, A.G.** (1978). *Dependent Accumulation and Underdevelopment*. UK: Palgrave Macmillan.

**Haleem, A., Javaid, M., & Vaishya, R.** (2020). Effects of COVID-19 Pandemic in Daily Life. *Current Medicine Research and Practice*, 10(2), 78. <https://doi.org/10.1016/j.cmrp.2020.03.011>.

**Hampden-Turner, C., & Trompenaars, F.** (2021). *Culture, Crisis and COVID-19*. Newcastle: Cambridge Scholars Publishing.

**Ibn Khaldum, A.** (2020). *The Muqaddimah: An Introduction to History*. New Jersey: Princeton Classics.

**Inegbedion, H.** (2021). Impact of COVID-19 on Economic Growth in Nigeria: Opinions and Attitudes. *Heliyon*, 7(5). [https://www.cell.com/heliyon/fulltext/S2405-8440\(21\)01046-X](https://www.cell.com/heliyon/fulltext/S2405-8440(21)01046-X).

**International Labour Organisation** (2022). *The Next Normal: The Changing Workplace in Nigeria*. Geneva: International Labour Organisation.

**International Monetary Fund** (2020). *IMF Executive Board Approves US\$ 3.4 Billion in Emergency Support to Nigeria to address the COVID-19 Pandemic*. Abuja: IMF.

**Jacobs, E. D., & Okeke, M. I.** (2022). A Critical Evaluation of Nigeria's Response to the First Wave of COVID-19. *Bulletin of the National Research Centre*, 46(1), 44. <https://doi.org/10.1186/s42269-022-00729-9>.

**Jaumotte, F., Oikonomou, M., Pizzinelli, C., Tavares, M.M.** (2023). *How Pandemic Accelerated Digital Transformation in Advanced Economies*. IMF Blog (March 21, 2023). Retrieved from

<https://www.imf.org/en/Blogs/Articles/2023/03/21/how-pandemic-accelerated-digital-transformation-in-advanced-economies> on 23rd February 2025.

**Kemp, S.** (2018). *Digital 2018: Nigeria. Global Web Index* (1 February 2017). Retrieved from <https://datareportal.com/reports/digital-2018-nigeria?rq=Nigeria> on 23rd February 2025.

**Kemp, S.** (2019). *Digital 2019: Nigeria. Global Web Index* (31 January 2019). Retrieved from <https://datareportal.com/reports/digital-2019-nigeria?rq=Nigeria> on 23rd February 2025.

**Kemp, S.** (2020). *Digital 2020: Nigeria. Global Web Index* (18 February 2020). Retrieved from <https://datareportal.com/reports/digital-2020-nigeria?rq=Nigeria> on 23rd February 2025.

**Kemp, S.** (2021). *Digital 2021: Nigeria. Global Web Index* (11 February 2021). Retrieved from <https://datareportal.com/reports/digital-2021-nigeria?rq=Nigeria> on 23rd February 2025.

**Kemp, S.** (2022). *Digital 2022: Nigeria. Global Web Index* (15 February 2022). Retrieved from <https://datareportal.com/reports/digital-2022-nigeria?rq=Nigeria> on 24th February 2025.

**Kemp, S.** (2023). *Digital 2023: Nigeria. Global Web Index* (13 February 2023). Retrieved from <https://datareportal.com/reports/digital-2023-nigeria?rq=Nigeria> on 24th February 2025.

**Knezevic, I., Mattiuzzo, G., Page, M., Minor, P., Griffiths, E., Nuebling, M., & Moorthy, V.** (2022). WHO International Standard for Evaluation of the Antibody Response to COVID-19 Vaccines: Call for Urgent Action by the Scientific Community. *The Lancet Microbe*, 3(3), e235-e240.

**Kofi, B.** (2021). *Nigeria Leverages Lessons Learnt from Ebola Response in Fight Against COVID-19 Pandemic*. WHO: WHO Regional Office for Africa.

**Lassa, R.** (2021). “COVID-19: Work from Home Directive to Workers Below Level 12 to End Soon – SGF”. *Voice of Nigeria* (Jun 24, 2021). Retrieved from <https://von.gov.ng/COVID-19-work-from-home-directive-to-workers-below-level-12-to-end-soon-sgf/> on 24th February 2025.

**Leat, D.** (2005). *Theories of Social Change*. Berlin: Bertelsmann Stiftung Foundation: International Network for Strategic Philanthropy.

**Levy, M.J.** (1989). *Our Tempest Mother*. California: University of California Press.

**Lupton, D., & Willis, K.** (2021). *The COVID-19 Crisis: Social Perspectives*. London: Routledge, Taylor & Francis.

**Mazrui, A.A.** (1986). *The Africans: A Triple Heritage*. Boston: Little Brown and Company.

**Mbachu, C. N. P., Azubuike, C. M. C., Mbachu, I. I., Ndukwu, C. I., Ezeuko, A. Y. A., Udigwe, I.B., & Orji-Ifeanyi, E. N.** (2020). COVID-19 Infection: Knowledge, Attitude, Practices, and Impact Among Healthcare Workers in a South-Eastern Nigerian State. *The Journal of Infection in Developing Countries*, 14(09), 943-952. <https://doi.org/10.3855/jidc.13248>.

**McClelland, D.** (1961). *The Achieving Society*. New York: D. Van Nostrand Company Inc.

**McMichael, P.** (2017). *Development and Social Change: A Global Perspective*. London: Sage.

**Mogaji, E.** (2020). Impact of COVID-19 on transportation in Lagos, Nigeria. *Transportation Research Interdisciplinary Perspectives*, 6, 100154. <https://doi.org/10.1016/j.trip.2020.100154>.

**Naseer, S., Khalid, S., Parveen, S., Abbass, K., Song, H., & Achim, M.V.** (2023). COVID-19 Outbreak: Impact on Global Economy. *Frontiers in Public Health*, 10, 1009393. <https://doi.org/10.3389/fpubh.2022.1009393>.

**Nkrumah, K.** (1965). *Neocolonialism: The Last Stage of Imperialism*. London: Thomas Nelson & Sons.

**Nneji, C. C., Urenyere, R., Ukhurebor, K. E., Ajibola, S., & Onaseso, O. O.** (2022). The Impacts of COVID-19-Induced Online Lectures on the Teaching and Learning Process: An Inquiring Study of Junior Secondary Schools in Orlu, Nigeria. *Frontiers in Public Health*, 10, 1054536. <https://doi.org/10.3389/fpubh.2022.1054536>.

**Nyerere, M.J.** (1986). *Ujamaa: Essays on Socialism*. London: Oxford University Press.

**Ossai, E. N.** (2020). Impact of COVID-19 on Medical Education and the Challenges: How Prepared is Nigeria?. *The Pan African Medical Journal*, 37(Suppl 1), 45. <https://pmc.ncbi.nlm.nih.gov/articles/PMC7846256/>.

**Parsons, T.** (1991). *The Social System*. London: Routledge, Taylor & Francis.

**Priya, S. S., Cuce, E., & Sudhakar, K.** (2021). A Perspective of COVID 19 Impact on Global Economy, Energy and Environment. *International Journal of Sustainable Engineering*, 14(6), 1290-1305. <https://doi.org/10.1080/19397038.2021.1964634>.

**Puplampu, K.P., Hanson, K.T., & Arthur, P.** (2023). *Sustainable Development, Digitalisation, and the Green Economy in Africa Post COVID-19*. Cham: Palgrave Macmillan.

**Rana, U., & Govender, J.** (2022). *Exploring the Consequences of the COVID-19 Pandemic: Social, Cultural, Economic, and Psychological Insights and Perspectives*. London: CRC Press.

**Rodney, W.** (1972). *How Europe Underdeveloped Africa*. London: Panaf Publishers.

**Rostow, W.W.** (2004). *The Stages of Economic Growth: A Non-Communist Manifesto*. New York: Cambridge University Press.

**Schwab, K., & Malleret, T.** (2024). *COVID-19: The Great Reset*. New York: Forum Publishing.

**Shrestha, N., Shad, M. Y., Ulvi, O., Khan, M. H., Karamehic-Muratovic, A., Nguyen, U. S. D., Baghbanzadeh, M., Wardrup, R., Aghamohammadi, N., Cervantes, D., Nahiduzzaman, K.M., Zaki, R.A., & Haque, U.** (2020). The impact of COVID-19 on globalization. *One Health*, 11, 100180. <https://doi.org/10.1016/j.onehlt.2020.100180>.

**Sibe, R.T.** (2024). “Cybercrime and the Challenge of Static Legislations in Nigeria”. *Forbes* (Apr 29, 2024). Retrieved from <https://www.forbes.com/councils/forbestechcouncil/2024/04/29/cybercrime-and-the-challenge-of-static-legislations-in-nigeria/> on 24th February 2025.

**Siollun, M.** (2021). *What Britain Did to Nigeria: A Short History of Conquest and Rule*. London: C. Hurst Publishers Limited.

**Spengler, O.** (2014). *The Decline of the West*. London: Random Shack.

**Sorokin, P.A.** (1990). *Social and Cultural Dynamics: A Study of Change in Major Systems of Art, Truth Ethics, Law and Social Relationship*. London: Routledge, Taylor & Francis.

**Statista** (2025). *Digital & Connectivity Indicators – Nigeria*. Retrieved from <https://www.statista.com/outlook/co/digital-connectivity-indicators/nigeria> on 22nd February 2025.

**Sule, B., Sambo, U. and Yusuf, M.** (2024). Countering Cybercrimes as the Strategy of Enhancing Sustainable Digital Economy in Nigeria. *Journal of Financial Crime*, 30(6), 1557-1574. <https://doi.org/10.1108/JFC-07-2022-0157>.

**Toynbee, A.J.** (1989). *A Study of History*. London: Thames & Hudson Limited.

**UNDP** (2020). *Pandemic in Nigeria: Potential Impact of Lockdown Policies on Poverty and Well-Being*. Policy Brief 3 April 21, 2020. Abuja: UNDP.

**Usman, S. O., Esomchi, O. S., Nasiru, I. M., & Daniel, A. V.** (2024). An Assessment of COVID-19 and its Impact on Nigeria’s Socio-Economic Development. *Cogent Social Sciences*, 10(1). <https://doi.org/10.1080/23311886.2024.2306700>.

**Worldometer** (2025). *COVID-19 Coronavirus Pandemic: Coronavirus Cases*. Retrieved from <https://www.worldometers.info/coronavirus/#countries>. Retrieved on 23rd February 2025 at 08:39 pm.

**Author's Address:**

Babayo Sule, Ph.D.  
Department of Political and Administrative Studies,  
National University of Lesotho, Roma  
[babayosule@gmail.com](mailto:babayosule@gmail.com)  
<https://orcid.org/0000-0002-3879-4884>

**Author's Address:**

Stephen Chinedu Chioke  
Department of Public Administration  
Legacy University, Okija  
[eruditescholar001@gmail.com](mailto:eruditescholar001@gmail.com)  
<https://orcid.org/0000-0002-5337-452X>