

THE INTERSECTION OF INFORMATION TECHNOLOGY GOVERNANCE AND CORPORATE DIGITAL TRANSFORMATION: LEGAL AND GOVERNANCE CONSIDERATIONS.

By:

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Abstract

The use of Artificial intelligence, Blockchain Technology and other digital transformational solutions by companies for business advancement in Nigeria is fast becoming a norm. This evolving movement as carried with it immense benefits and also setbacks. In as much as digital transformational solutions are important for the advancement of commercial growth and visibility, corporate organizations need to be aware of its intricacies, legal implications and the required digital/ Information Technology (IT) governance structuring to facilitate technological business operations. This paper seeks to review the essentiality of digital and IT governance structures in companies to enable effective electronic solutions for corporate entities in Nigeria. It further weighs the state and place of law, policy and regulation in meeting the demands of a digitalized corporate business framework within Nigeria in comparison with South Africa. South Africa is being used because of its robust legal template on IT governance.

Keywords

Artificial Intelligence, Digital transformation, IT governance, Law, Blockchain Technology, Nigeria.

1. Introduction

The era of the covid 19 pandemic has brought to reality the prominence of technology in business advancement and corporate practice. A major lesson learnt from the covid 19 era is technology is a lifeline for sustainable and future thinking companies and businesses

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which cannot be disregarded. Consequently, various companies are embracing digital transformation with the mindset that technology has come to stay in business transactions and relationships. Companies that trivialised digitalisation prior to the covid19outbreak havebegun toconsider (post covid) and set up digital transformation structures in place to meet up with the increasing standard and upgrade. Furthermore, the covid 19 pandemic has led to a surge in digitalisation in various fields, including corporate governance.Although such digital initiatives were adopted out of necessity rather than design, companies are more prone to severe cyberattacks and digital security threats. This highlights the necessity for companies to implement productivity-boosting strategies and structures to direct the organization on corporate digital transformation, legal and governance issues.

1. Conceptual clarification

It is imperative to define key terms and clarify the concepts that will be referred towithin the context of the research article namely: Digital transformation/ Digitalization, Enterprise governance, corporate governance, Digital governance, IT governance, Artificial intelligence, and Block chain technology.

a. Digital Transformation/ Digitalization:

A.J Reusch!, M.A Deist, A Maalaoui, A, *Digital transformation during a pandemic: Stretching the organizational elasticity.*(J ournal of Business Research, 2022) 144:1320-1332. from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9754622/> as accessed on 26'June 2024; Kadir Varoglu, Goner Gokten, Burak Ozdogan , "Digital Corporate Governance: Inevitable Transformation"Umit Hacioglu, Tamer Aksoy (ed), Financial Ecosystem and Strategy in the Digital Era: Global Approaches and New Opportunities, (Chapter I 0,June 2021) 219-236@ 223 from https://www.researchgate.net/publication/352386759_Digital_Corporate_Governance_Inevitable_Transformation accessed on 9th September, 2024. C. Mihu, A. Pitic, D. Bayrakta, 2023. *Drivers of Digital Transformation and their impact on Organizational Management.* (Studies in Business and Economics, 2023) 18(I):149-170 @156, from https://www.researchgate.net/publication/370793249_Drivers_of_Digital_Transformation_and_their_Impact_on_Organizational_Management#full-textaccessed on 26"May, 2024

OECD, 2022. *Digitalisation and Corporate Governance: Background note for the OECD-Asia Round table on Corporate Governance* (2022) 1-22 @4, from <https://www.oecd.org/corporate/background-noteAsia-roundtable-digitalisation-and-corporate-governance.pdfas> accessed on 27'May, 2024

Digital transformation (DT) is the process of leveraging novel electronic technologies like cloud, blockchain, mobile, artificial intelligence, and the web to optimize business operations, boost customer satisfaction, and develop new business models. It is adopting a fresh viewpoint and changing an organization's culture to incorporate the most recent digital technology innovations. The process of integrating digital technologies into every aspect of a company's business to radically alter how it runs, manages workflow, and provides value to clients is known as corporate digital transformation. Cultural change, workforce transformation, automation of processes, innovative business models, data-driven decisions, digital product development, and customer experience transformation are all involved. In simple words, companies embracing digitalization to advance their business is Corporate Digital Transformation (CDT).

Digitalization is the process of converting a business to a digital one. It involves using digital technologies to alter a business model and offer new chances for revenue and value creation. In a corporate environment that is shifting rapidly, digital transformation helps businesses to maintain innovation, increase efficiency, lower costs, and maintain their competitiveness.

a. Enterprise Governance:

Enterprise governance is the set of responsibilities and practices exercised by the Board and executive management with the aim of providing strategic direction, ensuring that objectives are achieved, assuring that risks are managed appropriately, and verifying that the enterprise's resources are used responsibly. It is a framework that directs and controls entities to accomplish their main objectives while minimizing risk. Enterprise governance has the power to affect the opportunities that businesses decide to take advantage of, especially when technology develops markets, modifies consumer demand, and affects how goods and

H. Huang, C. Wang, L. Wang, L. Yarovaya, 2023. *Corporate digital transformation and idiosyncratic risk: Based on corporate governance perspective* (Emerging Markets Review, 2023) 56, from <https://www.sciencedirect.com/science/article/abs/pii/S156601412300050Xas> accessed on 26th June, 2024

C. Tanushev, *Digital Transformation: The Impact on Corporate Strategy*. (Economic Alternatives, 2022) 3: 383-404@383

Gartner, Information Technology Glossary[Online] (2021) from <https://www.gartner.com/en/information-technology/glossary/digitalization> as accessed on 26th June 2024

IT Governance Institute. 2001. *Board Briefing on IT Governance* (2001) 33 from <http://www.itgi.org> as accessed on 1st September, 2003; C.C. Ekeigwe, C.C, 'IT governance responsibilities on the board and management 'Oladimeji Alo, Ph.d (ed), Issues in Corporate governance, (Financial Institutions Training Centre. Lagos 2003)101-125@ 101, 102

services are created and delivered. Enterprise governance is the broader framework that encompasses all aspects of governance within organizations: corporate governance, IT governance, Data governance, Digital governance, Risk governance, compliance governance, financial governance and operational governance.

c. Corporate Governance:

This is a system that sets how companies are being directed and controlled. Brian Coyle defines it as:

"...the way in which companies are governed and to what purpose. it is concerned with practices and procedures for trying to ensure that a company is run in such a way that it achieves its objectives, ... maximize the wealth of its shareholders subject to various guidelines and constraints and with regard to other group or individuals with an interest in what the company does.

Effective corporate governance is hinged on the principles of accountability, transparency, responsibility and fairness. The main issues that corporate governance addresses are: financial reporting and auditing; directors' remuneration; company - stakeholder relations; Risk-taking and risk management; effective director-shareholders communication; ethical conduct and corporate social responsibility.

a. IT Governance

Information technology can be defined as the technology for gathering, handling, processing, storing and accessing data. IT (Information Technology) Governance has been defined by the Information Technology Governance Institute as *"the responsibility of the board of directors and executive management. It is an integral part of enterprise governance and consists of the*

Ibid

¹⁰ Tayyab Choudhry, 'Introduction to Enterprise and IT Governance [1]' (2021) from <https://www.linkedin.com/pulse/introduction-enterprise-governance-l-tayyab/> accessed on 8th September, 2024

A. Cadbury, *Report of the Committee on the Financial Aspects of Corporate Governance*. (Gee Print, London 1992)

¹² Brian Coyle, *Corporate governance* (ICSA Publishing, London Second Edition, 2012) 3.

¹³ Op cit Kadir Varoglu, Goner Gokten, Burak Ozdogan Pg. 220

¹⁴ Op cit Coyle Pg. 21

¹⁵ IT Governance. In: Enterprise Governance and Enterprise Engineering. *The Enterprise Engineering Series*,

(Springer, Berlin, Heidelberg, 2009) 189 from https://link.springer.com/chapter/10.1007/978-3-540-92671-9_6 as accessed on the 10th September, 2024.

leadership and organizational structures and processes that ensure that the organization's IT sustains and extends the organization's strategy and objectives". Enterprise governance drives and sets the framework for IT governance. IT governance is the organisational ability used by the Board, executive management, and IT management to supervise the development and application of IT strategy and guarantee the integration of IT and business. The crucial component is establishing a framework made up of best practices-compliant structures, procedures, and mechanisms that merges business and IT to drive the creation of business value. Risk management, value delivery, and IT strategic alignment should all be included in such framework. IT governance is essential to the digital transformation process because it offers the risk management framework, performance metrics, and strategic direction needed to navigate the demanding and complicated path of digital transformation.

Digital Governance: is a comprehensive framework for establishing accountability, roles (who handles and owns the digital processes? Who and what legitimize the allocation of responsibilities?), and decision-making authority, that sets the digital strategy, policy and standards for an organization's digital presence. It is an extensive approach that covers an organization's whole digital environment and how it contributes to risk management, compliance, and overall strategy. It includes the development and management of digital products, services, data governance and analytics, digital marketing and customer experiences, cybersecurity, digital ethics, and compliance. It also

¹⁶ IT Governance Institute, 'Board Briefing on IT Governance' (2001) from <http://www.itgi.org>, as accessed September,2003; OpcitEkeigwePg 102

¹⁷ Ibid

¹⁸ W.V. Grembergen, *Introduction to the Minitrack IT Governance and Its Mechanisms* (Proceedings of the 35th Hawaii International Conference on System Sciences 2002)

¹⁹ S. De Haes, W.V. Grembergen, 2004. IT governance and its mechanisms. *Information Systems Control Journal*(2004)1: 27-33@32.

²⁰ M.Gheorghe ,Audit Methodology for IT Governance. *InformaticaEconomica*(2010), 14(1): 32-42@33.

²¹ G. Heymann, Navigating Digital Transformation: The Indispensable Role of IT Governance (2023) from <https://www.linkedin.com/pulse/navigating-digital-transformation-indispensable-role-gustav-heymann/as> accessed on July 30th,2024

²² Opcit Kadir Varoglu, Goner Gokten, Burak OzdoganPg. 209

²³ L.Welchman, What Is Digital Governance? (2017) from <https://digitalgovernance.com/dgblog/what-is-digital-governance/as> accessed on 30th July, 2024 ; L. Welchman, *The Basics of Digital Governance in Managing Chaos: Digital Governance by Design* (New York: Rosenfield Media, 2015), 11-18

- a. covers the management and oversight of all digital assets, resources, and services. Digital governance is a crucial and advanced component that includes IT governance.
- b. **Artificial intelligence** The term 'Artificial Intelligence' (AI) describes the capacity of a computer or a robotic system with computer capabilities to analyse information and generate outcomes that are comparable to the way humans think when making decisions, learning new things, and resolving issues. Business productivity has been shown to increase with AI, which also decreases time and costs, reduces human error, facilitates quick decision-making, forecasts customer preferences, and expands sales using data analysis and automation.
- c. **Blockchain Technology:** A Blockchain is a shared database that allows users to transact valuable asset-related business in a public, anonymous environment with no need for an intermediary or centrally managed authority. By itself, blockchain is a publicly accessible register. Because a blockchain lacks a central authority or third party to regulate the system, all transactions must be visible to the general public. Every user has access to a download of every blockchain, which includes every transaction made since the blockchain was created. Manipulating the register would require a global alteration to its previous history; every active node's version of the blockchain also would have to be compromised. Such a change would demand a massive amount of processing power.

By keeping the data on computers and under the observation of global stakeholders, it is ensured that no one entity, business executives or cybercriminals alike may exert control over the network. Blockchain technology's decentralized structure, rapidity, safety, and transparency make it indispensable for corporate governance professionals. Blockchain technology can be

²⁴ William Delone, Demetria Migliorati, Giovanni Vaia . 'Digital IT Governance'(2018) 205-230 from www.researchgate.net as accessed on 31"August, 2024

²⁵ V. Jain, An Impact of Artificial Intelligence on Business. *International Journal of Research and Analytical Reviews*, (2019) 6(2): 302-308@302, 308.

²⁶ Ibid

²⁷ I. Ivaninskiy, The Impact of the Digital Transformation of Business on Corporate Governance. An Overview of Recent Studies . *Journal of Corporate Finance Research*, (2019) 13(3) : 35-47 @36-37 from <https://cyberleninka.ru/article/n/the-impact-of-the-digital-transformation-of-business-on-corporate-governance-an-overview-of-recent-studiesas> accessed on 30"July, 2024

used to address the problem of companies not being able to keep accurate and current records of who owns their shares, which will shorten settlement times. Companies are enabled to source their operations using digital financing instruments by virtue of blockchain technology's ability to coordinate the emissions of digital securities.

As blockchain and AI are ingrained in various business processes globally, their effects also affect corporate governance practices, either directly or indirectly. For instance, through autonomous business systems, improved integrated reporting, computer-assisted board decisions, and a voting procedure based on blockchain infrastructure. In some cases, AI has occasionally been appointed as a board member. Regarding accountability, a variety of board agenda items include the use of AI and the digitalization of companies, along with a number of related questions. It's pertinent that technologies be used ethically and fairly when integrating them into businesses.

It has been stated that the current, rapidly evolving effects of digital transformation on companies may require more than the conventional IT governance template. Consequently, in today's new digital enterprises, the conventional understanding of IT governance might cease to be valid. This is because the mechanical method of IT governance is inappropriate for today's businesses because Digital Transformation is much more than just a technological shift. The idea of Digital Transformation refers not only to a new interaction between technology and its users, but also to a shift in the way individuals engage in the production of value and how a company executes business. A more robust governance framework which is Digital IT governance is most appropriate. This view is apt and recommended for companies as a blend of digital governance and IT governance (Digital IT governance) mechanisms will enhance a more efficient governance system to drive corporate digital transformation and its complexities.

²⁸ H. Singh, G. Jain, A. Munjal, S. Rakesh, Blockchain Technology in Corporate Governance: Disrupting Chain Reaction or Not? *Corporate Governance*, (Emerald Publishing Limited 2020) 20(1): 67-86 @ 67,

²⁹ E. Khoshimov, F. Makhmudaliev, Digital Transformation of Corporate Governance In Uzbekistan: Current State, Challenges And Perspectives, *International Finance and Accounting*: (2020) 6: 3from<https://uzjournals.edu.uz/interfinance/vol2020/iss6/3>as accessed on 13thAugust 2024

³⁰ R. Wile, A Venture Capital Firm Just Named An Algorithm To Its Board Of Directors -Here's What It Actually Does.(May 13, 2014) from<https://www.businessinsider.com/vital-named-to-board-2014-5?r=US&IR=T>as accessed on 28thJune 2024

³¹ Op cit Kadir Varoglu, Goner Gokten, Burak Ozdogan Pg. 226,228

³² Ibid Pg 206,214

³³ Ibid Pg. 206

1. Literature Review

Researchers have written on digital transformation in line with other concepts. According to *Khoshimov and Makhmudaliev*, as a result of current trends, all aspects of the economy will need to undergo a digital transformation in order to meet stakeholder demands. Additionally, corporate governance is not immune to digitalization. Utilising digital innovations like block chain networks can also make it possible to use other financing methods like peer-to-peer financing, crowd funding, and the issuance of token-based securities, which will make a country's investments more appealing globally. The objectivity and transparency of corporate operations are improved by these technologies. Singh, Jain et al in their article on blockchain and corporate governance explain that using blockchain technology can essentially enhance every facet of corporate governance, such as safer and more accurate proxy voting, better ownership transparency, reduced chances of fraud in businesses by providing a comprehensive audit trail, and enhanced efficiency through the removal of administrative burdens. Under a blockchain regime, corporate governance may alter and gain from various aspects in different ways.

Chen and Hao's work viewed digital transformation from the angle of board characteristics and environmental performance. From their research, the environmental performance of companies can be greatly enhanced by digital transformation. While board of directors demonstrated a low willingness to embrace digital transformation despite having a diverse mix of ages, nationalities, shareholding patterns, and political ties. On the other hand, boards characterized with a greater proportion of female directors and higher educational backgrounds favoured digital transformation strategies. The primary focus of Tanushev's article is how to modify a company's strategy to fit the demands of digital transformation. This involves considering four different angles, each with distinct goals: financial, customer, business process, and corporate capacity. To implement a corporate strategy, coordination is essential.

This paper seeks to highlight: the importance of digital transformational solutions for businesses; the intersection between digitalization, companies, governance and the law in Nigeria.

³⁴ Op cit E. Khoshimov, F. Makhmudaliev, Pg. 1

³⁵ Op cit H. Singh, G. Jain, A. Munjal, S. Rakesh Pg. 82.

³⁶ P. [Chen, Y. Hao](#). Digital transformation and corporate environmental performance: The moderating role of board characteristics. *Corporate Social Responsibility and Environmental Management* (2022) 29(5): 1757-1767

³⁷ Ibid

³⁸ Op cit C. Tanushev Pg. 383

Additionally how boards and stakeholders of companies can cautiously utilize these digital solutions without crossing legal boundaries. Also the article emphasizes on the need for digital and IT structuring as governance tools in corporate organizations and businesses. The article is divided into the following sections: Section one to four of the article is the introduction, conceptual clarification of relevant terms, literature review and methodology, while section five to ten of the article discusses; the impact of digital transformation in companies, the components of IT governance, legal insinuations of IT governance and corporate digital transformation, the role of the board of directors in IT and Digital governance, lessons from south Africa and conclusion.

1. Methodology

The Methodology adopted is doctrinal research with the utilization of primary and secondary sources of data. Primary data: Nigerian Code of Corporate governance 2018, Companies and Allied Matters 2020, Digital laws in Nigeria, Data privacy law, Intellectual Property laws in Nigeria and Kings Code of Corporate governance IV of South Africa. Secondary sources are: Journals, Newspaper publications, Internet sources and reports.

The theories utilized are: the sociological school theory of law (which expresses that the law is impacted by the society vice versa) on the one hand, and agency theory of corporate governance (which portrays a principal agent relationship in the governance of companies).

2. Impact of Digital Transformation in Companies

In the current digital era, digital transformation has emerged as a crucial subject for forward-thinking companies looking to maintain their competitiveness. Digital technologies are strategic to transforming traditional business practices and upending entire industries because of their unique features, accessibility, and integrated potential. Future business success may be significantly influenced by the efficient management of digital technologies, and the prompt and successful application of digital strategies is an essential component.

Digital transformation adds lasting value to the organization and impacts stakeholders as well as corporate structures. Because digitalization ensures that the information stakeholders need and

³⁹ M. Spremick, Governing digital technology- how mature IT governance can help in digital transformation?
International Journal of Economics and Management Systems. (2017) 2: 214-223

demand is transparent, timely, and accurate, it provides a more developed structure for responsibility and accountability. Businesses that embrace digital transformation are more customer-focused, productive, efficient, highly advanced in technology, and knowledge-driven. While there are many advantages of digital transformation for corporate law and corporate governance, including better work execution, stronger interaction with stakeholders, and even more, reliable cybersecurity is essential for safeguarding the company's assets, keeping an eye on cyber risk, and creating a robust cyber mechanism for corporate governance. Effective IT governance also necessitates strict cyber security laws. Examples of digital solutions suitable for business and corporate organizations are: Blockchain technology, artificial intelligence and more. Examples of trending digital transformation solutions are: Blockchain technology and artificial intelligence. By leveraging communication technologies and other cutting-edge technologies, digital transformation impacts not only a company's operations but all of its stakeholders, including shareholders, management, and suppliers. Because digitalisation ensures that the information stakeholders need and want is transparent, timely, and accurate, it creates a more developed framework for responsibility and accountability. By transforming the organisation to capitalise on its current core competencies or forge new ones, digital transformation gives a competitive advantage by facilitating cross-border relationships with vendors, clients, and competing companies.

It is noteworthy that the digital age has brought with it vital emerging responsibilities for corporate organizations known as Corporate Digital Responsibilities (CDR). CDR are: company's emerging responsibilities related to their digitalization-related impacts, risks, challenges, and opportunities. These CDR responsibilities are: Economic responsibilities (making profit as an organization by creating innovative business models that sustains the company in a highly competitive terrain); Legal responsibilities (compliance with laws and

⁴⁰ Op cit Kadir Varoglu, Goner Gokten, Burak Ozdogan Pg. 219-236

⁴¹ Op cit C. Tanushev Pg. 403

⁴² **S. Veeramani, R.P.N Rong, S. Singh, 2019.***Digital Transformation and Corporate Governance in India: A Conceptual Analysis. "Navigating Cyberspace for Socio- economic Transformation and Redefining Management in Light of Digital Economy"* (Proceedings of the 8th International Conference on Management and Economics 2019) 1-160@ 156 from https://www.researchgate.net/publication/339326554_Digital_Transformation_and_Corporate_Governance_in_India_A_Conceptual_Analysis as accessed on 5th August, 2024

⁴³ Op cit Kadir Varoglu, Goner Gokten, Burak Ozdogan Pg. 219

⁴⁴ E. Robinson, Increasing competitive threats are driving digital transformation. *Technology Record*. (2017) from <https://www.technologyrecord.com/Article/increasing-competitive-threats-are-driving-digital-transformation-60443> accessed on 6th September, 2024; Op cit C. Mihu, A. Pitic, D. Bayrakta Pg 151

regulations relating to digital technologies and data protection); ethical responsibility (doing what is just and fair, pursuing ethical digital practices) and philanthropic responsibilities (being a good corporate citizen by sharing knowledge, technologies and data to enhance sustainable development). Other issues in CDR are environmental CDR (which includes companies managing digital technologies in a sustainable way that preserves the environment) and social CDR (forming alliances and collaborations in the corporate ecosystem towards delivering high performance services and results) and governance CDR (ensuring transparency, accountability and responsibility in the handling of data).

With these digital transformation realities, it is important that companies set a well-designed Digital IT governance structure for their organization to mitigate risk and fluidity of its digital processes. As suitable as the benefits of digitalization are, companies must be aware of the legal implications that digitalization and IT governance brings with it. Businesses are positively enabled and made easier by digital solutions and processes. Digitalization brings ease to corporate governance. However, it has been argued that the digitalization bears with it consequences such as cybercrime; unreliability of digital systems; risks to data security; challenges with ownership of data and privacy; increased consumption of electricity and electronic waste leading to a higher environmental impact and discrimination through prejudiced artificial intelligence and more. Where the relevant governance and legal systems are in place, these threats can be mitigated and managed. This is the point where effective IT governance mechanisms, digital governance, legal structures come to application.

1. Constituents of IT and Digital governance.

The place of IT governance structures in company is to enable digital transformation and technological solutions in companies. For businesses to be prepared for the digital shift, they must act swiftly to enhance IT governance. IT governance mechanisms could be highly

⁴⁵ C. J. Herden, E. Alliu, A. Cakici *et al.* Corporate Digital Responsibility. *NachhaltigkeitsManagementForum*(2021)29:13-29 from <https://link.springer.com/article/10.1007/s00550-020-00509-x#citeasaccessedonJune26th2024>

⁴⁶ Op cit I. Ivaninskiy, Pg 36-37

⁴⁷ Op cit Herden, C.J., Alliu, E., Cakici, A. *et al.* Pg. 13-29

advantageous for businesses looking to adopt digital transformation. It is pertinent to note that an IT governance framework of a company must be protected against unwanted access.

An ideal Digital governance structure will reflect accountability, responsibility and definition of roles. This will highlight which team is responsible for what aspect of digital governance (strategy, policy, processes or workflow, setting guidelines and standards. Digital governance is rested on pillars of: an effective digital governance framework that reflects strategy risk, budgeting and resource management; stakeholder engagement; data protection and security; ethical decision making; leadership, integration and partnership workings.

The components of an ideal IT governance framework are: IT value and alignment, Accountability, Performance measurement and monitoring, Risk management. Furthermore, it strategy and planning, communication and stakeholder management, compliance and regulatory management, security and privacy, resource management, continuous improvement/ review of the framework are other essentials in an ideal IT governance framework. The framework ought to provide guidance to the company on how to decide on IT-related matters, develop strategies, and notify stakeholders of developments.

1. Legal Insinuations for Corporate Digital Transformation

There is no centralized, integrated law on Information Technology in Nigeria. However, there are various legal frameworks on different aspects of technology and corporate practice in Nigeria relevant to corporate digital transformation namely: Nigeria Data Protection Act (NDPA) 2023, National Information Technology Development Agency (NITDA) Act 2007, Cybercrimes

⁴⁸ Op cit M. Spremici Pg. 214- 223

⁴⁹ Op cit Ekeigwe Pg 125

⁵⁰ Josh Tong. Key components of digital governance in organizations. (November 2017) from <https://www.joshtong.io/blog/2017/11/14/key-components-of-digital-governance-in-organizations> accessed 23'daugust, 2024;

⁵¹ Good governance Institute, The five pillars of digital governance (25 July 2022) from <https://www.goodgovernance.org.uk/publications/insights/the-five-pillars-of-digital-governance> accessed on August 22, 2024.

⁵² Mario Spremici, Zlatan ZmirakKrunoslav Kraljevic. IT governance and performance measurement: research study on Croatian companies (2008) from www. Researchgate. net as accessed 22 August 2024; Op cit M. Gheorghe; S. De Raes, , W. Van Grembergen, (2009). *Enterprise Governance of Information Technology.* (2009) 6, 13 from <https://www.researchgate.net/publication/297464902> *Enterprise governance of information technology! Achieving strategic alignment and valueas* accessed on 8th September, 2024

Act (Prohibition, Prevention Etc.) Act 2015, Nigerian Communication Commission Act 2003, Companies and Allied Matters Act, 2020 , Industry Specific laws such as the Central Bank of Nigeria Act 2007, Bank and Financial Institutions Act 2020, Securities and Exchange Commission Rules 2013 etc.

The applicability of digitalization in businesses reflects in various areas of a company. Such as: in the operations (through the use of technological processes to enhance the operations of the business), use of AI assistants, online trading, digital marketing (use of social media and other platforms), virtual meeting and stakeholder engagements, innovations, customer service, Fintech in Banks and financial institutions, startups just to mention a few. The Nigerian law recognizes the use of technology in businesses.

In Nigeria, the Companies and Allied Matters Act (CAMA) 2020 introduced provisions on, and acknowledging the use of certain digital forms in companies in Nigeria. **Section 101** provides for the use of electronic signatures in companies; documents requiring authentication by a company can be electronically signed by designated/authorized officers of the company and same will be accepted as satisfying the requirement for signing. **AlsoSection 240** provides for Electronic/ virtual meetings for private companies. Private companies meetings do not need to hold their general meetings physically or in person and specific location which must be in Nigeria, implying that such meetings are deemed properly constituted. Also registration and incorporation of companies, filing of annual returns and other regulatory compliance processes to the corporate affairs commission can be conducted virtually. These provisions are laudable as they enrich the ease of doing business, nevertheless these may come with challenges such as cyber security threats, data privacy issues (as a lot of corporate documents and data will be in the digital space), technical issues in accessing the CAC portal among others. It is noteworthy that **Section 84 of the Evidence Act, 2011** allows the admissibility of computer generated documents as evidence in court.

Companies should be aware of the legal facets of digitalization, and the repercussions on their corporate strategy. The following are some highlighted legal themes that may arise from corporate digital transformation:

a. **Data privacy:**

One of the implications of corporate digital transformation is that companies will interact more with data either in the capacity as data controllers, data processors among others. Consequently, it is necessary for companies to manage data ethically, considering legal provisions on data protection and privacy so as to avoid liabilities. Still, it is required by the law that the consent of data subjects be obtained where the need arises. The legal framework for data protection and privacy in Nigeria is the Nigerian Data Protection Act, 2023 (NDPA) which has the basic legal template for the protection of personal information of natural persons residing or doing business in Nigeria.

The Act addresses a number of issues, including the establishment of the Nigeria Data Protection Commission (the "Commission") as an independent body to oversee and regulate data protection matters and enforce compliance with the Act's provisions. It also addresses the rights of data subjects, data security, cross-border transfer of personal data, requirements for data controllers and data processors of major importance, compliance, infringements, penalties, and dispute resolution. The act established requirements for data processors and controllers, including NDPC registration. Furthermore, it was held in the case of *Incorporated Trustees of Digital Rights Lawyers Initiative & Ors v. National Identity Management Commission* that personal data protection as provided in the NDPR generally falls under the fundamental right to privacy guaranteed in **Section 37 of the Constitution of the Federal Republic of Nigeria**. The right to privacy extends to protection of a citizen's personal data - *Incorporated Trustees of Digital Right Lawyers Initiative v. L. T.Solutions & Multimedia Limited*.

⁵³ D.M Chika, E.S. Tochukwu, E. S. An analysis of data protection and compliance in Nigeria. *International Journal of Research and Innovation in Social Science* (2020) IV(V), 377-382 @380 from https://scholar.google.com/scholar?hl=en&as_sdt=0%2CS&q=1.%09An+Analysis+of+Data+Protection+and+Compliance+in+Nigeria+Michael+D+I+Y+O+K+E+Chika+International+Journal+of+Research+and+Innovation+in+Social+Science+%28IJRISS%29+%7CVolume+IV%2C+Issue+V%2C+ May+2020%7CISSN+2454-6186+Divoke+Michael+Chikal+%2C+Edeh+ Stanley+Tochukwu+377-382.&btnG as accessed on 18thJuly 2024

⁵⁴ Federal Republic of Nigeria Official Gazette, No. 119 Lagos-1st July, 2023 Vol. 110 from https://ndpc.gov.ng/Files/Nigeria_Data_Protection_Act_2023.pdf as accessed on 9thSeptember, 2024

⁵⁵ Solomon Okedara, Olumide Babalola , Irene Chukwukelu, Digital Rights in Nigeria: Through the Cases: (CI PLUS Limited, 2022) 68; Suit No. AB/83/2020 (delivered by Honourable Justice A.A.Akinyemi)

⁵⁶ Suit No. HCT/262/2020 Unreported judgement of the High Court of Ogun State, Abeokuta Judicial Division, (delivered on the 9thday of November 2020 by Coram Hon. Justice O.Ogunfowora O; Ibid page 56

Digitalized companies ought to have an effective data protection structure in place and may require an in house data protection expert who is conversant with the legal implications thereof, to guide the company accordingly

a. **Regulatory compliance:**

Companies must prioritize fulfillment and observance of regulatory directions, guidelines and laws, annual fillings and disclosures as non-compliance will result to penalties and grave consequences from regulators. Some of the relevant Regulators connected to corporate digital transformation and corporate governance in Nigeria are: Nigerian Communications Commission (NCC), Nigeria Data Protection Bureau (NDPB), National Information Technology Development Agency (NITDA), Corporate Affairs Commission (CAC), Industry specific regulators such as Central Bank of Nigeria for banks, National Pension Commission for pension funds, National Insurance Commission for insurance companies, Securities Exchange Commission for listed companies. Also the Nigerian Broadcasting Commission, Financial Reporting Council, Federal Competition and Consumer Protection Commission among others.

b. **Cybersecurity and the Law:**

Digitalization in all its forms comes with cyber risk and a proactive cyber security structure is important to protect the company's digital assets. The Cybercrimes (Prohibition and Prevention etc. 2015) Act is the relevant law in Nigeria on Cyber security and all forms of cybercrimes. It provides in **Section 6(1) and Section 32** that it is an offence for any person, without authorisation, to intentionally access in whole or in part a computer system or network with the intent of obtaining computer data, securing access to any program and commercial or industrial secrets or classified information. Penalty for this is imprisonment for a term of not more than seven years or a fine of not more than N7,000,000.00, or both.

It is important that companies are aware of the various illegal acts listed by the law, and make an awareness of such acts to its personnel to prevent itself liabilities. Also there is the need for effective digital IT governance structures to prevent the companies from cyber threats that can collapse or destroy or expose the company's assets including data. Companies can bring legal actions against persons who have attacked their digital assets.

a. Intellectual Property:

Digitalization drives innovation, where there is innovation there is the need to protect the intellectual property (IP) (such as patents, trademarks, industrial designs, copyrights) of the parties involved which could be the company itself, its employees or third parties. It is important that innovative creations be registered with the requisite regulators. In Nigeria, the Nigerian Copyright Act 2022, Patents and Designs Act 2004, Trademarks Act 2004 provides for legal requirements for intellectual property in Nigeria. Also it is important that a company clearly defines its stake and ownership ofIP rights and that of the employees to avoid disputes, and acknowledge /give credits for the work done by others (moral rights, economic rights).

b. Liabilities:

It is crucial for companies be cautious of infringement of the rights of others by upholding ethics and legal compliance in its use of digitalization. As breach of such legal obligations will amount to severe consequences such as damages, fines, corporate and directors liabilities. Likewise, it is also important that a company grooms its personnel to avoid issues of vicarious liability, civil or criminal liabilities.

c. Contracts:

Securing and managing business relationships are fundamental in corporate digital transformation especially through well drafted contracts. Contracts are legally binding and the terms and conditions freely and voluntarily agreed upon by them per Adekeye, JSC in Best Nig. Ltd. v. Blackwood Hodge. Companies ought to protect their interests by employing digitally exposed legal personnel for contract reviews and management. Smart contracts are one of the blockchain technology's tools that can be utilised in companies to automate transactions inside the parameters of preset rules, saving time and money on middlemen and improving board and shareholder relations in the process.

⁵⁷ Federal Republic ofNigeria Official Gazette No.56, 27thMarch ,2023, Vol. I I 0

⁵⁸ (2011) 15 WRN I; A.G. RiversStatev.A.G. Akwa-IbomState(2011) 29 WRN I.

⁵⁹ C. Van der Elst, A. Lafarre, Blockchain and smart contracting for the shareholder community. *European Business Organization Law Review*,(2019) 20(1), 111-137. <https://doi.org/10.1007/s40804-019-00136-Q>; Op cit Kadir Varoglu, Goner Gokten, Burak OzdoganPg. pg 229

a. Dispute resolution:

Disputes are inevitable in corporate and commercial transactions especially where the company interfaces with various digital stakeholders. In a digitalized business climate, disputes may arise from online business transactions, cross border transactions or other areas. A corporate dispute resolution policy in line with the law considering the various dispute resolution options and mechanisms is paramount and should also reflect in contracts, negotiations and general business dealings of the company. It is noteworthy to acknowledge current developments of trade in Africa precisely African Continental Free Trade Area (AFCFTA). The AFCFTA aims at accelerating intra-African trade and boosting Africa's trading position in the global market by strengthening Africa's common voice and policy space in global trade negotiations. An AFCFTA digital trade Protocol was created to provide rules for participants on digital trade, this also earmarks directions on digital trade issues such as cross border data transfers (Article 20).non-discrimination of digital products (Article 7) among others, which can guide African companies in digital cross border trade and its complexities.

b. Corporate Policy making:

Policy making is central in Digital and IT governance. Corporate policy is a set of written guidelines intended to govern the actions of company managers and its other employees in specified situations. Digital governance earmarks responsibilities for policy which may be handled by the digital team; however it is vital for the legal team of the company to have an input in policy as to properly align the digital goals and specifications with legal standards. Digital governance thrives on collaborations. Corporate policy ought to be in line with the law

⁶⁰ The African Continental Free Trade Area from <https://au.int/en/african-continental-free-trade-areaas> accessed on the 9th September, 2024

⁶¹ African Union, Digital Trade, from www.au-afcfta.org as accessed on 9th September, 2024; £. Agarwal, Implementing the AFCFTA Digital Trade Protocol in Nigeria: Three Crucial Considerations, (12th July, 2024) from <https://odi.org/en/insights/implementing-the-afcfta-digital-trade-protocol-in-nigeria-three-crucial-considerations/> as accessed on 9th September, 2024

⁶² Definition of corporate policy from <https://www.oxfordreference.com/display/10.1093/acref/9780199684984.001.0001/acref-9780199684984-e-7459> as accessed on 9th September, 2024

⁶³ Opcit Josh Tong.

a. **Ethical use of digitalization and the law:**

In Nigeria, companies are utilizing virtual AI assistants in various sectors namely: finance sector, even in the legal sector especially through brands like lawpavillion, the issue of ethics and lawful use comes to fore. Digital and IT governance requires accountability and responsibility. Issues such as who is liable for the acts or wrong doing of the AI assistants? may arise in future. Other ethical implications of AI are: bias in algorithm, data privacy, accountability and more. Also where AI is involved in decision making processes, it may have significant consequences for the society. In some advanced country, AI was appointed a member of the board of a company. The question is: are our laws well advanced to tackle such issues?

It is pertinent that strong legal frameworks be established to meet the imminent technological wave in the corporate and business clime in Nigeria. Although the legal terrain on technological matters is evolving, a comprehensive legal template is indispensable. The law needs to be ahead; law affects society and societal processes shapes the law. Accordingly, a need for legislative intervention on the ethical use of AI to prevent abuse. It is important the company leadership ensure ethical use of digital forms so as not suffer liabilities that can be avoided. For companies using AI and Blockchain technology, there is the need for prioritizing the requisite ethics in the course of use of these forms.

8. The Role of the Board of Directors in Corporate Digital Transformation and IT governance

The board of directors has the general duty to manage the company, to show utmost good faith in accordance with the provisions of the law and the constitution of the company. See: *Wallersteiner v Moir*. The board of directors has a duty to act bonafide for the benefit of the company. **Section 279(3) of CAMA 2020**, a director shall act at all times in what he believes to be the best interest of the company as a whole, preserve its assets, further its

⁶⁴ Oluseun Abimbola, *Artifical intelligence and the law* (A Lecture delivered at Faculty of Law Lecture Series, Koladaiisi University Ibadan April 17, 2024) 1(I):13, 18, 19.

⁶⁵ Op cit R.Wile

⁶⁶ (1974) 1 WLR 991

⁶⁷ Companies and Allied Matters Act 2020, Laws of the Federal Republic of Nigeria; Chris Wigwe, *Introduction to Company law and Practice* 2022. (Princeton & Associates Publishing Company Limited, 2nd edition 2022) 287 -288

business and promote the purposes for which it was formed, in such a faithful diligent and careful as an ordinary skillful director would act in the circumstances. In the course of their duties must to protect the interests of the members of the company and its employees.

In light of the above, the board of directors is the governing body of a company which provides leadership and strategic direction to the **company-Principle 1 of the Nigerian Code of Corporate Governance 2018 (NCCG 2018). Practice 1.10 of Principle 1** stipulates that the board establishes an information technology (IT) governance framework for their companies. For digital transformation to thrive in organizations, there is need for boards to set structures and policies in line with the company's objectives. It has responsibilities to direct the company on effective IT governance and digital transformational structuring. It must ensure that an ideal IT and digital governance structure is in place, manned by qualified personnel. Employment of appropriatedigital talent to handle the digital governance structure will bring about innovations and guide the company in this light. For example a chief digital officer may be appropriate to direct the board and board committees on digital issues.

The effect of digitalizationon corporate governance is thata novel governance era is arising around technology to build more sustainable relationships with stakeholders. Technology-centric enterprises have changed the demands and standards of corporate governance. Consequently, the board must rise to the occasion by upgrading to meet the emerging demands of technology driven corporate governance. The board ought to invest in cybersecurity mechanisms in the company to protect the company's data and other digital assets. It must prioritize legal structures and a strong and highly effective legal team to guide it through legal considerations regarding the company's IT governance and digital transformational processes and technologies. The board members themselves need to learn digital skills and be trained on use of technology and corporate governance. Primarily,

⁶⁸ Section 305(4) ofCAMA 2020; *Artra Industries Nig. Ltd v Nigerian Bank for Commerce and Industry* (1998)4NWLR(Pt.546)

⁶⁹ Principle 1 oftheNCCG 2018

⁷⁰ Op cit William Delone, Demetrio Migliorati, Giovanni Vaia Pg 217,229

⁷¹ Op cit Kadir Varoglu, Goner Gokten, Burak Ozdogan Pg.225

⁷² B.T Adejugbe, Boardroom best practices: Implications for corporate governance, *Afe Babalola University Ado ekiti law journal.*(2018) 6(1): 22- 33 @30 : R.S. Peterson, A. Johnston, 2018. The 3D Boardroom . *Governance and Compliance.* (Institute of Chartered Secretaries and Administrators UK Monthly Publication April, 2018) 30-32.

the company secretary who is the corporate governance expert of the board ought to be technologically savvy to guide the board appropriately in accordance with regulatory guidelines on electronic meetings ,and can ensure this during board evaluation and prescribe appropriate digital knowledge trainings for directors who are lacking. Moreover, there are existing digital tools and solutions to guide boards on modern governance (an integration of corporate governance and technology) to help boards digitally manage corporate governance issues conveniently. An example of such is the Modern governance by Diligent Company, a company based in the United Kingdom. Such tools can be utilized by companies to give their boards in the digital age. Also in the advent of social media, where a post on any social media platform can mar the reputation of a company, it is important members of the board familiarize themselves with the social platforms of the company to follow up on engagement from the public on how the brand is being viewed, not solely rely on the report of the social media handlers / managers of the company. With this they can have first-hand information, organize appropriate corporate response and damage control when needed and most importantly generate insights for corporate strategy.

A general sensitization or awareness on effective data privacy, digital systems and governance for all staff especially those whose roles intersect with digitalization and its handling. Furthermore, the need to equip the legal and regulatory compliance team of the company through trainings on digitalization and the intersection with the law, to enable the team gives appropriate legal directions and set policies for the organization on IT and digital governance is pragmatic. The board must be legally cautious in adopting digital solutions to avoid liabilities for the company.

On the issue of AI, it can help in corporate decision making precisely it can help boards determine the best strategy that will enable exponential growth and for the company in a highly competitive market space. The board must be ready and knowledgeable about the extent of artificial intelligence (AI) technology use in business and processes, as well as any

⁷³ principle 8 of the NCCG 2018

⁷⁴ Principle 13 of NCCG 2018; K. Aina, B. Adejugbe, *An Appraisal of the Role of the Company Secretary in Corporate Governance in Nigeria*. *Society for Corporate Governance Journal* (2020) 12(1) :2496-2518@ 2512-2513; Page, S. Time to upgrade. *Governance and Compliance*. Institute of Chartered Secretaries and Administrators UK (ICSA) Monthly publication September, 40- 41.

⁷⁵ Modern Governance by Diligent <https://www.diligent.com/solutions/modern-governance>

⁷⁶ AI in the Boardroom: The Next Realm of Corporate Governance from <https://sloanreview.mit.edu/article/ai-in-the-boardroom-the-next-realm-of-corporate-governance/> 1/5 AI in the Boardroom accessed on 6th July, 2024;

potential risks and advantages. Establishing the AI policy and implementation strategies as well as creating a constant environment for risk assessment is necessary. Transparent and frequent communication with stakeholders regarding policies and their implications is also crucial. As good corporate governance specifies efficient stakeholder communications and disclosures.

In terms of stakeholder engagement, the increasing adoption of virtual general shareholder meetings may help to promote involvement and participation from shareholders and may even become an ongoing aspect of corporate governance.

Still the board must take into cognizance the CDR responsibilities that comes along with digitalization and prioritize compliance with ethics in the use of digital resources. In embracing digital transformation, corporate digital responsibilities must be adhered to and balanced.

It is very clear what the board is responsible for: safeguarding shareholder value. IT governance guarantees risk transparency and the safe application of technology to increase and protect shareholder value. The IT governance process puts IT management on the board and senior management's agenda where it can receive serious attention, thereby increasing managers' awareness of the risks the company faces from both technological and business perspectives. It also directs and controls IT investment, opportunity, benefits, and risk. The board creates strategy and goals and a structure that facilitates the strategy on IT and cascades the vision to the employees. Subsequently measure performance to review how effective the structure has work and what needs to be done. The company's leadership must be proactive and lead appropriately for the governance of digital transformation to succeed. This includes setting goals, fostering team collaboration, ensuring that all digital projects comply with industry regulations and cyber security, allocating resources among other things.

Regarding Blockchain Technology, it is recommended to resolve principal agent confidence and corporate governance issues such as corporate voting, financial records and

⁷⁷ Op cit Kadir Varoglu, Goner Gokten, Burak Ozdogan Pg. 227

⁷⁸ Op cit OECD Pg 4

⁷⁹ Op cit Ekeigwe Pg. 115, 116

⁸⁰ Ideas Board. Developing an effective digital transformation governance model (October 24, 2023) from <https://idealsboard.com/digital-transformation-governance-model/> accessed on august 23, 2024

reporting as it enhances transparency thereby reducing the transaction costs for the business. Blockchain technology can enable accurate and comprehensive information needed by the board for its duties. Additionally, key performance indicators and board performance can be evaluated using digital metrics in the form of digitalized dash boards. These will serve as benchmarks for evaluating the board based on competitive advantage, threats, strategy, and other factors. This will serve as a teaching tool for the board.

Businesses would be more efficient if emerging technology were used at the board level to support transparency and other corporate governance pillars as well as data-driven decisions. Particularly, Blockchain technology will facilitate monitoring systems to mitigate against the excesses of the management of the company (particularly accounting and stakeholder communication and engagement).

Data privacy issues and cyber risks are a result of digitalisation and the utilisation of digital trends and resources. To reduce these digital risks, the board must create strong risk management policies and procedures. In addition, the board will face challenges in managing the workforce in an organisation where remote and virtual work arrangements are common. To facilitate a learning process for the board and apprentices, it has been proposed that companies implement board digital apprentices. For the board to effectively mitigate risks related to digital security, it is imperative that it has the necessary knowledge and resources at its disposal. Boards should take into account the risk associated with digital security when creating their overall risk management plans, recognising that these risks are essentially matters of governance.

1. IT Governance and South Africa:

Kings Code IV which is the current South African Corporate governance Code stipulates an extensive approach on information and technology governance. This can be found in

⁸¹ Op cit I. Ivaninskiy, Pg35-47

⁸¹ H. Grove, M. Clouse, L.G. Schaffner, Digitalization impacts on corporate governance. *Journal of Governance & Regulation*, (2018) 7(4), 51-63@60

⁸³ Op cit Kadir Varoglu, Gonter Gokten, Burak Ozdogan Pg.231

⁸⁴ Op cit H. Grove, M. Clouse, L.G. Schaffner Pg 60

⁸⁵ C. Magnusson, D. Blume, (2022), "Digitalisation and corporate governance", *OECD Corporate Governance Working Papers*, No. 26,(OECD Publishing, Paris, 2022) 1-22@ 14, from https://www.oecd.org/en/publications/digitalisation-and-corporate-governance_296d219f-en.html as accessed on 9th September, 2024

its **Principle 12**. The highlights of the principle and recommended practices are as follows. The board has the responsibility for IT management and oversight. The company should approach IT governance by creating a policy, to promote ethical and responsible use of IT. The management should be delegated the responsibility to manage IT effectively, a breach coach should be appointed for security and social media incidents. Compliance with IT laws, integration of IT risks into the company's overall risk management, enhancement of intellectual property through information management, data protection, enabling IT architecture are other recommended practices.

Furthermore, information security law aspects are put in place, the company's responsiveness to disruptive technologies, periodic independent assurances on the company's IT arrangements (inclusive of outsourced services) and disclosure of governance and IT management by the company to stakeholders (detailing focal areas, plans and actions taken) are other suggested practices. The explicit provisions on IT governance by the Kings IV code is notable as it gives companies in south Africa a clear description on what an ideal IT governance structure should be, though it has been argued that certain relevant aspects such as cybersecurity was excluded. While **Principle 1 of the NCCG 2018** postulates that the board of directors should establish an information technology (IT) governance framework for their companies, which is commendable, it is proposed that in subsequent reviews of the NCCG 2018 code, more detailed provisions/ practices explaining what makes up an ideal IT governance structure should be specified.

1. Conclusion

Digitalization has come to stay in business and it is essential for forward thinking, proactive companies. However it is critical that the board of companies prioritize the establishment of Digital/ IT governance structuring and systems to enable a smooth sailing of the company on the waves of the digitalized business terrain. Most importantly is the prioritizing and understanding of legal considerations pertaining to digital transformation and IT governance in order to protect the business, and avoid pitfalls that may cost the company comprehensively. There is the prerequisite for explicit and robust legal templates for digital-IT governance in Nigeria.

⁸⁶ John Giles, *Kings Code IV and IT governance* (November 1st 2016) from <https://www.michalsons.com/blog/king-iv-code-and-it-governance/18691> accessed 9th September, 2024.

⁸⁷ ibid