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THE CONCEPT OF SUSTAINABILITY AND INNOVATION IN BANKING

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Abstract

The paper seeks to understand and analyse the concept of sustainability and innovation in banking. It is obvious that as financial service institutions, banks have business relationships and investment that cut across all sectors of the economy. It is, therefore expedient for banks to incorporate sustainability principles as contained in Brundtland report 1987 both in their short and long-term business models. In fact, the drive for sustainable banking will depend on a conducive, healthy and prosperous socio-economic environment. This way sustainable innovative banking services will be tailored to meet the needs of today and future stakeholders, as well as environmental and social risks. Hence, banks are challenged to integrate the science of sustainability and sustainable development objectives in their business operations and services innovation, for the preservation of environment and sustaining the unity of nature for future generations. Thus, sustainable bank services innovation focus on strategies and business models that incorporates multitude of innovative financial services, e. g. digital finance, through robust financial technology and finance-related software 'fintech' companies and innovative financial service providers. To this end, the paper will conceptually analyse sustainability objectives and how it is entrenched in banking services innovation, credit and loan administrations, product offerings and general banking operations.

Keywords: Sustainability, Innovation, Banking, Services, Technology, Environment.

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1. Introduction

In resent time, the concept of sustainability has formed an integral part of research and sustainable business practice discourse. It suffices to note that the concept gained global public policy attention with the adoption of the Brundtland report of 1987, which was a submission of the United Nation's World Commission on Environment and Development (WCED). Though the title of the report was 'Our Common Future' it is nevertheless, popularly referred to after the name of its Chairperson, Former Norwegian Prime Minister Gro Harlem Brundtland.

Thus, sustainable development concept is aimed at meeting the developmental needs of Nations, countries, communities and corporate bodies without infringing on environmental wellbeing of others. And, sustainable banking is seen as commitment and support of banks toward the journey for the attainment of United Nation's Sustainable Development Goal (SDGs) objectives. Besides being a passionate effort in creating awareness, and spreading sustainability principles, policies, practices as well as promoting innovations that comply with sustainable wealth creation that are considerate to the ecosystem and environment.

This paper attempts to explain the concept of sustainability and innovation as applied in some banks business models. This is necessary as the world grapples with the triple bottle line-social, economic and environmental issues, versus institutional challenges of sustainable development, growth, profitability and surging wealth creation for the overall mutual benefits of stakeholders. We then conclude by providing avenues for future research directions.

1.1. Understanding Sustainability and Sustainable Development:

In understanding sustainability, the paper needs to appreciate the origin of the term 'sustainability' and 'sustainable development'. Thus, Asheim (1994) defined sustainability as a requirement of our generation to manage the resource base such that the average quality of life that we ensure ourselves can potentially be shared by all future generations. Similarly, he argued that development is sustainable if it involves a non-decreasing average quality of life. In this sense, sustainability is a process of development that is associated with human activities meant to improve present quality of life and sustain same for the future generation. Furthermore, Du Pisani (2006) traced the evolution of sustainability to notion of 'progress' which is an idea on the human civilization that steadily move, grow, and developed in a desired direction. Progress also points to, for instance, the increasing demand for raw materials and environmental problems that are caused by human activities such as degradations, deforestation, loss of soil fertility and more recently activities on science and technology innovations.

However, it is generally believed that the concept of sustainability predates industrial revolutions. Also, sustainability was said to be borne out of fears that without understanding and integrating the unity of nature, society and environment the present and future generations of humanity might be at risk (Du Pisani, 2006; Kates, 2011; Kuhlman & Farrington, 2010). Hence, their standard of living and means of sustenance might not be guaranteed. These stimulates United Nations (UN) to organise various conference and summits that culminated to the worldwide advocacy for sustainable development treatises.

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In 1972, the United Nations organised a conference at Stockholm, Sweden on Human Environment, which addressed concern on degradation and preservation of environment globally (Handl, 2012). However, the setting up of World Commission on Environment and Development by the United Nation catalogue among other things long-term environmental strategies for international community in 1984 and published in the commission's report of 1987. The commission report also set the climax of sustainable development advocacy. The Brundtland report, 1987 even so commonly called globally was entitled 'our common future,' and is believed to have stimulated the 'Earth Summit' held in Rio de Jenairo, Brazil, 1992 as well as the UN conference in Johannesburg, South Africa in 2002 on environment and development.

Furthermore, the UN unflinching concern for sustainable development also led to another conference in Rio de Jenairo, Brazil in 2012. But this time, the conference reviewed the progress achieved, since the last Earth Summit of 1992 i.e. twenty years after. Additionally, it galvanised the participants in both public and private sectors, non-governmental organisations (NGOs) and other interested stakeholders, toward actions that meets developmental needs of the present without undermining the needs of the world future generations.

No doubt, the Brundtland report popularised the concept of sustainable development with its worldwide acceptable and recognised definition of sustainable development as 'development that meets the needs of the present without compromising the ability of the future generations to meet their own needs.' Seemingly, the quest for sustainable human life, steady progress, growth and development is viewed in the light of limited resources and the dangers inherent in environmental degradation. This further explained effort to resolving differing goals of economic success, social justice and environmental quality, representing the triple bottom line (TBL) of the report (Crabbe', 1998; Du Pisani, 2006; Kates, 2011; Kuhlman & Farrington, 2010; Svensson & Wagner, 2015).

Thus, the sustainable development concept focus on meeting developmental needs of nations, communities, corporate institutions and stakeholders, without infringing on environmental wellbeing of others. In this sense, financial service institutions and banks in particular, that have business relationships that cut across social, economic and environmental spheres of human life. Hence, banks are challenged to integrate the science of sustainability and sustainable development objectives in their business operations, service innovation and credit and loans administration, to ensure they contribute in the global advocacy for the preservation of environment and sustaining the unity of nature for future generations.

1.2. Sustainable Bank Services Innovation:

The activities of financial institutions such as banking industry provides the direction to the economy, the society and the environment, through the provision of the required capital for investment in varied sectors or projects for sustainable development (Weber, 2014). We try to explore sustainability from the economic aspect, since using the resources of financial institutions and banks in particular, goods and services are created, besides innovation and creativity that leads to sustainable future is encouraged.

Innovation involves developing the best ideas into practical products and services (Ibrahim, Jedin & Abdul-Talib, 2018). Accordingly, Mathur & Berwa (2017) outlined the role of technology and innovation in attaining corporate and global sustainability, and also unveiled the linkage between technology, innovation and sustainability, as well as relates countries and corporate organisations with high innovation

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rating to score well on the sustainability factors. In this sense, conventional financial service is gradually paced out with sustainable banking services, that meet the needs of the current and future generation (Brundtland report of 1987). In fact, it is common knowledge that traditional banking primarily points at risk and return on investment i.e. maximising profitability and returns on shareholders' funds (Weber, 2014).

However, sustainable banking emphasises continuous innovation of quality services that recognise the triple bottom line, which ensure economic prosperity, quality of the physical environment and social justice (Mathur & Berwa, 2017; Tan, Chew & Hamid, 2017). Accordingly, banks are focus on putting strategies and business models that integrate both short and long-term services, through robust financial technology. In this regard, what easily comes to the fore is digital finance that incorporates a multitude of innovative financial services, financial businesses, finance-related software, and novel forms of customer communication, interaction, and collaboration brought about by some 'FinTech' companies and innovative financial service providers (Aremu, 2017; Brynjolfsson & McAfee, 2012; Gomber, et al, 2017; Kendall & Voorhies, 2014).

These innovations offer alternate means from conventional banking services, using high technology infrastructures such as mobile phones, mobile apps, social media, smart devices and cloud computer devices. Undoubtedly, these devices provide sustainable banking services faster and more convenient, though performs digital payments and fund transfers better than the traditional tellers in the hitherto banking platforms. Also, digital technologies have created huge opportunities for people to use their exceptional and dispersed knowledge for the benefit of the whole economy (Brynjolfsson & McAfee, 2012; Hassim, Abdul-Talib & Abu Bakar, 2011). Indeed, availability of these digital technologies has transformed banking worldwide. Hence, adopting digital and mobile apps has created new crop of customers, digital skills and innovators as well as digital marketers.

But, these developments have also posed some problems to conventional banks. Yves Mersch (2015) observed first, 'Fin Tech' companies and other non-banks financial services providers (such as money gram, and western union) are set to change the landscape of retail payments markets by integrating e-commerce, social media and retail payments. Secondly, through a seamless digital platforms and easy access to online lending, as well as capital for investment conservative banks will be losing their market share. Thirdly, regulatory agencies are providing enabling laws, legal framework and policies for the establishment of these innovative and technology driven payment institutions (Cortet, Rijks & Nijland, 2016).

Nevertheless, electronic banking and digital finance technology has forced most banks to deploy strategies for remodelling ways of sustaining their business. The reform offers new potentials away from building elegant and gigantic banking structures, for internet-based banking, automated teller machines (ATMs), point of sale (POSs), money gram, western union and a host of other mobile banking solutions. Furthermore, a research (Kendall & Voorhies, 2014) found that digital mobile finance transactions cost less; mobile finance requires the use of internet data, hence provide opportunities for internet service providers; and most importantly, mobile platforms instantly link banks with their customers in real time, thereby transforming conventional customer service offerings to the digital experience. These undoubtedly

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benefits both traditional customers and the relatively young, who are technology-savvy clientele (Gomber, et al, 2017).

It is no surprise then, Global Banking Outlook (GBO) report, 2018 suggests that 85% of banks are transforming to digital banking with a massive investment in technology in order to drive efficiency and manage evolving risk as well as growth opportunities for sustainability. Obviously, this sustained investment in technology would serve as driver for growth, improve liquidity and profitability of most Deposit Money Banks (DMBs) globally in the short and long-run. Furthermore, GBO observed that banks cite investment in technology because, they hope it will eventually strengthen their competitive position and enhance market share. Similarly, innovation is indisputably another reason for banks investment in technology. It would also help banks tailor better products and services to the delight of customers (Polasik & Piotrowski, 2016).

The technology driven strategy of the financial institutions requires sustainable business models, which significantly hinge on conditions of the economy, society, and the environment. Whereas, integrating the sustainability principle and standards as well as complying with international best practice deployed by United Nations Global Compact (UNGC); the Organisation for Economic Cooperation and Development (OECD); United Nations Environment Program Finance Initiative (UNEP-FI); International Finance Cooperation (IFC), among others.

However, sustainability reporting standard might vary from one country to another and from one corporate to another, to accommodate the varied conditions around the globe. But it must meet the general disclosure and management approach guidelines for different indicators, as well as the financial services sector specific disclosure guidelines as contained in Global Reporting Initiative (GRI) and the Global Sustainability Standard Board (GSSB). In Nigeria for instance, there is the Central Bank of Nigeria's Sustainable Banking Principles (NSBP).

The NSBP defined 'sustainable banking as an approach that recognises the role of banks in driving long-term economic development in Nigeria that is not only economically viable, but also environmentally responsible and socially relevant'. This suit the Nigerian context and international best practice on sustainable banking business activities and operations. Although, each bank would no doubt interprets and apply these principles in accordance to their business model, mission, and vision as well as level of commitment to the sustainable banking traits.

Zenith bank is a leading financial institution in Nigeria, that is committed to sustainable banking principles. The bank is becoming the most profitable, the biggest in tier-1 capital and Africa's sixth largest financial institution. From a humble beginning in 1990, the bank also aspires to lead in technology driven product and service innovation in this highly competitive global market. In fact, Zenith bank is a fast-growing brand with presence in Nigeria, Africa and Europe. It aimed to be a global brand that compete with other financial institutions around the world, hence the embracement of the sustainable business practices. Thus, serves as an encouragement for adopting the green business option. Finally, the bank has in the last decade, committed to several global sustainability principles geared towards the social, economic and environmental wellbeing of Nigerans and society in general (The Banker Magazine, 2018; Zenith Economic Quarterly 2013, 2017 & 2018; Zenith Sustainability Reports 2015 & 2016).

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Similarly, the central bank of Bangladesh introduced the ‘Policy Guidelines for Green Banking’ (PGGB) as a vehicle for sustainable banking. And, in compliance with the sustainable finance initiative of the United Nations, signed during Paris Climate Agreement in 2015. Accordingly, PGGB in Bangladesh focus on measuring up with the triple bottom line in all the financial institutions in the country. The result of a study of some banks reveals high degree of green banking policy and guidelines compliance among both conventional and Islamic banks in Bangladesh (Julia, Rahman & Kassim, 2016). Also, Weber, Hoque & Ayub Islam, (2015) suggests that great benefits exist for lenders that used sustainability approach in credit risk assessment.

On the other hand, in Malaysia Maybank has been identified as the most sustainability compliant bank. In a recent research, Tan, Chew & Hamid (2017) argued that Maybank have embrace sustainability principles in most of its banking operations such as credit risk management process, and its investments were socially responsible. In this case, Maybank, have redefined service quality to include the concept of sustainable banking and proactively shaping their corporate image to look more socially and environmentally sustainable (Hong, Cheong & Rizal, 2016; Oh, 1999; Zamani, Abdul-Talib & Ashari, 2016).

Indeed, Banks as major financial services institution must continue to promote sustainability. This encompasses climate change mitigation and adaptation, asset investment or lending that have strong social impact and initiative in diverse sectors of the economy like agriculture, oil and gas, power and energy that has low-emission, though environmentally friendly (Sheng, 2015).

1.3. Sustainable Bank Credit & Loans Administration:

The global concerns about environmental sustainability and the growing demand for a clean earth principle, led some banking regulators and associations from some emerging markets to focus on sustainable or ‘green’ banking. The goal was to transform banking operations that would deliver efficient energy, low carbon-emission, preserves natural resources and protect biodiversity, as well as conduct business activities in an environment that is risk-free, clean and friendly (Carè, 2018; Dikau & Ryan-Collins, 2017).

Therefore, banking sector seek to boosts sustainable wealth creation through ‘green’ lending (loans) or credits, otherwise refers to as risk assets creation through risk management. To this end, green loans refer to those lending to businesses and industries that cause positive effect on the environment and society. Though, sustainable lending also refers to commercial banks’ lending based on borrower’s pledge to be environmentally and socially responsible throughout the tenor of the loan, as against credit assessment based on applicant’s financial strength (Calderon & Chong, 2014). Obviously, this is a follow up on the critique by some non-governmental organisation (NGOs), that observed surge in banks involvement in financing sustainability compliant services and projects, but hesitate to report indirect emission and customers that are involve in environmentally disruptive projects (Weber, 2014).

On the other hand, risk management drives decision processes of bank leadership that minimize environmental and social risks. Besides, green banking pivotal goal is to encourage banks to integrate environmental and social risk into their loans, credits and investment decisions (Soejachmoen, 2017; Volz, et al., 2015). This goal is being champion by the Sustainable Banking Network (SBN) an arm of IFC of the

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World Bank Group. SBN has membership from 31 countries with focus on environmentally and socially sustainable lending (Dikau & Ryan-Collins, 2017; Fantone, 2018; Johnson, 2017; Maimbo & Zadek, 2017; Wright, 2012).

We would like to note the unique yardsticks offered by SBN which can be used to track green banking at international arena, and amongst the countries that have signed up to sustainable banking. These includes:

1.Banking commitments: this measures bank's level of adoption and implementation of green finance principles, standards and practices.

2.Financial flows: this measures the volume and distributions of bank's assets to sustainable investment.

3.Financial risk: this measures the depth of the quality of financial assets and its impacts from integrating environmental and social factors.

4.Environmental and social outcomes: this measures how negative environmental and social impact were avoided, as well as how positive impacts in core financing activities were achieved.

2. Problem Statement

It is a well-known tradition that banks view return on investment for shareholders as the critical reason for their existence, regardless of the social, economic and environmental implications. Similarly, banking investments and credit decisions were skewed on projects that aimed to produced the highest profit to the delight of investors (Carolina Rezende de Carvalho Ferreira, Amorim Sobreiro, Kimura & Luiz de Moraes Barboza, 2016). These issues were generally the universal key performance indicators for most banks.

However, there are growing concern the world over, about sustainability and innovation. This indication suggests that financial institutions must adopt sustainable principles and practices in their organisational culture for continuous survival. Besides, the Brundtland report, 1987 clearly redefined these issues and refocused the lens through which numerous decisions are taken in both public and private organisations.

To this end, banks being the focal of this paper are expected to responsibly invest their resources based on the principle of meeting 'current needs without compromising future generation', hence implies care and concern for the society, economy and environment.

3. Research Questions

The paper is aimed at addressing the following questions:

3.1 To what extent does banks incorporate sustainability principles in their business models?

3.2 How does sustainable bank service innovations improve financial services credit and loan administrations?

4. Purpose of the Study

The purpose of the paper is:

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4.1. To understand and analyse the concept of sustainability and innovation in banking.

4.2. To analyse sustainability objectives and how it is entrenched in banking services innovation, credit and loan administrations, product offerings and general banking operations

5. Research Methods

This is a conceptual paper aimed at analysing level of implementation and integration of sustainability and sustainable development objectives and principles in banks business models, and how it is entrenched in banking services innovation, credit and loan administrations, product offerings and general banking operations. Consequently, the paper has reviewed some previous literature and research papers to come up with its findings.

6. Findings

The paper conceptually analysed sustainability and innovation in banking, and then examined sustainable development objectives and principles. The study reviewed how banks integrate the concept and principles of sustainability in their service innovation, credits and loan administrations as well as general banking operations.

Thus, the findings of the paper traced the background of sustainability and sustainable development to the attempt of integrating nature, society and environment, with the survival of future generations. It revealed that sustainable banking underscores continuous innovation of quality services that admits the triple bottom line principle.

To this end, banks have incorporated strategies and business models with robust innovative capabilities, and efficient technologies that facilitates effective risk management as well as maximisation of returns on investment, without compromising unity of nature and quality of environment. Besides, banking operations has been transformed through green lending and project financing that cause positive effect on the economy, society and environment.

7. Conclusion

This paper attempts to analyse sustainability and innovation in banking from its background and efforts made toward implementing sustainable or green banking locally and at the international arena. In recent times, banking institutions globally have committed a lot to sustainability principles, standards, and practices geared toward the social, economic and environmental wellbeing of the society. Hence, milestones achieved were fully supported by international organisations such as the United Nations Global Compact (UNGC); the Organisation for Economic Cooperation and Development (OECD); United Nations Environment Program Finance Initiative (UNEP-FI); International Finance Cooperation (IFC); Respective Government Initiatives; and Industry Regulators among others. Other notable contributors in this area includes innovation, financial technology (FinTech) companies, and other non-bank payments service providers, which has continued to interconnect conventional banking services with automation and scientific innovation or inventions. In this sense, transforming traditional customers service offerings to the digital experience, thereby reconstructing a world model deemed to be credible and assuring the long-term survival of life on earth.

On the other hand, despite financial institutions commitment to sustainability, in practice most banks are still lackadaisical to the implementation of sustainable investment and lending to green projects. We therefore, recommend the introduction of some comprehensive, focused, directional policies, rules and regulations, as well as punitive sanctions and penalties for any violations of the green lending principles and practices by any financial institution.

On the other hand, sufficient encouragement needs to be packaged for banks that enforce sustainable finance, credit and investment. We believe respective governments and concern international organisations through the financial industry regulators, can create the enabling environment for raising awareness about opportunities of both green investment and lending or credits for a more innovative and sustainable development as enshrined in the Brundtland report.

In a final note, we suggest further research to assess specific directions sustainable banking innovation, investment and credit should emphasised to reduce socio-economic slits, carbon-emission and renewable energy for a sustainable environment.

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