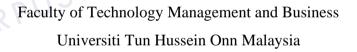
THE IMPACTS OF INTANGIBLE ASSETS ON THE COMPANY'S COMPETITIVE ADVANTAGE, PERFORMANCE, AND SUSTAINABILITY OF NIGERIAN CEMENT COMPANIES

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A thesis submitted in fulfilment of the requirement for the award of the Degree of Master Science in Real Estate and Facilities Management.



DEDICATION

This thesis work is dedicated to my dear my parents, my proposed wife, and my family the family of Alhaji Ibrahim Chimba Milala Kachalla of Biu Emirate.



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ABSTRACT

Intangible assets are one among the assets that play a crucial role in today's business. With technological development throughout the globe, the lack of investment in intangible assets by Nigerian cement companies can lead to a large gap in competitive advantage, performance and sustainability. This study was aimed at assessing the impacts of the intangible asset on the competitive advantage, performance, and sustainability of Nigerian cement companies. It is focused at determining the factors affecting the competitive advantage, performance, and sustainability of Nigerian cement companies. The research also focused on assessing the relationship between them, and evaluating the impact of intangible assets on the performance and sustainability of Nigerian cement companies. Nigerian cement companies were selected as the case study for this research where the administrative staff were selected as its respondents. The research employs the use of questionnaires and interviews as its data collection strategy. Descriptive and correlational statistical data analysis was carried out where qualitative data was analyzed using CAQDAS NVivo. The result found that there is a strong relationship between the intangible asset financial competitive advantage, performance and sustainability of the Nigerian cement companies and intangible assets have an impact on competitive advantage performance and suitability of Nigerian cement companies. It is concluded that intangible assets are the driver of competitive advantage, performance, and sustainability of Nigerian cement companies.

ABSTRAK

Aset tidak ketara merupakan antara aset perniagaan yang memainkan peranan yang amat penting. Dengan perkembangan teknologi di seluruh dunia, kekurangan pelaburan ke atas aset tidak ketara oleh syarikat simen di Nigeria boleh mengakibatkan jurang yang besar dari aspek daya saing, prestasi dan kemampanan. Kajian ini bertujuan untuk menilai kesan aset tidak ketara terhadap kelebihan daya saing, prestasi dan kemampanan syarikat simen di Nigeria. Ia memberi tumpuan kepada menentukan faktor yang mempengaruhi kelebihan daya saing, prestasi dan kemampanan syarikat simen Nigeria. Penyelidikan ini difokuskan kepada mengkaji hubungan di antara faktor di atas serta menilai kesan aset tidak ketara terhadap prestasi dan kemampanan syarikat. Syarikat simen di Nigeria telah dipilih sebagai kajian kes bagi penyelidikan ini, di mana responden kajian adalah di kalangan kakitangan pentadbiran. Kaedah pengumpulan data bagi kajian ini adalah mengunakan instrumen boring soal selidik. Analisis data statistik deskriptif dan korelasi telah dijalankan serta data kualitatif telah dianalisis menggunakan CAQDAS NVivo. Hasilmendapati terdapat hubungan yang kuat antara prestasi kewangan aset tidak ketara dan kemampanan syarikat simen Nigeria dan aset tidak ketara mempunyai kesanke atas prestasi kelebihan daya saing dan kesesuaian syarikat simen Nigeria. Kesimpulannya, aset tidak ketara adalah pemacu kepada kelebihan daya saing, prestasi dan kemampanan syarikat simen Nigeria.

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LIST OF ABBREVIATION

ΑI Intangible Asset

APCM African Portland Cement Manufacturers

African Portland Cement Manufacturers **APCM**

BCC British cement company

CA Competitive Advantage

CAQDAS Computer Assisted Qualitative Data Analysis Software

FESTAC Festival of Arts and Culture

GDP Gross Domestic Product

IAS International Accounting Standard JNKU TUN AMINA!

KBV Knowledge Based Value

NBS National Bearue of Statistics

NCC Nigerian Cement Company

PLC Public Limited Company

PM Performance

Research and development R&D

RBV Resource Based Value

SB Sustainability

SPSS Social Science Statistical Package

UK United Kingdom

Value Added Intellectual Coefficient **VAICe**

WAPCO Western African Portland cement company

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CHAPTER 1

INTRODUCTION

1.1 Study Background

An intangible asset has large dimensions and categories in business environments, the categories including marketing-related intangible assets, customer-related intangible assets, contract-based intangible assets, technology-based intangible, and artistic-related intangible assets. An intangible asset is seen as "property owned by a company or individual that is considered worthwhile and available to meet liabilities, or obligations," among other general asset definitions, the source material is intangible assets (Intangible asset is not financial assets, financial capital, or physical resource such as real fixed assets)

Generally, the subject intangible asset is interchangeable with the word intellectual property, in general business sector the performance of the intangible asset across businesses continue to increase, for example in tele-communication industry the subject intangible asset is give much attention likewise the manufacturing sector. However, the role that the intangible asset plays has been under estimated physically by other business but the financial report of the subject drawn their attention. (Paracha & Siddiqui (2019).

As a factor of production, Intangible assets play a significant role in a firm's value-building process to compete successfully. It consists of relationship capital, human capital, and structural capital (Salehi & Ghasempour, 2021).

According to Barragato (2019) the broad definition for the property is similar to that of the board of financial accounting standards, describing the property as a "probable future economic benefit of past transactions or events acquired or regulated

by one person." Rojas *et al* (2019) clearly stated that intangible assets are simply a collection of knowledge, information, intellectual property, goodwill, and know-how to be used to create wealth.

Awa Flex *et al* (2020) expressed the view that intangible assets are vital strategic resources and extremely important for the development of company value and improvement of company performance in a modern business environment.

Martin-Bhawe and Zahra (2019) Seen that building on human resources, new techniques, research, development, use of technology, and advertising, businesses are now increasingly needed to promote new processes and product innovation, to develop and retain their broader abilities to assimilate and exploit the information available from abroad, intangible assets investment, therefore, seems current to be one of the key concerns of companies that are willing to develop (or maintain) a competitive advantage, bust performance and grow sustainably. These assets have future value as well, and they can sometimes be more valuable than tangible assets.

Athreye *et al* (2021) and Paracha & Siddiqui (2019) agreed that these assets have played a significant role in the company's performance, competitive advantage, growth and have been the source of increased profitability and firm sustainability.

Companies aim to acquire key assets that may serve as the foundation for developing and maintaining a competitive advantage in today's quickly changing and competitive business settings. The strategic assets of a company can take various shapes. Intangible assets may offer a business essential and valued competitive advantages, thus they are probably one of the most important strategic assets (Shafiee, 2021).

Intangible assets are more likely to provide a competitive advantage since they are frequently unique and socially multipliable, by the activities of the business and relationship with the environment to some extend (Kryscynski, *et al*, 2001).

According to Iriyanto *et al* (2021) and Jaax & Miroudot (2021) intangible assets are becoming increasingly important drivers of innovation and knowledge production in the business environment.

According to Ali *et al* (2021) in virtually all businesses, the capacity to produce innovation, which intangible assets may provide, is becoming increasingly important for successful operation and management. Intangible capital is a precious asset that allows a company to maintain its competitive edge. In reality, intangible asset development is on the rise across the world. In certain situations, this investment equals

or exceeds traditional tangible assets like buildings, machinery, and equipment (Li, & Hall, 2020).

Intangible assets, according to strategy experts Fang *et al* (2021) are the most likely sources of business success since they are difficult to acquire and reproduce in factor marketplaces. However, because businesses are collections of intangible assets and tangible assets, it is extremely difficult for a firm to compete only based on a single, no matter how valuable it may be (Kafouros *et al* 2021). Furthermore, because Tangible and Intangible are inherently static Xie (2021) reported that organizations must rely on additional processes to integrate and reconfigure resources, as well as renew or vary their resource mix, in order to respond to environmental changes.

According to some researchers which include Dagnino *et al* (2021) only capabilities can change these static resources into dynamic nature and transform them into a new resource configuration that can sustain competitive advantage. Nonetheless, little empirical evidence exists within the resource base value (RBV) stream to claim the result, despite the main prescription of the resource-based view (henceforth known as the RBV), which points to intangible assets as the most likely sources of competitive advantage and theories that tangible asset offers no or very limited contribution to overall firm performance (Dagnino *et al.*, 2021).

Efrat *et al* (2018) and Pearson *et al* (2015). Also agreed that a competitive strategy that leverages a company's competitive advantage, performance, and sustainable growth is required. Therefore, investing in intangible assets is one of these techniques, which is popular in competitive marketplaces and enterprises of all sizes, locations, and industries.

Lin *et al*, (2020) and Thatrak, (2021). Pointed out that the necessity for competitive advantage for companies to increase performance and sustainable growth has recently increased, as it does not last indefinitely and must be renewed.

Holzmayer, & Schmidt, (2020). Confirm that long-term competitive advantage, incredible performance, and sustainability is dependent on a balancebetween a firm's internal resources, particularly intangible assets, competencies, and the changing circumstances of their external environment.

The study of Tahat *et al*, (2018) and Teece, (2018;) assert that intangible assets are regarded as one of the most important resources for a firm's long-term competitive advantage, which improves its financial and market performance for continuing sustainable growth

Nigerian cement company has faced challenges in the cement market inNigeria, challenges such as the exploration asset (license) and other related have not given the company ability to be among the leading cement producer in the country, and most companies have difficulties in reaching out to customers, managing their advertisements become subject of worry with such, it resulted in large expenses to accumulate by the company, the company have become inquisitive on the factors that affect performance, their competitive advantage, and sustainability of the company.

Therefore, going with the background that the intangible asset is seen as curtail factors in the company and driver of competitive advantage, performance sustainability in a firm therefore there is need to carried study on the impacts of the intangible asset on the Nigerian cement companies' competitive advantage, performance, and sustainability.

1.2 Problem Statement

Assets that are not corporeal are known as intangible assets. In today's economy, intangible assets like patents, trademarks, copyrights, and business methods, as well as goodwill and brand awareness etc. are all prevalent (Kadirovich *et al.*, 2021). A Asa result, businesses must invest in intangible assets to remain creative and maintain a competitive edge that leads to superior future performance and sustainability.

Sanchez-Segura *et al*, (2021) intangible asset does not only play vital role in telecommunication companies, and other industries but also in manufacturing companies, intangible asset play a significant role in the company because intangible asset such as computer software, advertisement, exploration asset (licensee) etc. are found as a driver of the manufacturing companies' competitive advantage, performance, and sustainability.

Currently, companies' business across the globe are struggling to maintain, and increase the level of their investment and management of intangible assets because of technological development. The technological advancement is growing rapidly to the level company become obsolete in production, have very low sales if they have not invested and adopted the new technologies such as intangible assets in form of computer softwires and new way of advertisement technologically, their performance will decline and give their partner competitive advantage over them that adopt

technological development from the various perspective of intangible assets (Caseiro, & Coelho, 2019).

Bartolacci *et al* (2020) stipulate that many of company's performances have been elevated through the investment and management of internal resources such as intangible assets, especially the technological base intangible asset including computer software, advert etc.

Rufo (2017) reaffirms that investment in intangible assets from technology and contract base categories among African, US, Japanese and European, Asia companies grew rapidly in the macro scenario. Increased global competition, the use of information and technology, computer software, the adoption of new business models, and the prevalence of the service sector have increased firms' performance, growth, and competition ability. The role of intangible assets in regional growth, performance, and sustainability has now been increasingly analyzed for a relatively short period.

Haseeb *et al*, (2019) reported that Intangible asset research has evolved from a micro-level through the various stage to its integration into a macro level. For a time, intangible asst assets have been regarded as competitive sources, as Barney's seminar paper emphasizes (Onufrey & Bergek, 2020; Chen *et al*, 2021).

World cement 2012 reported that the Nigerian cement industry growing at an 11 percent annual rate, one of the top companies invested \$1 billion increase enabling the nation Nigeria to be a self-sufficient cement-producing center by increasing output by up to 22.50 million costs yearly, Dangote now exports 27800 tons of clinker through Lagos state to the rest of the globe, with the credible record, most of the other cement firm has compliant of lack of performance which arises as a result of technological innovation, (software) licenses, and marketing strategy (advertisement), it has been evident that factor such as intangible asset management inventory management has given Dangote cement plc advantage to increase with domestic production of 7.3 million tones. Therefore, intangible assets are worth a dimension for research in the Nigerian cement industry.

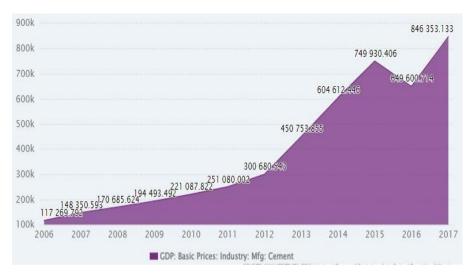


Figure 1.1: Nigerian GDP: Basic prices: Mgf: Cement from 1981 to 2017 (NBS 2022)

The above Figure 1.1 is indicating the GDP and the basic price in the cement industry as price increment is on among the indicator of substandard performance there have been a increments on the price of from 2006 to the year 2017, all this factor that attributed to lack of performance is as result of lack of utilization technology, increase in the cost of licenses and non-reaching out to the customers.

Comparing with the Figure 1.2 below showing the Nigerian cement consumption forecast which forecasted 8% in yoy volume to 28 million metric tons in 2021 and 10 years CARG with 6% to 45 million metric tons in 2030, this projection has restrengthened that the for research in the Nigerian cement industry to enhanced the performance competitive advantage and sustainability is required

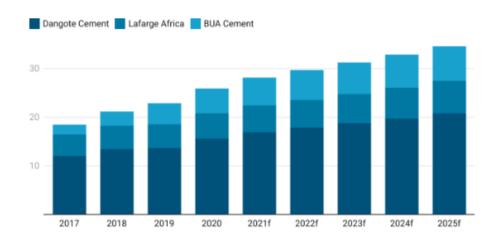


Figure 1.2: Nigerian cement consumption forecast (NBS 2022)

Nigerian firms have generally been producing cement in Africa and still producing, cement companies, such as Ashaka Cement Lafarge Cement, BUA cement Plc, Dangote Cement Plc, Reagan Cement Company, Cement Company of Northern Nigeria, Edo Cement Company Ltd, etc. The fact that this whole companies are producing cement, Dangote cement Plc, BUA Cement Company, Ashaka cement Plc. And numerous other companies are confronted with a challenge of execution, competitiveness, performance and sustainability due to the adoption of technology in the business especially intangible asset categories, also political factors which are caused by the instability of certain policy in contract-based intangible assets such as licensing and other types of intangible assets, furthermore the lack of investment into the intangible asset such as advertisement has contributed to the problem, the consequences this firm encounter have resulted in financial losses for the companies and their shareholders, many employees have lost their jobs, product price increases, and scarcity of cement products in the market, such related issue evidenced by the study of (Whyte, & Whyte, 2019).

Again many companies into cement production in Nigeria have long not operated due to lack of in-corporation with the technological development, competition, and changes in policy on investment in an intangible asset such as licensing; royalty, lease agreements; construction permits; franchise agreements, and advertisement as obtained in the profile of BUA company, the record also indicated that Sokoto cement and Edo cement letter acquired by the BUA company to increase his production some of the reasons that lead selling of Sokoto cement and Edo cement company are lack of strong performance, competitive advantage, and sustainability. Some of the factors that also hinder them from operations are lack of adoption of new technologies and investment in intangible assets.

Going by this scenario Nigerian cement companies is still not the top and dominant producer of cement in the world. Intangible assets have grown in importance throughout time, accounting for 5% of all assets in 1978 and now accounting for 78% of all assets today.

However, some public and private organizations do not seek to incorporate the value of intangible assets but covid 19 pandemic has reveal it importance (Bailoa, 2021). The business has recognized the importance of intangible assets in enhancing financial performance, creating value, and preserving competitiveness.

Numbers of studies have been carried out on the impact of the intangible asset on firm performance, competitive advantage, and sustainability indicating the contribution of a tangible asset to firm performance, it is also indicting that many non-financial businesses' tangible asset stock influences how effectively their goods may meet desired objectives such as competitive advantage, performance, and sustainability.

Many businesses' tangible non-current assets account for more than 10% of their asset structure and contribute significantly to their revenue-producing capability. The strength of a company's tangible non-current assets is also a good predictor of its borrowing capacity since these assets may be sold to pay creditors in the event of a liquidation. As a result, the quality and quantity of tangible assets obtained by businesses in certain industries reflect the competitive strength of the companies.

It was seen in the study of the following Chukwu & Egbuhuzor (2017) which focuses on tangible assets and corporate performance: evidence from the manufacturing industry in Nigeria. Nkechi, & Sunday (2020) investigate effect of assets utilization of net worth of big-cap companies quoted in Nigeria. Gajšek, & Kostanjšek (2015); Okwo, Ugwunta, and Nweze, (2012) two studies based on Nigerian data looked at how tangible asset investments impact company performance in Nigeria. Olatunji and Tajudeen (2014) examined the impact of intangible assets on thebanking sector.

With the impact mentioned above of intangible assets in studies of the authors mentioned above, it indicates that most studies are assessing the impact of a tangible asset with no single study on assessing the impact of intangible assets in manufacturing sectors in Nigeria.

Asgari & Asgari (2021) the complexity of the nature of intangible assets is worth the in-depth research over the dimension considering manufacture company to be specific, the importance of the roles it plays in a company is comprehensive and cannot be overemphasized, realizing such, and with the lack of research studies on focused on intangible asset the need for the in-depth research on intangible assets raised.

Asgari, & Asgari, (2021) the complexity of the nature of intangible assets is worth the in-depth research over the dimension considering manufacture company to be specific, the importance of the roles it plays in a company is wide and cannot be overemphasized, realizing such, and with the lack of research studies on focused on intangible asset the need for the in-depth research on intangible assets raised.

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