Muobuike Owen Chukwuazom

EFFECTS OF INTELLECTUAL CAPITAL ON ORGANIZATIONAL PERFORMANCE IN TAI SOLARIN UNIVERSITY OF EDUCATION

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Muobuike Owen Chukwuazom

Supervisor

Assoc. Prof. Dr. Behiye Cavusoglu

Nicosia

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Approval

We certify that we have read the thesis submitted by **Muobuike Owen Chukwuazom** titled **"EFFECTS OF INTELLECTUAL CAPITAL ON ORGANIZATIONAL PERFORMANCE IN TAI SOLARIN UNIVERSITY OF EDUCATION"** and that in our combined opinion it is fully adequate, in scope and in quality, as a thesis for the degree of Master of Educational Sciences.

Examining Committee	Name-Surname	Signature
Head of the Committee:	Dr Sameer Hamdan	.....
Committee Member*:	Dr Laith Tashtoush	.....
Supervisor:	Assoc. Prof. Dr. Behiye Çavuşoğlu	.....

Approved by the Head of the Department

10../08../2022

.....

Assoc. Prof. Dr. Behiye Cavusoglu

Head of Department

Approved by the Institute of Graduate Studies

...../...../22...

Prof. Dr. Kemal Hüsnü Can Başer

Head of the Institute

Declaration

I hereby declare that all information, documents, analysis and results in this thesis have been collected and presented according to the academic rules and ethical guidelines of Institute of Graduate Studies, Near East University. I also declare that as required by these rules and conduct, I have fully cited and referenced information and data that are not original to this study.

Muobuike Owen Chukwuazom

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Foremost, I would like to give thanks to God, my family and friends despite the challenges. I appreciate the unconditional support of my supervisor Assoc. Prof. Dr. Behiye Cavusoglu throughout my research study, for her motivation, guidance, patience, enthusiasm and immense knowledge.

Abstract

Effects of Intellectual Capital on Organizational Performance in Tai Solarin University of Education

Muobuike Owen Chukwuazom
MA, (Innovation and Knowledge Management)
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The present thesis assesses the effects of intellectual capital on organizational performance in Tai Solarin University of Education. The Data was collected from 346 staffs of Tai Solarin University of Education via a questionnaire survey. The thesis objectives are: (i) to check the effects of intellectual capital on organizational performance; (ii) to examine the effects of human capital on organizational performance; (iii) to determine the effects of structural capital on organization performance (iv) to check the effects of relational capital on organizational performance and (v) determine the joint contribution of human capital, relational capital, structural capital and intellectual capital on organisational performance in Tai Solarin University of Education. We applied several techniques such as Pearson correlation, multiple regression to assess these interrelationships. The outcomes from the findings revealed that a positive significant relationship exists between human capital and organisational performance. It was also revealed that a positive significant relationship exists between relational capital and organisational performance. Furthermore, it was also revealed that a positive significant relationship also exists between structural capital and organisational performance. This research work is limited to a specific higher institution of learning, which restricts the generalizability of the findings. Secondly, the research took into notice the perspective of the staffs while leaving out students' perspective of intellectual capital on performance. The findings of the research will be valuable in analyzing the alignment of results with the university's founding strategies, as well as in setting measurable targets that are connected with the organization's strategic mission and assessing performance in terms of producing human, structural, innovational and rational capital based on the management and reporting of intellectual capital.

Keywords: Intellectual Capital, Organization, Performance, University

ÖZ

Tai Solarin Eğitim Üniversitesi'nde Entelektüel Sermayenin Örgütsel Performansa Etkileri

Muobuike Owen Chukwuazom
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Bu tez, Tai Solarin Eğitim Üniversitesi'nde entelektüel sermayenin örgütsel performans üzerindeki etkilerini değerlendirmektedir. Veriler, Tai Solarin Eğitim Üniversitesi'nin 346 personelinden anket çalışması yoluyla toplanmıştır. Tez hedefleri şunlardır: (i) entelektüel sermayenin kurumsal performans üzerindeki etkilerini kontrol etmek; (ii) insan sermayesinin örgütsel performans üzerindeki etkilerini incelemek; (iii) yapısal sermayenin organizasyon performansı üzerindeki etkilerini belirlemek (iv) ilişkisel sermayenin organizasyonel performans üzerindeki etkilerini kontrol etmek ve (v) beşeri sermaye, ilişkisel sermaye, yapısal sermaye ve entelektüel sermayenin organizasyonel performans üzerindeki ortak katkısını belirlemek. Tai Solarin Eğitim Üniversitesi. Bu ilişkileri değerlendirmek için Pearson korelasyonu, çoklu regresyon gibi birkaç teknik uyguladık. Bulgulardan elde edilen sonuçlar, insan sermayesi ile örgütsel performans arasında pozitif ve anlamlı bir ilişki olduğunu ortaya koymuştur. Ayrıca ilişkisel sermaye ile örgütsel performans arasında pozitif yönde anlamlı bir ilişkinin olduğu ortaya çıkmıştır. Ayrıca yapısal sermaye ile örgütsel performans arasında da pozitif yönde anlamlı bir ilişkinin olduğu ortaya çıkmıştır. Bu araştırma çalışması, bulguların genellenebilirliğini kısıtlayan belirli bir yüksek öğrenim kurumu ile sınırlıdır. İkinci olarak, araştırma, öğrencilerin entelektüel sermayenin performansa bakış açısını dışarıda bırakırken personelin bakış açısını dikkate almıştır. Araştırmanın bulguları, sonuçların üniversitenin kuruluş stratejileriyle uyumunu analiz etmenin yanı sıra, kuruluşun stratejik misyonuyla bağlantılı ölçülebilir hedeflerin belirlenmesinde ve beşeri, yapısal, yenilikçi ve rasyonel sermaye üretimi açısından performansın değerlendirilmesinde değerli olacaktır. entelektüel sermayenin yönetimine ve raporlanmasına dayalıdır.

Kelimeler: Entelektüel Sermaye, Organizasyon, Performans, Üniversite

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CHAPTER I

Introduction

1.1 Background of the study

Most businesses need both physical and intangible assets to grow and succeed. A company's intangible assets are just as important as its physical ones when it comes to its long-term success and development. Although many organizations lack access to intangible assets, according to Kristandl & Bontis (2007), they may help a company create a long-term position. Because they can't be simply obtained by rivals or substituted by other businesses, they have the potential to provide future advantages that other companies cannot easily get. They are immobile because they are under corporate control. They are non-physical and have a finite life according to their nature. The intellectual capital of a company refers to these assets' ability to be converted into monetary value at a later date. A company's competitive edge is built on the impactful blend of human, structural, and relational capital known as "intellectual capital" (Saeed, Sami, Lodhi, & Iqbal, 2013). There is a strong connection between "intellectual" and "Capital," which refers to resources, and the word "intellectual."

As a novel and rapidly developing notion, intellectual capital is gaining traction. In order to distinguish themselves from their rivals, organizations, whether for-profit or nonprofit, strive for increased market share and better use of their resources. Competition and economic circumstances deter businesses from making optimal use of their resources, which leads to an increase in performance. A country's economic development and progress are ultimately the result of this increase in the effectiveness of organizations. Innumerable studies indicate the importance of an organization's intellectual capital in terms of both efficiency and competitive advantage (Mention & Bontis, 2013; Muhammad & Ismail, 2009). (Mondal & Ghosh, 2012).

It's important to note that public and private educational institutions play a germane role in the development of a knowledge-oriented community when it comes to this investigation. As a result of their reliance on intellectual capital, these companies generate output that is utilized by other companies. Researchers (Sharafi & Abbaspour, 2013) found that the performance of educational institutions, particularly universities, is

strongly influenced by the quality of their intellectual capital. This intangible asset must be managed properly if educational institutions are to maintain a high level of performance over time. Historically, universities have been distinguished by their primary roles: teaching and research. Growing social and economic development has been a need and expectation for universities in recent years.

1.2 Statement of Problem

The focus of this research work is to check how an educational institution's intellectual capital affects its performance. University intellectual capital should be examined and studied so as to have a better understanding of how intellectual capital affects the performance of institutions.

Between their internal responsibility to staff and student innovators and external obligations to prospective commercial partners, universities must strike a balance. Businesses, government agencies, and semi-governmental entities fall within this category.

This research is essential since Nigerian schools do not teach intellectual capital. To effectively produce new skills and knowledge, a college's intellectual capital must also be at its highest potential level. In a developing country like Nigeria, there are no reputable research or case studies on intellectual capital in education. The great majority of academic study is focused on other types of service providers, such as telecommunications, healthcare, financial institutions, hotels, and retail stores. According to a study, it is critical to make investments in Nigeria's universities' intellectual capital.

In the end, the most difficult task is to sustain the institution's goal of attaining truth and effective knowledge in the spirit of academic/educational independence while also making use of this knowledge for the larger good. Information and communications technology (ICT) in university organizational performance has led to an increased interest in how universities may manage and assess intellectual capital.

Despite the fact that intellectual capital is a strange commodity. Are universities aware of the ways in which intellectual capital might help them to enhance their results? Does an institution's intellectual capital have an impact on the organization's success?

1.3 Research Objectives

The objective of this research thesis is to check the effects of intellectual capital on organizational performance in Tai Solarin University of Education. Specifically, the objectives aim;

- To check the effects of intellectual capital on organizational performance in Tai Solarin University of Education.
- To examine the effects of human capital on organizational performance in Tai Solarin University of Education.
- To determine the effects of structural capital on organization performance in Tai Solarin University of Education.
- To check the effects of relational capital on organizational performance in Tai Solarin University of Education.
- To determine the joint contribution of human capital, relational capital, structural capital and intellectual capital on organisational performance in Tai solarin University of Education
- To investigate the relative contribution of human capital, relational capital, structural capital and intellectual capital on organisational performance in Tai solarin University of Education

1.4 Research Questions

In this thesis, the research questions are drafted as a guide for the study.

- There is no joint contribution of human capital, relational capital, structural capital and intellectual capital on organisational performance in Tai solarin University of Education?
- There is no relative contribution of human capital, relational capital, structural capital and intellectual capital on organisational performance in Tai solarin University of Education?

1.5 Research Hypothesis

To achieve the objectives of this study the following hypotheses were formulated.

H1: Intellectual capital has influence on the organizational performance in Tai Solarin University of Education.

H2: Human capital has influence on the organizational performance in Tai Solarin University of Education.

H3: Structural Capital has influence on the organizational performance in Tai Solarin University of Education.

H4: Relational capital has influence on the organizational performance in Tai Solarin University of Education.

1.6 Significance of the Study

Strategic management and internal value creation will both benefit from the outcomes of this research, which will provide management with an improved reporting system. Internal management and transparency may be improved by providing an efficient framework for finding, assessing, managing, and communicating knowledge. For the simple reason that academic institutions are under increasing public scrutiny for their lack of accountability, openness, and control over how public money is spent. Another benefit would be more transparence with the distribution of public funds and a demonstration of their competitiveness by exhibiting their development as intangible assets, identifying leverage effects and externalities, and communicating (new) organizational value.

For this study, the university's founding strategies can be examined, as well as the setting of measurable goals that are linked to the business' strategic mission and evaluation of performance based on management and reporting of intellectual capital in terms of the production of human, structural and innovational capital. It is imperative that the university system use knowledge management to its fullest extent before it can continue to expand and prosper. Many stakeholders in Nigerian universities will be able to criticize the current accounting information model in Nigerian universities and recommend that annual accounts of universities should be expanded to include data on intellectual capital, which has been demanded by various stakeholders, as a result of these findings.

These intangibles include academic achievements in the domains in which NUC and other institutions utilize their staff members and their education and expertise in the fields in which they teach and study. Researchers' capabilities and competencies (Human Capital) and attempts to invent intellectual property (Capital Structure) as well as employability for graduates, links with the corporate sector, and research application and dissemination should all be taken into account (Relational capital).

1.7 Research Plan

The thesis's structure is as follows: As mentioned before, the study question, thesis framework, and goals are as follows: In chapter two, the literature review, theoretical framework, and empirical research are discussed; (ii) the third chapter discuss the research methodology; (iv) the fourth chapter, discuss the method of data analysis employed in this. Discussions, limitations and implications of the thesis is also discussed in the fifth chapter; and (v) the sixth chapter presents the conclusion and policy suggestions.

1.8 Definition of Terms

- **Intellectual Capital:** When Klein and Prusak (1994) spoke about "valuable information crowded in one location," they were talking about IC. In general, it serves as a reservoir of learning, tradition, and fresh ideas (Sullivan, 2000). The majority of IC specialists, despite their divergent views, believe that IC may be divided into three main categories: human, structural (or institutional), and relational (or interpersonal) (Bontis, 1998; Edvinsson & Malone, 1997; Edvinsson, Roos, & Dragonetti, 1997; Edvinsson & Sullivan, 1996; Lynn, 1998; Stewart & Ruckdeschel, 1998). Despite the fact that this study aims to enhance the fourth aspect of social capital with the aforementioned wide dimensions, it relies on prior research. As a whole, the knowledge that is included in the networks of mutual familiarity and identification among employees is referred to as SOIC (social capital) (Nahapiet & Ghoshal, 1998; Subramaniam & Youndt, 2005). Trust and cooperation are built on the foundation of social networks that grow over time via casual contacts (Granovetter, 1985). To put it another way, "human capital" (HIC) refers to a company's human resources' knowledge, skills, and creativity.

Innovating assets, including as patents, are included in the structural capital (SIC), which also includes process capital (organizational procedures and processes). "Relational capital" requires a detailed awareness of market routes, customer and supplier ties, and government or industry networks. Knowledge and experience, professional competence, know-how, and strong relationships, as well as technology talents, all contribute to a company's competitive advantage (CIMA, 2001).

- **Organizational Performance:** The efficacy of an organization, or the degree to which it fulfills its established aims or announced objectives, is the subject of this study (Mia & Clarke, 1999; Steers, 1977). In addition, a company's effectiveness in implementing a sound plan may be gauged by looking at its performance (Otley, 1999).
- **Education:** For a university grad, "university education" also means the acquisition of broad and specialized knowledge and skills that prepare him or her for work in industry, for scientific study or for teaching a particular area of expertise.

CHAPTER II

Review of Literature

2.1 Conceptual framework

The three factors that make up the conceptual model are: human capital, relational capital, and structural capital. There is an extra dependent variable in this model, and that is the success of the company.

The research model was designed utilizing the intellectual capital framework. According to this paradigm, there is a direct link between an organization's capacity to use its intellectual capital and its success. Using this diagram, we can observe the relationship between the several factors involved.

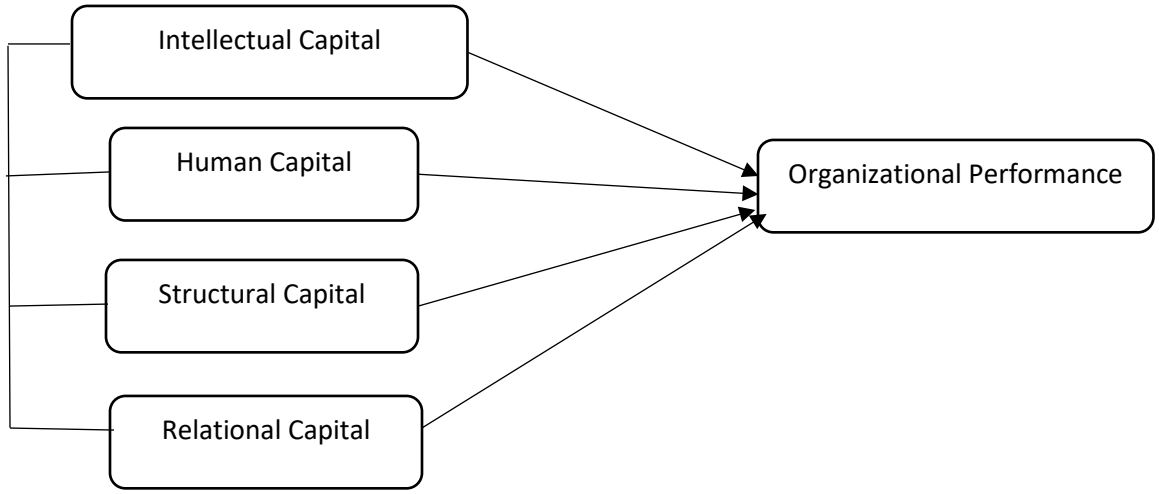

Figure 1: Conceptual Framework

2.2 Conceptual Review

2.2.1 Intellectual Capital

Gailbraith first developed the concept of intellectual capital, although it has only recently undergone significant revisions. (Kaya, Sahin, & Gurson, 2010) identify the categories types of capital needed by every organization as physical, financial, and intellectual. A company's intangible assets ranking grows when it has a larger degree of intellectual capital, which is properly desribed as knowledge, experience, information, and talents that have a significant impact on current and future progress. 'Intellectual capital,' according to Edvinsson and Malone (1997), refers to the accumulation of information and

knowledge. The IC is described as the variation between a company's book value and its market value. He defined IC similarly to (Sullivan, 2000): as knowledge which can be transferred for money. IC includes not only a company's real assets, but also its intangible assets, such as its employees, community relations, and operating techniques. (Lönnqvist, 2004) claims that in recent years, intellectual capital, a company's knowledge-based equity, has gained the most attention and significance (Campisi & Costa, 2008). Choudhury (2010) argues that intellectual capital is the bedrock upon which an organization and, ultimately, a country, are built, and it is this capital that fuels future development and prosperity. Production aspects that aid in long-term profitability are included in the plan. Examples include patents, copyrights, trademarks, customer connections, and knowledge. Intangible assets conceal a company's capacity disparity.

Information and Communication Technology (IC) has been proposed as a means of decreasing costs or increasing consumer benefits, or both. This is supported by several theories in the literature, including resource-based theory, organizational learning and information processing.

European Commission definitions are used to characterize intellectual capital in education, notably universities, by Ram'rez & Gordillo (2014). Research shows that an institution's non-tangible assets are made up of patents, copyrighted materials and methods of doing business, as well as social recognition of the abilities of the institution's members and the ability to interact with others. According to a study by (Canibano & Sanchez, 2008), because of society's greater authority and autonomy, many other institutions mandate and motivate educational institutions to adequately report their intangible assets (IC). There are six components to 1C, according to Khalique et. al. (2011), although the bulk of research focuses on only three: human capital, structural capital, social capital, and technological capability (Ahmad et. al., 2012; Akbari et. al., 2013; Corcoles et. al., 2011). Human capital, according to (Sundac & Krmpotic, 2009), is the most significant part of intellectual capital, but this does not invalidate the need of integrating the other two. In the field of investigation (Saeed et al., 2013).

As a result, organizations must devote resources to building up their human capital if they want to get a return on their investment. To put it simply, structural capital refers to all that an organization must do to succeed and flourish. These rules and processes assist

a company to maintain long-term connections with its stakeholders and also with other businesses, according to this research. Because it includes workers' skills, knowledge, and competencies, human capital is the most valuable asset for any firm (Wasim-ul-Rehman, Asghar & Rehman, 2013). Structural capital provides the foundation for human capital. There are sections on patents, trademarks, copyright, techniques, legislation, and regulations. Relational capital refers to the sum of an organization's connections, both internal and external, with its many constituencies. Through brainstorming and daydreaming, or re-engineering and raw brilliance, human capital may bring innovation and regeneration to a firm. In the same way, structural capital is defined as the mechanisms that enable individuals to function at their best, since even if employees have exceptional talents, an organization's ability to attain peak performance is hampered by a lack of suitable systems and procedures. Customer capital is closely linked to one's ability to build and maintain relationships with one's customers as well as one's understanding of various marketing channels.

When it comes to defining "intellectual capital," organizations are woefully underprepared, as seen by the many definitions available. Financial assets, such as cash, have less weight than intangible assets, therefore intellectual capital is the new lynchpin of economic growth in our knowledge-based society. Many experts now believe that intellectual capital is an essential part of improving organizational efficiency (Sydler, Haefliger, & Pruksa, 2014). Priority intangible assets are increasingly being given more weight in the reorganization of capital. As a result, they are considered non-physical assets (the ability to utilize organizational culture and information).

Every intangible asset and an organization's economic capabilities have a role to play in creating a cohesive collection of resources and a system to develop those resources. It's fairly uncommon for investors in the most sophisticated and rapidly developing sectors to use a range of arguments to promote their investments, according to A. Toffler (1995). According to Rastogi (2002), "intellectual capital" is a company's capacity to capitalize on opportunities for value creation. In this viewpoint, a multi-level analysis is typically employed, integrating human knowledge and talents with organizational and interorganizational processes. A company's intangible assets, such as its employees' knowledge and expertise, may be turned into a valuable source of financial advantage by

carefully managing the power of intellectual freedom. Using this definition, intellectual capital refers to all of a company's intangible resources, which, when coupled with other advantages, may lead to long-term advantages. Understanding intellectual capital requires familiarity with the terms and meanings listed above. An organization's intellectual capital is described as having the following properties, according Lönnquist and Mettanen:

• Invisibility;

• Related to the knowledge and experience of workers, as well as the clients and technologies in possession of an organization;

• Increases the chances of an organization's future success.

2.2.2 Components of Intellectual Capital

Intelligence capital may be divided into four categories: process capital (innovation), research and development (R&D), or intellectual property (IP). Classification of the human body's internal and exterior structures, as well as its constituent parts, is done by Svieby (1997). People, market assets, infrastructure, and intellectual property all go into making up intellectual capital, according to Marr et al. (2004a, b). As stated by Stewart (1997), "intellectual" capital is a blend of human, structural, and consumer capital.

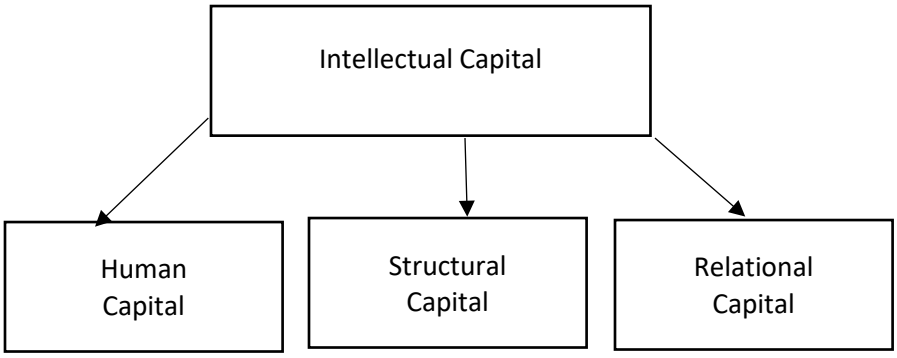

Figure 2: Elements of Intellectual Capital (Steward, 1997)

Three main components exist according to a study of the intellectual capital literature by Edvinson & Malon (1997), Roos et al. (1997), and Bontis (1998).

- ***Human capital:*** The overall amount of intellectual capital is mostly comprised of this kind of capital. Human knowledge is represented in this way. People's capital

is taken with them when they depart an organization. For example, it takes into consideration an employee's talents, experience and capacity to innovate.

- ***Structural capital:*** non-human capital is the sum total of all of the company's resources. Providing an infrastructure to support and expand human capital is a key component of this capital. Because it is kept in the institution, when employees leave the organization, this money is not at danger of being lost. It encompasses the organization's vision, management philosophy, organizational culture, operational procedure, strategy, data base, and information systems.
- ***Customer/relational capital*:** This capital consists of all assets that influence the company's network, environment, and connections both inside and beyond the business. There are many different types of interactions that an organization has with other people in the community and government and regulatory organizations.

Human Capital

As defined by Hudson (1993), an employee's human capital includes both his or her genetic make-up and the knowledge, skills, and attitudes he or she has accrued via prior employment. This ability to think beyond the box is referred to as human capital in Bontis's (1998) definition of human capital. Losing this cash is a major concern for the firm because of staff departures. It is Bontis, N (2001) who argues that human capital has much valuable to a business since it is the source of innovation and long-term competitive advantages. There's no one-size-fits-all definition for it. According to Kim et al. (2010), an employee's competencies, skills, and education are what produce an organization's worth.

It is impossible to have intellectual capital without people. It has to do with the employees' knowledge, competence, skill, capability, and creativity (Edvinsoon and Malone, 1997; Bontis, 1998; Shaari et al., 2010; Isaac et al., 2010). It is believed that workers create intellectual capital through demonstrating competence, a positive attitude, and mental agility, as reported by Roos and colleagues (1997) and Bontis and colleagues (1997) (2000). Competence encompasses a worker's outlook, skills, and education, while their outlook and intellectual agility focus on their creative and problem-solving ability. Human capital, according to Fitz-enz (2000), consists of a worker's knowledge, ability,

and experience. A company's most valuable asset is its people, whose skills and knowledge serve as the foundation of its added value.

Human capital has drawn the attention of academics and practitioners from a wide range of fields (HC). Strategic HC deployment is becoming more critical in light of this expanding trend, which plays a dynamic role in a volatile business environment. Due to these reasons and many more, investing in human capital development (HCD) programs is a smart business move. As a consequence of HC, the organization's growth and future prospects are greatly enhanced or at the very least altered in a more favorable direction. A company's primary strategic obligation is to keep growing the value of the organization as a whole. Centre for Educational Research and Innovation (CERI) defines Human Capital (HC) as "knowledge, skills, competences and other traits ingrained in economic activity" (CERI, 1998). "Knowledge management" refers to the use of employees' professional experience, knowledge, competence, and talent to improve the company's performance and provide a competitive advantage (Hayton, 2005; Martinez-Torres, 2006; Roos and Roos 1997). Every company's most peculiar strategic asset is its workforce. In order to keep its workers happy and productive, many MNCs provide generous benefits and training programs tailored to individual employees' needs. There are only a limited number of people who are capable of making critical judgments that have an impact on the bottom line.

Failure to invest in the motivation, loyalty, and competency of the company's workers may mean the end of the company as we know it. Cheng et al. (2010) concluded that human value contributed is an essential competitive edge component that enhances firm performance, in contrast to Chen and Lin (2004) who stated that many organizations get competitive advantage from human cost. The development of new value and the maintenance of one's current competitive position are impossible without high levels of HC and knowledge. A company's efficiency and performance may be improved by the use of an integrated circuit subsystem, according to De Pablos (2003). Human capital enhancement has a favorable effect on the performance of an organization, according to Bontis et al. These relationships are supported by Bontis's 1998 study. Firms with high Human Capital Effectiveness (HCE) were more likely to achieve financial success, according to Chen and colleagues (2005). As previously stated, a company's human costs

have been demonstrated to have a favorable link with financial success (Goh 2005; Tan et al. 2007; Ahangar 2011; Joshi et al. 2010; Kamath 2007; Yalama and Coskun, 2007).

Structural Capital

Structural capital, according to Edvinsson and Sullivan (1996), is one of the most essential intellectual capital components. According to Cohen and Kaimenakis (2007), structural capital is an asset that a corporation owns outright. Copies and distribution are possible. Improved working conditions, more knowledge development and exchange, and a boost in productivity are all benefits of structural capital. Nonhuman knowledge in the form of policies, procedures, general systems, and organizational structures is referred to as structural capital by Stewart (1999). He considers all of these things to be more important than they could ever be measured in monetary terms.

It is important to remember that "structural capital" indicates to information that remains in an organization even after its original creators have left (1997). Structural capital is the activities, values, and future goals of the firm. Ramezan (2011) defines "structured capital" as "knowledge that is embedded in the organization and supports human capital." It's all about the organization's structure, culture, and learning as well as its structural capital and staff productivity, as well.

Examples of organizational structural capital include databases, organizational charts, process manuals, strategies, procedures, and policies (Bontis et al., 2000; Wu and Tsai, 2005). Roos et al. (1998) refer to this as "structural capital," which are the things left behind when employees leave the business physical structure each night.

There's no human capital, but there is structural capital that may be copied and shared by businesses (Cohen and Kaimenakis, 2007). Joshi et al. (2010) defines structural capital as knowledge that is inherently linked to an organization. Human capital is better invested in activities like knowledge development and leverage when there is structural capital present, in the opiniom of Stewart (2000) and Shih et al. (2010), for example. Structure and system are the primary concerns of structural capital, according to Ramezan (2011). Structural capital is essential for companies to produce value-added goods and obtain a competitive edge. In Bontis (1998), it is impossible to effectively exploit an organization's intellectual capital if its structural capital is poor. The full utilization of an

organization's intellectual capital is facilitated by robust structural capital, according to Ramezan (2011). An organization's structural capital, according to the literature, is comprised of infrastructure, system policies, and processes.

Relational Capital

A company's connections and the information it gains via marketing channels are both considered to be a part of its "relational capital," which it owns and grows through its activities. "Relational capital," as defined by Kaplan and Norton (1996), stresses the connections between staff and clients. It indicates the loyalty and happiness of customers and employees in connection to the success of the firm. Relational capital, in the opinion of Edvins son and Malone (1997), is a component of structural capital as well.

According to Bozbura, structure and relational capital aren't the same thing (2004). In the opinion of Chen et al., relational capital is the most significant element of intellectual capital when it comes to building market value (2005). They also responded that a company's capacity to create and maintain solid connections is critical to its success. Relational capital, in the opinion Chang and Tseng (2005), provides a foundation for the development of value by the company's stakeholders, both internally and outside.

Through the use of collaborative problem solving, supportive RC helps an organization to better understand and address emerging concerns. In order to get an edge in the marketplace, Cheng et al. (2010) claimed that sustaining long-term, mutually beneficial relationships with stakeholders is essential (Dewhurst and Navarro, 2004). Customer relationships, according to Bontis, serve as a kind of "relational capital" that may be used to grow your business (1998). According to Prahalad & Ramaswamy (2000), customers are a source of improving organizational competence. An organization's ability to serve its customers may be improved via the utilization of customer connections. Relational capital is equally crucial for the company's external stakeholders. Furthermore, the notion of relationship capital may be attributed to marketing. It's already common knowledge that companies often utilize marketing-intensive tactics to figure out how much relationship capital they have. Relational capital has become a big part of many organizations' budgets in order to maintain a favorable image with their customers and

other stakeholders. Relational capital improves product quality, productivity, and responsiveness, all of which are critical to a company's success, via this method.

2.2.3 Organizational Performance

Individuals, groups, and even whole organizations may be checked on the rate of their performance in the workplace. Job satisfaction, objectives achieved, and individual adjustment are all referred to as "personal adjustment." As a result of these and other issues, it's important to take into account things like group morale and cohesiveness as well as organizational profitability and efficiency as well as a company's capacity to handle change (Ivancevich, 1977). "" (Tseng and Lee, 2014),"" As described by Borman and Motowidlo (1993), "any actions connected to organizational goals that are depending on individual involvement levels" is OP (Tseng and Lee, 2014). The basic objective of every company is to increase productivity. Growth of OP may be shown in strategic management in this way: (Venkatraman and Ramanujam, 1986). Managers everywhere are worried about the spread of OP. Organizations must have a comprehensive measuring index in order to give managers and staff with clear instructions and objectives (Tseng and Lee, 2014).

Profit and non-profit organizations alike consider organizational performance a critical problem (The et al. 2012). The majority of businesses want to improve their overall performance (Uzkurt et al., 2013). An organization's performance can be affected by a variety of factors, according to research. These include the organization's culture (Agbejule, 2011), the environment in which it operates (Tuanmat, 2011), employee involvement and commitment to its goals (Molina, 2009), and individual and organizational learning (Bhatti et al., 2011). Organizational performance may be defined in a variety of ways in the literary canon. This ability to provide acceptable outcomes and activities is referred to as performance (Gharankhani, 2012). The ability of an organization to provide its own required needs and those of its stakeholders is referred to as organizational performance. However, according to, an organization's performance may be defined as a rate at which it accomplishes its objectives (Ho, 2011). Variety of measures and objectives exists that may be used to check an organization's overall success (Abu-Jarad et al., 2010). This task isn't as easy as it sounds when it comes to evaluating the

success of a corporation. Measures that aren't based on money should also be considered (Tseng, 2010). Organizational success may be assessed by looking at factors such as creativity, the invention of new products, customer happiness, customer retention, and costs associated with running the business. The (Clarke et al., 2011) method for analyzing organizational performance includes return on assets, return on equity, revenue growth, and employee productivity.

Researchers have devoted little attention to the definition or assessment of organizational performance, despite being a regularly used tool for measuring a company's capacity to function well (Richard, Devinney, Yip, & Johnson, 2009). Scholars have a difficult time objectively evaluating the success of organizations. It is vital to consider the multifaceted nature of an organization's structure, size, and scope in order to have a comprehensive understanding of its performance (Devinney, Richard, Yip, and Johnson, 2005). Performance and variables of interest, such as intellectual capital, may be linked via the company's internal measures (such as intellectual capital). This might have an effect on managerial decisions and practices (Devinney et al., 2005).

2.3 Theoretical Review

Based on the Knowledge-Based theory, this study was conducted. The Knowledge-Based theory was first suggested by Stalk in 1992. In principle, a firm's competitive advantage is built on knowledge-based abilities and competencies. In the words of Marr and Schiuma (2004), "a company's capabilities are dependent on its knowledge, and as such, a company's ownership of specialized information confers some benefits." A company's long and short-term survival rests on its ability to identify, maintain, and rehabilitate its competencies (Surdarsanam et. al., 2013). Organizations may improve their performance by increasing their Human Capital Efficiency (HCE), Structural Capital Efficiency (SCE), and Capital Employed Efficiency (CCE). Tai Solarin University's research is of the suggestion that intellectual capital has little effect on an organization's success.

2.4 Discussion of Hypotheses

Intellectual Capital and Organizational Performance

It has been acknowledged by many researchers that IC is the most important strategic assets in evaluating the performance of an organization in the developing and under developed countries (Khalique, Abdul Nassir Shaari, Md. Isa & Ageel, 2011; Amrizah & Rashidah 2013 and Ngah & Ibrahim, 2012). For instance, Bontis et al. (2000), in their study done in Malaysia approved that IC is a significant contributor to the performance of organization despite of different type of industry.

A study by (Maryam et al, 2015) investigated the relationship between six elements of intellectual capital such as human capital, structural capital, customer capital, social capital, technological capital and spiritual capital with organizational performance in Malaysia. The results revealed that intellectual capital has significant influence on the organizational performance in Malaysia.

According to Ramona (2015) he opined that The Intellectual Capital of a firm is the sum total of its Human Capital, Structural Capital and Relational Capital. These assets form a source of distinct competitive advantage and distinguish the performance of one firm from the other. Some organizations appear to continue relying on traditional resources for wealth creation but they should increase their attention towards a greater reliance on intellectual capital factors. His study revealed the roles of intellectual capital in nowadays modern organizations and in particular, its relevance for education institutions such as universities.

Hypothesis 1: Intellectual capital has influence on the Organisational Performance.

Human capital and organizational performance

Human capital is made up of three main components: intelligent, creative, and skillful individuals. A company's internal operations and processes are influenced by the characteristics of its human capital. Resolving conflicts is made easier by them. Scholars must first grasp the many roles that human capital performs in order to better appreciate its worth. A university's major output is the development of knowledge, and human capital may play a significant role in attaining its purposes and goals.

Employers may continually increase human capital capabilities by making full use of workers' existing knowledge, according to Stewart (1997). According to Ramirez et al.,

the major role of universities is to generate and disseminate information (2007). Economic development in established nations is a challenging process for emerging economies. Understanding and acknowledging the essential role education plays in generating intelligent persons is vital to bridge this gap. This objective may be accomplished through raising university grades.

Factors ranging from the economy, politics, society, technology, and the environment all provide obstacles. Universities have seen a major shift in their mission in recent years. Education has evolved from providing basic educational services to constructing particular educational programs and engaging in volunteer activities to lessen the downside of human impacts that negatively impact the environment, which is the primary goal presently. In addition, the provision of all research demands and requirements for experiments such as labs goes hand in hand with performing research aimed at solving societal challenges. In order to achieve university goals, one must improve society via community service, education, and research, all of which contribute to a better global standing.

Several research works have shown that human capital is among the most influential factors in OP. The following are a few examples: Including Komnenic, and Pokraji (2012) According to some research, human capital has little effect on OP (e.g., Peng Pike and Roos 2007) or innovation creation (Dost. et al 2016). Consequently, the connection should be revisited. This study proposes the following hypotheses:

Hypothesis 2: Human capital has an influence on the organizational performance

Structural capital and organizational performance

A company's organizational knowledge, such as that included in manuals, databases, and patents, constitutes structural capital (Hansen et al., 1999). It is often referred to as structural capital or organizational capital. It is simple for organizations to utilize organizational capital to remind them of what they have previously learned and how to apply it, which in turn has an impact on OP (Subramaniam and Youndt, 2005).

Furthermore, OP relies on information contained in systems, files, databases, patents, and licenses since it saves time and effort for staff to get familiar with the organization's routines and processes. Organizational capital includes internal processes, procedures, databases, and the culture of the company. The process of an organization and

the quality of its output are both enhanced by organizational capital. Organizations employ cutting-edge technology to effectively manage their organizational capital in order to accomplish their goals (Hsu and Wang, 2012). Researchers in Russia have shown that Organizational capital is linked to higher levels of performance. (Andreeva and Garanina, 2016). Wang, Wang, and Liang (2014) also found that Malaysian enterprises' operational and financial performance were both improved by organizational capital. A negative correlation exists between organizational capital (OP) and OP in Romanian public firms, according to Hejazi and colleagues (2016). According to Morariu (2014), an organization's market worth may rise or fall depending on how well its capital is handled. The impact of IC on India's conventional industries (steel and Indian knowledge-based industries) was also studied by Maji and Goswami (2016). (Engineering sector).

OP isn't affected much by organizational capital, according to the findings of this research. Some studies has concluded that organizational capital does not have an impact on organizational results, while others have found it to be contradictory. As a result, the relationship is worth revisiting. This research work proposed the following hypothesis:
Hypothesis 3: Structural capital has influence on the organizational performance.

Relational capital and organizational performance

An organization's relationship capital may be described as the external connections it has with other organizations, including but not limited to: the society at large, banks, government agencies, and businesses. Expanding a company's network of external partners is critical if it hopes to have access to other sources of funding.

Due to a lack of study on relational capital, we don't know much about the impact of OP on the population. Andreeva & Garanina's conclusions are in line with these results (2016). OP, on the other hand, does not seem to be much impacted by relational capital, according to some study (e.g., Wang, et al 2014; Vishnu and Kumar Gupta 2014; Andreeva & Garanina, 2016). Consequently, the connection should be revisited. The following hypothesis is put forward by this investigation:
Hypothesis 4: Relational capital has influence on the Organisational Performance.

2.5 Intellectual capital and its importance in organizational Performance

The intangible value of assets can no longer be adequately accounted for by accounting systems that are only focused on financial reporting (Nawaz & Haniffa, 2017). In the opinion of Jordao & Almeida, (2017), Businesses look on IC as a key instrument for generating economic value.

That which is the combination of everyone's total knowledge, which gives the firm a competitive advantage and develops intellectual substance (information, knowledge, and intellectual property) that can be exploited to make riches, is represented by this. IC A company's intangible assets today include things like trademarks, patents, and expertise (Nawaz & Haniffa, 2017). (Denopoljac et al., 2016; Roos, 2017; Agostini et al., 2017). ICs may be used to calculate value by comparing the market value to the accounting value (Clarke, Seng & Whiting, 2011). "IC" refers to the hidden money, assets, or resources that a company may use to keep functioning and improve its performance.

A lot of discussion exists in the literature on the importance of different types of capital, such as human capital, structural capital, and customer/social capital. This encompasses a person's accumulated knowledge, skills, and natural aptitudes. What you know about yourself, your abilities, and your personality traits are all relevant. A company's customers, suppliers, and reputation are examples of structural capital. Relative resources" include all of these instances. On the other hand, client capital refers to the assets held by the firm, while structural capital points to the assets owned by the corporation (Agostini et al., 2017).

As a key source of income and development in today's economy, intellectual capital is a powerful corporate performance and market value enhancer (Wang & Chang, 2005; Tseng et al., 2013). In order for a corporation to succeed, it is imperative that it use IC, which includes knowledge management, intellectual property, and information (Amin & Aslam, 2017).

Organizational performance, but also the ability of organizations to market their advantages and competitive value, may be affected by IC management (Wang & Chang, 2005). Intangible assets, according to a business viewpoint, are the driving force behind the success of organizations (Forte et al., 2017).

Today's managers have a huge issue when attempting to estimate the worth of their organizations. Firms and the market, therefore, need procedures that can discover, quantify, and appraise intangible assets with certainty (Jordao & Almeida, 2017).

To put it another way, intellectual capital management is no longer an academic or cultural pursuit, but rather an economic need (Amin & Aslam, 2017). To plan and carry out their goals, organizations will employ IC management (Clarke et al., 2011).

Humans are the most crucial aspect in deciding how to solve problems and make decisions, and hence intellectual capital must be valued first and foremost. Building on the importance of a company's organizational structure, which includes all of these elements as well as its management philosophy and information technology (IT), the value of structural capital emphasizes the significance of a company's organizational structure in driving innovation, product development, and market share gains. Connecting with customers and suppliers is crucial to a company's capacity not just to help and guarantee but also to establish new markets for their items (Jordao & Almeida, 2017).

As a result, IC has grown more vital in the workings of businesses, accounting for the majority of their product and service value in many cases (Agostini et al., 2017). This reveals that intellectual capital is critical to a company's success.

Finally, in order to effectively manage the company's intellectual capital, managers must focus on defining the most critical criteria for organizational effectiveness. This necessitates that the phenomena be quantified rather than just labeled, so that it can be empirically linked to organizational performance.

2.6 Intellectual Capital Practices in Universities

The rising investments in intangible assets have resulted in recurring formations of intellectual capital management and reporting in the company. The focus of academic research and early experiences was on corporate intellectual capital, but in the past 20 years, the attention has shifted to public institutions, particularly colleges and universities.

Since its founding, the university has been a constant presence in society because of its mission to advance knowledge, educate the public, and serve the community. Using university-based knowledge and intellectual capital as a global competitive advantage is

a smart move. Hidden strengths and resources may be measured in terms of intellectual capital. A lot of attention has been paid to intangible resources and intellectual capital in recent years (Brătianu and Pînzaru, 2015). Educators must encourage and hold pupils accountable for socially responsible conduct (Caibano and Sanchez, 2008).

The Intellectual Capital concept started to be utilized and modified by public organizations and institutions towards the end of the 1990s. For the first time ever, Austria's research institutes and universities have adopted the Intellectual Capital report. First European research agency to give a report on Intellectual Capital for the whole corporation in 1999 was the Austrian Institute of Technology, according to one study quoted. It also aims to provide information to stakeholders and assist information for the management of intangible assets by this research organization (Leitner, 2002; Alkhateeb et al., 2016).

Spanish intellectual capital management and reporting is founded on universities, as well as on the volunteer efforts of its citizens. The Observatory of European Universities (OEU) claimed in their study, according to Sanches et al., that the purpose of this report was to improve transparency and allow standard sharing of intellectual capital indicators at universities and research institutes (2006).

Projects on Intellectual capital for educational institutions that have been implemented in other countries may make it simpler to manage knowledge-based resources and connect with a wide variety of external partners.

A initiative termed "Intellectual Capital" was originally launched at Poznan University of Economics. According to Fazlagic (2005), the Danish Ministry of Science, Technology, and Innovation created a framework to characterize the resources, activities and effects of intellectual capital (2000). There is a new national agency in Italy, established in 2006, that has been tasked with enhancing the quality of the country's university and research systems, particularly the state-run institutions, private institutions that grant academic degrees, and public research institutes that are overseen by the MIUR (Italian Ministry of Universities and research). Indeed, the Research Assessment's criteria underline the importance of structural, notably human capital, as a component of intellectual capital (Leitner et al., 2014).

As a component of long-term planning, several Lithuanian organizations have begun publishing yearly reports. Increasingly, yearly reports include indices of human, structural, and relational capital in their breadth. However, the use of rhetoric and ideas in intellectual capital management and reporting is rare (Leitner et al., 2014). Every year, Latvian universities are required to prepare three major reports: All three reports may be combined into a single document. So yet, no Latvian institutions have provided statistics on intellectual capital, and just one university has emphasized intellectual capital's relevance. Human, structural, and relational capital are often included in annual reports (Leitner et al., 2014). Annual reports from universities in the United Kingdom are sparse in terms of revealing their intellectual capital. Universities in the United Kingdom have been criticized for being too controlled and lacking in intellectual capital (Bezhani, 2010).

Analysis of intellectual capital in Colombia is provided in the paper by Bucheli and colleagues (2012). When it comes to research capacity, higher-capital institutions outperform those with lower levels of intellectual capital. Because of their work, these organizations have amassed enormous amounts of intellectual property. The capacity to undertake scientific research improves in lockstep with one's growth in intellectual capital.

South Africa's Rand Afrikaans University created the intellectual capital model to manage and analyze intellectual capital in higher education institutions in the nation (Kok, 2007).

In addition, universities in Asia are doing research on intellectual capital. Intellectual capital was the focus of a research by Shehzad at el, (2014), which looked at academic achievement at public and private universities in Pakistan.

A research investigation of intellectual and innovative capital in Taiwan is being carried out by a separate study team (wu, chen, and chen, 2010). Another study carried out at a Malaysian public university found that a company's potential to produce wealth is dependent on its intellectual capital, or the entirety of its workers' and shareholders' aggregate knowledge and abilities (Ishak, Kamaluddin, and Said, 2014).

There is still much to be done in the Middle East. It has been shown that intellectual capital has a significant effect on university goals in Jordanian private and governmental organizations (Najim, Alnaimi and Alnaji, 2012). As a result, Iran's universities are still

in the process of building up their academic resources (Bahrami, 2011; Babaei et al, 2012; Mousavi et al, 2015).

2.7 Empirical Review

Duho and Agomor (2021) examine several business and national factors to better understand how intellectual capital influences the performance of publicly listed non-financial enterprises in West Africa. Intellectual capital performance was evaluated using the Value-Added Intellectual Coefficient (VAICTM), while profitability was evaluated using the return on asset (ROC). The data collected between 2007 and 2018 was analyzed using panel-corrected standard error regression. Nonfinancial enterprises (NFEs) are primarily driven by structural capital efficiency, although human capital and capital utilized efficiency have little impact on profitability. Intellectual capital and performance have been shown to be related in an inverted U-shape, according to some.

Analysis of Pakistan's nonfinancial sector's financial performance and investment decisions is carried out using the VAICTM developed by Muhammad, et al. (2020). A total of 396 Pakistani non-financial firms are included in the study's population. Financial performance and investment choices are significantly affected by intellectual capital, according to the study's conclusions.

Okolo, Nnubia, and Emeka-Nwokeji evaluate the performance of Nigerian non-financial businesses (NFBs) (2019). A ten-year study of non-financial enterprises listed on the Nigerian Stock Exchange by Nigerian companies (from 2007-2016). We employed Ordinary Least Squares (OLS) for our analysis. Nigeria's publicly listed non-financial firms' performance is positively influenced by capital utilized efficiency, human capital efficiency, and structural capital efficiency, according to the results of the study.

Analysis of 25 listed Indonesian banks from 2008 to 2013 by Elfiswandi et al. (2019) used both a verification survey and a descriptive survey to check the effects that IC had on their financial performance. However, CEE had only a minimal influence on Net Interest Margin. In order to strengthen human resources and bank performance, it is necessary to contribute to the banking industry by carefully examining capital allocation choices.

To investigate how intellectual capital impacts Indonesian manufacturing businesses' financial performance, Josua et al. (2018) employed the VAIC approach to

examine the influence of intellectual capital on the financial performance. According to 10 regression models, VAIC demonstrated an extremely significant connection with firm performance but negatively affected the valuation of selected firms.

In the work of Saqer and associates (2019). "The Importance of Intellectual Capital in University Administration: Achieving Educational Quality." To attain global and local leadership, rational and entrepreneurial institutions are merging with a magnificent resource: intellectual capital. A sampling of Jordanian university department members from both public and private universities was used in this research (45). When it comes to obtaining educational quality, different universities (humanity, structural, and relational) need to identify their intellectual capital, and this research recommends they do so in order to provide rational University administration for diverse Universities.

Aymen was studying while (2018). Organizational structure is influenced by intellectual capital. The study's primary goal is to evaluate the different types of intellectual capital and the effects they have on businesses. The research also looks at how financial records represent a company's intellectual capital. Definition of intellectual capital's three components, how it is recorded in a company's financial statements, and the implications for its structure are all based on a survey of the literature and a theoretical framework. Studying the business effect of intellectual capital on firms depends on secondary sources like journals and books for its analysis. Qualitative research on business organizations shows that possession of a significant level of intellectual capital enhances everything from competitive advantage to innovation to employee competency to improved overall company performance. As a result of this research, financial managers may learn about a wide range of intellectual capital and which ones should be included in financial reporting and which ones should be avoided.

Nassar (2018) employed VAIC methods as a control of IC to study Turkish real estate enterprises from 2004 to 2015. SCE had a significant impact on the capacity of real estate enterprises to develop value before and throughout the crisis. According to a survey, intellectual capital is undervalued in Turkish companies.

IC's effect on exporting firms at Mashhad's Development Center of Science and Technology Park was also studied by Habib (2018). Study participants included 460 managers from exporting selected firms, with the study sample recruited at random from

the top and intermediate management levels of these organizations. Smart PLS was used as a research approach in this study. Structural capital has little bearing on a company's performance, according to research. A company's capacity to innovate also has a positive effect on its overall success.

According to Pulic VAIC methodology, researchers Kurfi, Udin, and Bahamman (2017) evaluated the effect of IC on the output of listed Nigerian consumer sector companies between 2010 and 2014. SCE and CEE had an influence on the performance of Nigerian consumer sector companies, while IC had no effect. The findings of a regression study supported this conclusion. 15 listed Nigerian banks' financial performance between 2010 and 2015 was demonstrated to be significantly affected by IC by Okenwa, Ndubuisi and Chidoziem (2017), survey research using VAIC techniques. Using multiple regression analysis, it was revealed that Intellectual Capital had a strong connection to the financial performance of Nigerian banks. Thirty-three Indonesian financial organizations were researched by Irawanto, Gondomono, and Hussein (2017) for the effects of Intellectual Capital on their profitability between 2013 and 2014. The data was analyzed via the use of regression analysis. Results show that profitability is greatly affected by HCE, whereas bank performance is adversely affected by VAIC.

Analysis of 93 Indonesian manufacturing enterprises' worth in 2012 was carried out by Nuryaman (2015), who used the VAIC approach. According to the statistics, IC had a favorable impact on the worth of the firm. After that, Hasim Osman and Alhabshi (2015) looked at the relationship between IC and the performance of Malaysian firms from 2008 to 2014. Using non-probability convenience sampling, a well-designed questionnaire was created to gather data. Researchers examined the data using a variety of approaches and discovered that Intellectual Capital had a feasible impact on the performance of Malaysian enterprises.

Karchagani (2015) employed correlation, multivariate regression analysis, and a Structural Equation Model to examine the impact of IC and innovation on 294 Iranian agricultural insurance sectors in 2013. What transpired is now clear to us. Performance and inventiveness are both influenced by circuits and their components.

Many businesses, including the banking sector, benefit from IC and its component pieces, as shown by the literature. Researchers observed that although conventional banks

use capital as a measure of performance, Islamic banks focus more on human capital, a critical indication of success in Islamic banks. (Latif, Malik, and Aslam 2012; Latif Malik and Aslam, 2012) The survival of the Islamic banking business in Malaysia is also dependent on intellectual capital, according to a Malaysian study.

Even though not all areas of IC contribute to bank performance, intellectual capital has a significant impact on the performance of banks and helps banks acquire a competitive advantage over their competitors (Mondal & Ghosh, 2012).

According to research conducted by Sungmin and Youn (2020). Sharing economy businesses' strategic characteristics and the creation of shared value and performance." Study objectives included discovering long-term competitive advantages in businesses that leverage the sharing economy, as well as determining whether these strategic characteristics are connected to CSV and performance in the long run. For the purpose of comparing P2P and B2P SE business models, this research used 631 customers who had bought items or services from SE enterprises. The route analysis and reliability, validity, and goodness-of-fit tests were carried out using SPSS and AMOS statistical software. The following are the results. When it comes to strategy features for long-term competitive advantage, both the B2P model and P2P model have a significant impact on interplay between "social congruence" and "strategic innovation." which is connected to building shared value. In terms of the B2P model's "value of information sharing," "moment of truth," "strategic innovation," and "value network" and the P2P model's "moment of truth," "strategic innovation," and "value network"; the last variable was strongly influenced by "moment of truth," "strategic innovation," and "value network" in the P2P model. Third, "value of information sharing" affected "social value congruence," and these factors had a substantial effect on "value of participation" in both models when it came to the interaction between variables linked to CSV and their contribution to performance in both models. These components. In terms of performance, only "value of engagement" mattered.

Researchers Mention & Bontis (2013) found that human capital has the greatest relation to bank performance, whereas the other two have a positive influence on performance but are less significant. An investigation was conducted by (Cabrita and Bontis, 2008) to see whether IC components' interactions and interdependence had a

favorable effect on banking sector performance, as has been shown in the literature several times. It was also shown that the Pakistani banking system's performance is improved by components of intellectual capital (M. Khalique, Shaari, Md.Isa, & Alkali, 2012).

There is evidence that IC has a good effect on telecommunications, as well (Saeed et al., 2013). Developing long-term relationships with clients and building relational capital are critical for the telecom industry's success, according to (Suraj & Bontis, 2012). Consider intellectual capital management while developing a company's long-term plan (Sharabatia & Nour, 2013). Human and structural capital are important to a telecom company's performance, but relationship capital has a higher influence on the company's success.

According to Maditinos, evi, and Tsairidis' study, relational capital affects structural capital in service and non-service organizations alike (2010). Although it has an impact on organizational performance in both service and non-service businesses, structural capital has a greater impact on the former.

IC's most important component, human capital, was discovered, and it has a significant influence on an organization's success (Makki, Lodhi, & Rahman, 2008). A company's success is dependent on the contributions of its employees. Maintaining an organization's competitive advantage is made possible by properly managing and disclosing its intellectual capital.

Institutions must provide accurate data on their intellectual capital in order for their information model to be useful (Corcoles and colleagues, 2011), according to the researchers. (Ram'rez and Gordillo, 2014) an inventory of fundamental intangible assets that may be used as a standard to gauge a university's IC can be utilized to analyze its intellectual capital.

CHAPTER III

Research Methodology

3.1 Introduction

This section examines the research technique employed and the concerns associated to the methodology selected while researching the various impacts of intellectual capital on university organization performance.

Procedures utilized to address research design, data gathering and analytic techniques will be discussed here. Both the research framework outlined in chapter two, as well as the primary study goals and pertinent research questions, inform our approach to these difficulties.

Research designs and methodology are discussed in the first section, followed by a review of research methodologies, strategies, and approaches that have been used in the study of intellectual capital and organizational effectiveness. Based on this analysis, the research method used in this study is deemed appropriate and effective in attaining the study's primary goals. Data collecting techniques, phases in field data gathering and obstacles experienced at each level of fieldwork are also covered in this chapter. Also included in this chapter are real data obtained and analysis methods.

3.2 Research Design

To Sarantakos (1998), research technique is defined as "the theory of methods"; it's how you understand what you're studying. What Robson defines as the foundations of social research in terms of its implications for research methodology and the use of specific methodologies (Robson, 2002). According to Morvaridi, quantitative and qualitative research methods are the most frequent in the social sciences and humanities (2005). Social science research may be done in either a quantitative or a qualitative setting, according to Sarantakos (2005b).

Quantitative research

The quantitative approach is a well-liked technique to social science research. Numbers are used to symbolize numerous thoughts and/or conceptions, and this is founded on a strong intellectual conviction. A consequence of this emphasis on quantitative data collection and analysis, quantitative research may be conducted. Deductive hypothesis testing is used to determine whether or not the idea can be confirmed or disproven via observation and data collection (Morvaridi 2005).

It is said that the quantitative approach is imbued with positivism, which is an approach to the study of people that emphasizes the scientific process.

Qualitative research

Qualitative research, on the other hand, employs words and observations to depict people and study phenomena in their natural habitats in order to express reality (Amaratunga, 2002; P: 19). Contrary to popular belief, quantitative and qualitative methods are not in competition (Morvaridi 2005). According to this study, both qualitative and quantitative research help and enlighten each other, with both approaches adding to the corpus of knowledge. According to Bryman (1989) and Clark's argument, this is consistent (1998). For Bryman (1989), quantitative and qualitative research provide complementary perspectives on this problem (Bryman, 1989). Furthermore, according to Clark (1998), the conceptual differences between qualitative and quantitative approaches are not as stark as is usually imagined.

3.3 Variables Used

3.3.1 Independent Variables

Intellectual Capital: In general, it serves as a reservoir of learning, tradition, and fresh ideas (Sullivan, 2000). The majority of IC specialists, despite their divergent views, believe that IC may be divided into three main categories: human, structural (or institutional), and relational (or interpersonal) (Bontis, 1998; Edvinsson & Malone, 1997; Edvinsson, Roos, & Dragonetti, 1997; Edvinsson & Sullivan, 1996; Lynn, 1998; Stewart & Ruckdeschel, 1998).

Human Capital: We cannot have intellectual capital without people. It has to deal with workers' knowledge, competence, skill, talent, and creativeness. (Edvinsoon and Malone,

1997; Bontis, 1998; Shaari et al., 2010; Isaac et al., 2010). Intellectual capital was acquired in 1997 by employees via their knowledge, attitude, and intellectual agility, as stated by Roos and others (Bontis and others) (2000).

Attitude, competence, and intellectual agility are all qualities of an employee's job that are relevant to the company's success. Human capital, according to Fitz–enz (2000), is comprised of a company's workforce's collective knowledge, skill, and experience.

Structural Capital: According to Ramezan (2011), "embedded knowledge in the organization that allows human capital to grow" is the definition of "structural capital." The concept of organizational culture includes the structure, culture, and learning process, including the structural capital support and the work performance of employees.

Relational Capital*:* A company's connections and the information it gains via marketing channels are both considered to be a part of its "relational capital," which it owns and grows through its activities. Customers and staff are linked in a company's "relational capital," as defined by Kaplan and Norton (1996). It indicates the loyalty and happiness of customers and employees in connection to the success of the firm. Personal and professional ties are also considered structural capital by Edvinsson and Malone (1997).

3.3.2 Dependent Variables

Organizational Performance: The degree to which a company succeeds in achieving its stated goals is referred to as organizational effectiveness (Mia & Clarke, 1999; Steers, 1977). Consequently, a company's performance is a good indicator of how well it's adopting a plan that's working (Otley, 1999).

3.4 Measurement of Variables and Survey Design

In order to collect data from the respondents, this thesis used a reliable research instrument (questionnaire). Sections of the questionnaire were broken up into two. The respondents' demographics were gathered in the first part. It was separated into three sections, Section B. Cntia Giacomello, Clarissa Gracioli Camfield, and Miguel Sellitto offered questions for each of the three sections (2018). A total of 27 questions were asked, seven of which focused on human capital, nine of which investigated structural capital, and the last six of which assessed the influence of relational capital on organizational performance. Findings from each of the three sections were distinct. The replies were

assessed on a range of "strongly disagree" to "strongly agree" using a four-point Likert scale. "i.e. (SA- Strongly Agree, A-Agree, SD-Strongly Disagree, D-Disagree). The poll participants were not compensated in any way for their participation, and it was entirely voluntary. The participants were kept in the dark about the whole research procedure, including how the data was collected and the outcomes.

3.5 Sample selection and data Collection

The report is based on Tai Solarin University of Education, Nigeria's higher education institutions. Lecturers, assistant professors, and associate professors were among those who took part in this survey. It was gathered by means of a self-administered survey. During the survey, participants were given a full explanation of the survey's objective and design. Respondents have enough time to answer all of the questions on the survey.

All 3379 personnel of the chosen Nigerian university comprise the study's target demographic (Tasued ERP, 2022**)**. The basic random sample approach was employed to collect data in this thesis project. This research employed a simple random selection procedure to pick 346 staff members to participate as a sample size.

To verify that a sample of the population is really representative, simple random sampling must be used. Smaller subpopulations are sampled less often than larger ones. Researchers are less likely to inadvertently skew their findings since the process is fully random. After completing the surveys, participants will return the originals to the organization's administrative office. Respondents' information is being collected for research reasons.

Using data from earlier research, a standard questionnaire was created and administered to participants. In Section A of the survey, respondents were asked to supply their basic demographic information. On the topic of innovation's influence on organizational performance, Clarissa Gracioli Camfield and Cntia Paese Giacomello and Miguel Afonso Sellitto conducted study in Section B. (2018). Staff from Tai Solarin University of Education, Nigeria, provided the information. Between April and May of 2022, the information was gathered. Emails, Google forms, and physical forms were used to disseminate questionnaires. It took a while to gather data because of the constant reminders and checkups provided to the personnel who had received surveys. To do

additional analysis, their replies were entered into an Excel spreadsheet and then imported into SPSS software.

3.6 Sampling

In Ogun State, Nigeria, researchers gathered information by interviewing faculty and staff at the Tai Solarin University of Education. Organizations, employers, and academic students will all benefit from the research presented in this thesis. Samples were drawn at random. Random sampling is used because it produces unbiased samples that reflect the population's characteristics, making it ideal for analysts who need to make inferences about populations from a sample.

Consequently, since this study's sample comes from Nigeria's Tai Solarin University of Education. The simple sampling method was used to randomly select 346 employees in the Ogun State Area of Nigeria.

3.7 Data Analysis

Data analysis is the most important aspect of any investigation. Analysing the data provides a concise summary of the information gleaned. Analysis and logic are used to discover patterns, correlations, and trends in data.

This argument relies on quantitative data. Any information that can be described as a list of numbers is referred to as quantitative data. This data may be categorized, classified, measured, computed, or scored in a variety of ways.

3.8 Validity of Data

Validity is the degree to which the results of a measurement properly reflect the variable for which it was developed. The accuracy or dependability of an instrument is a secondary criterion for quality in a quantitative investigation. A research instrument's reproducibility, or its ability to deliver the same outcomes over and over again under the same conditions. The researcher gave a copy of the questionnaire to the supervisor, who checked the content to determine whether the instrument was able to measure what it was designed to assess. As a result, helpful recommendations for improving the information's quality were made.

3.9 Reliability of Data

The capacity of a research methodology to provide consistent findings over time is referred to as "reproducibility." Therefore, the Cronbach Alpha was used to test the reliability of the variables in this study; Organisational performance ($\alpha = 0.721$), human capital ($\alpha = 0.811$), relational capital ($\alpha = 0.762$), structural capital ($\alpha = 0.770$) and Intellectual Capital ($\alpha = 0.810$).

CHAPTER IV

Result Findings and Discussion

4.1 Introduction

Tables and visuals are used to illustrate the findings of this research in this chapter. The research questions and hypotheses generated throughout this investigation led to this conclusion. The following are statistical summaries and inferences based on the study's demographics and characteristics.

TABLE 1: **Percentage Distribution of Respondents by Gender**

Gender	**Frequency**	**Percentage**
Male	180	52.0
Female	166	48.0
Total	346	100.0

Table1 shows that 52% of the respondents were male while the remaining 48% were female.

This implies that most of the respondents were male.

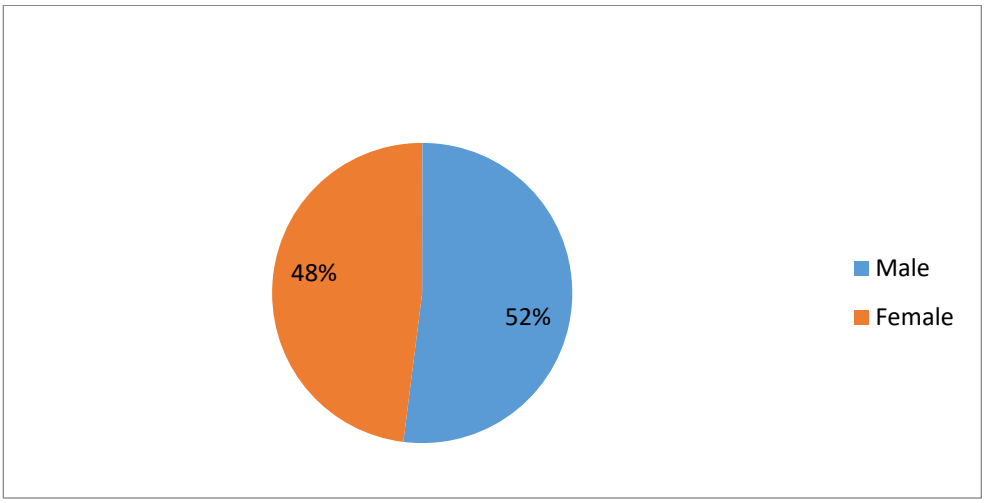

Figure 1: Pie-chart showing percentage distribution of respondents by structural capital

Table 2: **Percentage Distribution of Respondents by Age-range**

Age-range	**Frequency**	**Percentage**
20-35 years	35	10.0
36 – 45 years	32	9.2
46 – 50 years	255	73.6
51 years and above	25	7.2
Total	346	100.0

Table 2 shows that 73.6% of the respondents are between the ages of 46-50yrs, 10% of them are between the ages of 20-35years, 9.2% of them are between the ages of 3-45years, while 7.2% of them are between the ages of 51years and above. This implies that most of the respondents are between the ages of 46-50yrs.

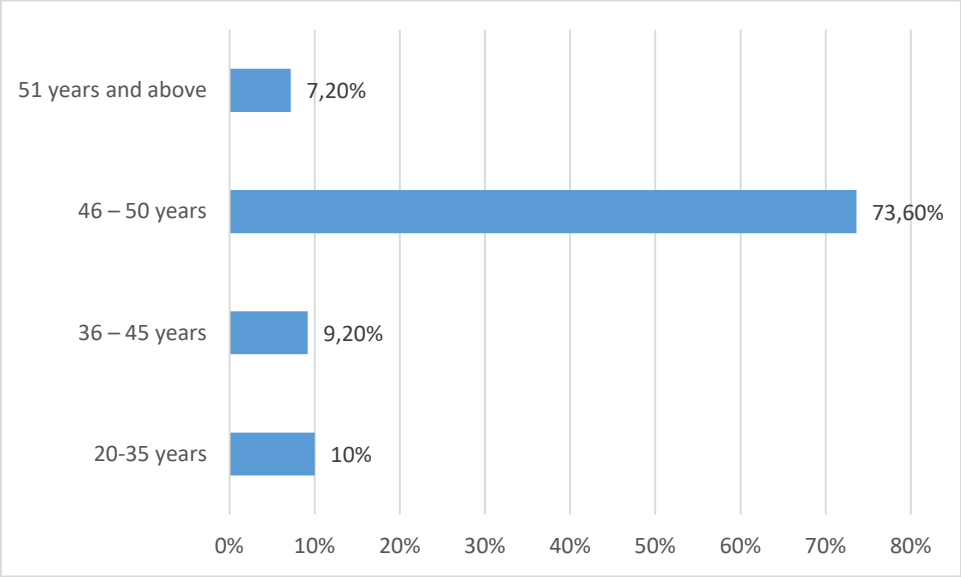

Figure 2: Pie-chart showing percentage distribution of respondents by age range

Table 3: Percentage Distribution of Respondents by Religion

Religion	Frequency	Percentage
Islam	76	22.0
Traditional	8	2.4
Christian	262	75.6
Total	346	100.0

Table 3 reviews that 75.6% of the respondents were Christians, 22% were Islam while the traditional were 2.4%. This implies that most of the respondents were Christians.

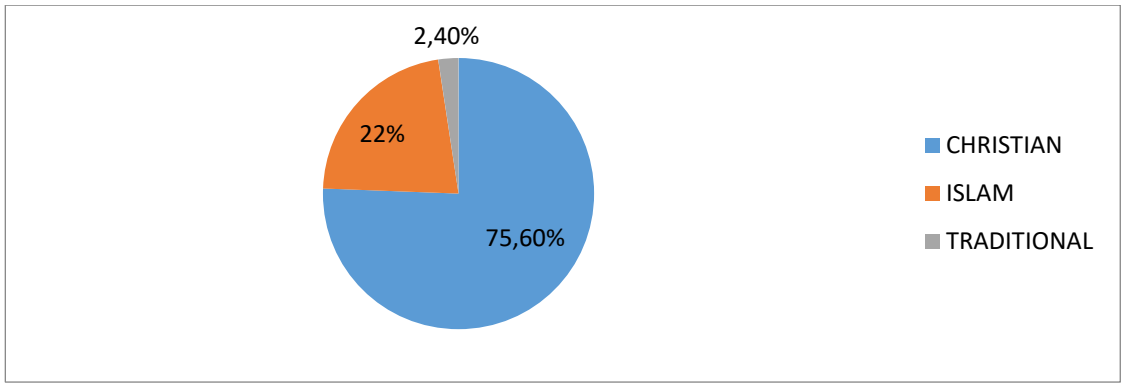

Figure 3: Pie-chart showing percentage distribution of respondents by religion

Hypothesis 1: Intellectual capital has influence on the organizational performance in Tai Solarin University of Education.

Table 4: PPMC summary showing the relationship between intellectual capital and organizational performance.

Variables	N	Mean	Standard deviation	df	r	Sig	r^2
Organisational performance	346	51.1361	8.34476	344	0.320*	0.021	0.1024
Intellectual capital	346	44.1613	14.94154				

Table 4 reviews a positive significant relationship between intellectual capital and organisational performance in Tai Solarin University of Education; r (344) = 0.320, r^2= 0.1024, p<0.05. The table further reveals that increase in intellectual capital would lead to an increase in organisational performance. Effect size (r^2= 0.1024) reveals that intellectual capital explained 10.24% increase in organisational performance in Tai Solarin University of Education.

Hypothesis 2: Human capital has influence on the organizational performance in Tai Solarin University of Education.

Table 5: PPMC summary showing the relationship between human capital and organisational performance.

Variables	**N**	**Mean**	**Standard deviation**	**df**	**r**	**Sig**	**r^2**
Organisational performance	346	51.1361	8.34476	344	0.382**	0.000	0.146
Human capital	346	139.8274	18.29916				

Table 5 reviews a positive significant relationship between human capital and organisational performance in Tai Solarin University of Education; r (344) = 0.382, r^2= 0.146, p<0.01. The table further reveals that increase in impact of human capital would lead to a reduction in organisational performance. Effect size (r^2= 0.146) reveals that human capital explained 14.6% increase in organisational performance.

Hypothesis 3: Structural capital has influence on the organizational performance in Tai Solarin University of Education.

Table 6: PPMC summary showing the relationship between structural capital and organisational performance.

Variables	N	Mean	Standard deviation	df	R	Sig	r^2
Organisational performance	346	51.1361	8.34476	344	0.120*	0.025	0.0144
Structural capital	346	47.1593	14.94154				

Table 6 reviews a positive significant relationship between structural capital and organisational performance in Tai Solarin University of Education; r (344) = 0.120, r^2= 0.0144, $p<0.05$. The table further reveals that increase in structural capital would lead to an increase in organisational performance. Effect size (r^2= 0.0144) reveals that structural capital explained 1.44% increase in organisational performance in Tai solarin University of Education.

Hypothesis 4: Relational capital has influence on the organizational performance in Tai Solarin University of Education.

Table 7: PPMC summary showing the relationship between relational capital and organisational performance.

Variables	N	Mean	Standard deviation	df	R	Sig	r^2
Organisational performance	346	51.1361	8.34476	344	0.259**	0.000	0.067
Relational capital	346	63.6197	9.42955				

Table 7 reviews a positive significant relationship between relational capital and organisational performance in Tai solarin University of Education; r (344) = 0.259, r^2= 0.067, p<0.01. The table further reveals that increase in relational capital would lead to an increase in organisational performance. Effect size (r^2= 0.067) reveals that relational capital explained 6.7% increase in organisational performance.

Research Question 1: There is no joint contribution of human capital, relational capital, structural capital and intellectual capital on organisational performance in Tai solarin University of Education?

Table 8: Joint contribution of human capital, relational capital and structural capital on organisational performance.

R= **0.473**				Adjusted R^2= **0.214**	
R^2= **0.224**				Standard error=	
7.31281					
Model	**SS**	**DF**	**MS**	**F**	**Sig**
Regression	3787.079	4	946.769	24.613	0.000
Residual	13155.382	342	38.466		
Total	16942.461	345			

Table 8 reveals the joint contribution of human capital, relational capital, structural capital and intellectual capital on organisational performance. The R coefficient recorded 0.473, R^2=0.224. The combination of the four predictors explained 21.4% variance in organisational performance. 78.6% unexplained variance is as a result of variance outside the study. Therefore, there is a significant joint contribution of human capital, relational capital, structural capital and intellectual capital on organisational performance in Tai solarin University of Education; $F_{(4, 342)}$ = 24.613, P<0.01. Thus, the null hypothesis is rejected.

Research Question 2: There is no relative contribution of human capital, relational capital, structural capital and intellectual capital on organisational performance.

Table 9: Relative contribution of human capital, relational capital, structural capital and intellectual capital on organisational performance.

Model	Unstandardized coefficients		Standardized coefficients	t	Sig
	Beta	**Standard error**	**Beta**		
Constant	59.564	4.935		12.070	0.000
Human capital	0.181	0.050	0.207	3.602	0.000
Relational capital	0.169	0.025	0.375	6.655	0.000
Structural capital	2.514	0.944	0.153	2.664	0.008
Intellectual Capital	0.178	0.012	0.397	5.412	0.000

Table 9 reveals that all of the three factors (human capital, relational capital, structural capital and intellectual capital) are significant predictors of organisational performance in Tai solarin University of Education. The most potent predictor of organisational performance is intellectual capital (β= 0.397, t= 5.412, $p<0.01$), followed by relational capital (β= 0.375, t= 6.655, $p<0.01$), human capital (β =0.207, t= 3.602, $p<0.01$) and structural capital (β= 0.153, t= 2.664, $p<0.01$). This implies that, increase in intellectual capital, relational capital, human capital, and structural capital explained increase in organisational performance by 39.7, 37.5%, 20.7% and 15.3% respectively.

4.2 Discussions of Findings

From the findings of this study, in hypothesis one, a positive significant relationship between intellectual capital and organisational performance in Tai solarin University of Education; r (344) = 0.320, r^2= 0.1024, $p<0.05$. Effect size (r^2= 0.1024) reveals that intellectual capital explained 10.24% increase in organisational performance in Tai solarin University of Education. In line with this result, the researchers (Carmeli and Tishler, Impact of intellectual capital 2004), agreed that what characterizes successful

organizations the most is the ability to optimize the use of intellectual capital. Intellectual capital is defined as the most important intangible assets whose results are shown as economic and material values that have a competitive advantage. They further added that intellectual capital is all the intangible assets of the organization, which adds value to it and enhance its competitive position, namely, workers and their mental abilities, knowledge, skills and experiences that enable them to create and produce new ideas, processes and systems within the organization, leadership style, organizational climate and organizational culture, as well as all forms of intellectual property owned by the organization, within the framework of the organization's intellectual image of its customers and its good reputation within the business community and the strength of its brand in society.

In hypothesis two, a correlation between human capital and organizational performance at Tai solarin University of Education was found to be favorable, with r (344) = 0.382, r^2= 0.146, p<0.01. In addition, it was discovered that improving human capital led to better performance in the workplace. Effect size (r^2= 0.146) reveals that human capital has a 14.6% increase in organisational performance. This finding was corroborated by Stewart (1997), who concluded that the best way to increase human capital capabilities is to make full use of the knowledge that already exists within the workforce.

Hypothesis three shows a favorable correlation between Tai solarin University of Education's organizational performance and structural capital; r (344) = 0.120, r^2= 0.0144, p<0.05. Structural capital was also shown to have a positive impact on organizational effectiveness. Effect size (r^2= 0.0144) reveals that structural capital has a 1.44% increase in organisational performance in Tai solarin University of Education. Human capital activities are made easier by organizational capital since it may be utilized to remind organizations of what they've previously learned and how to employ that knowledge. (Subramaniam and Youndt, 2005)

Finally, in hypothesis four, the association between relational capital and organizational performance at Tai Solarin University of Education is positively significant, as shown by hypothesis three r (344) = 0.259, r^2= 0.067, p<0.01. A decrease in organizational performance was shown to accompany a decrease in the influence of relational capital. Effect size (r^2= 0.067) reveals that relational capital explained 6.7%

increase in organisational performance. In order to get an edge in the marketplace, Cheng et al. (2010) claimed that sustaining long-term, mutually beneficial relationships with stakeholders is essential.

4.3 Limitations

In the future, future studies may consider expanding their scope or verifying the fit of businesses in other universities to see if the goodness-of-fit varies among universities in the same model. This study does not include all major universities in Nigeria due to the ongoing labor strike in the country, lack of resources, and time constraints.

The study's findings are based on the perceptions of employees about Intellectual Capital. For clearer outcomes, students' perspectives should also be taken into account.

CHAPTER V

Conclusions, Recommendations and Suggestions

5.1 Conclusions

Since intellectual capital is increasingly important in commercial organizations, it is essential to evaluate the function of intellectual capital in understanding the link between intellectual capital and educational attainment. For enterprises, IC may be a competitive advantage, especially in today's environment of increased competition and limited resources. Management, cultural and organizational changes are brought about as a consequence of assessing intellectual capital in order to better plan and manage intangible resources in line with the company's value generation strategy Intangible assets, performance indicators, resource allocation, and benchmarking might all be improved at universities.

Success at a university is directly linked to the three elements of intellectual capital, as the findings from this research reveal. Study after study shows that human capital has a more significant influence on a university's success than structural or relational capital, therefore that's where we should start when looking at university performance. The university's teachers and staff are regarded as an important aspect of the company's human capital. In the right hands, they may take the firm to new heights. As a result, human capital has a greater impact on university success.

A university's human capital is enhanced by its structural capital. Having rules and regulations, processes, systems, and programs in place, as well as new research findings, improves the institution's performance. It is apparent that an institution's performance improves if it has suitable norms and regulations and thorough research development strategies in place. Shu-hsiao Tsen et al. (2010) argued that, since intellectual capital consists of human, structural and social capitals, it is important that an organization develops *human capital* hardly replicable by competitors, transforms the accumulated wisdom/abilities into its core capability, creates distinctive organizational qualities using functions of structural capital, and establishes irreplaceable external relationships to bolster social capital. They also consider the synergy resulted from interactions among human, structural and social capitals a crucial factor of organizational competitiveness.

Relational capital has no significant effect on the success of an institution as the other elements. Human and structural capital have a much greater influence on an institution's success than its relationships with other institutions and the outside world. The chances of a student succeeding in college are better when they have both human and structural capital on their side.

Human capital has the greatest impact on university success, even if the three IC components all have a favorable effect. However, the impact of structural capital on performance is less significant than the impact of human capital. Finally, relational capital has the least impact on university achievement. Previous research has shown that intellectual capital components have a favorable influence on an institution's success.

5.2 Recommendations

As a result of the findings from this thesis work, the study therefore gives the following recommendations;

- Starting with the recruitment and placement of the appropriate individual in the right position, the university's human resources are properly used, enhancing the experience and creative thinking abilities of its personnel. Leaders at the institution need to pay more attention to the assessment procedures of workers' performance rather than just assessing it.
- The need to work on enabling the human elements in universities to support the building of human capital, as the main component of intellectual capital, through training programs and the delegation of authority and support confidence between employees and managers.
- Emphasize the holistic view of intellectual capital in universities, so that the focus is on human capital, structural capital and client capital
- Training programs, delegating power, and support for employee-manager confidence are all necessary to foster human capital growth, the most significant element of intellectual capital.
- Creating work groups with a wide range of perspectives and backgrounds. In order to think more creatively, these organizations need to have a wide range of viewpoints and experiences.

- The institution must develop procedures for talent identification and sponsorship, offer financial assistance to them via a department responsible for the care and support of talented individuals, granting them scholarships, and backing their ideas and helping them realize these ideas.
- Supporting the institution’s social participation in community activities, which contributes to building a positive relational image of the university within the society

5.3 Suggestions for further studies

Despite the fact that this study focused on educational institutions, the results cannot be used to apply to other industries, such as financial institutions or service-oriented businesses. All of these may be included into future coursework.

We need more studies on how to measure intellectual capital and how to make that data public in Nigerian institutions. This will help us better understand why it's so important to do so. There is also a need for more studies on the factors that help in the formation of intellectual capital and how modern organizations adopt them, especially the factors related to the quality of work life and its effects on the creative environment within organizations.

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APPENDIX A

RESEARCHQUESTIONNAIREONTHE EFFECTS OF INTELLECTUAL CAPITAL ON ORGANIZATIONAL PERFORMANCE (RICOP)

Dear Respondent,

This study assesses the effects of intellectual capital on organizational performance. Your sincere opinion on the items generated for the study is highly solicited. Any information given will be used strictly for research purpose.

Thankyou

Chukwuazom Owen Muobuike

SECTIONA:

1. Gender:( ) Male ( ) Female
2. AgeRange: 20-35years( ) 36– 45 years ( )46 – 50 years ( ) 51years and above( )
3. Work Experience: 5-10 years ( ) 11-15 years ( ) 16-20 years ( ) 21 years and above ( )
4. ReligionDifferences:( ) Christian ( ) Islam( )Traditional ( )( )Others

SECTIONB

INSTRUCTION:PLEASE TICK ASAPPROPRIATE (/)

Thekey:Strongly Agree(SA),Agree(A),Strongly Disagree(SD),Disagree(D)

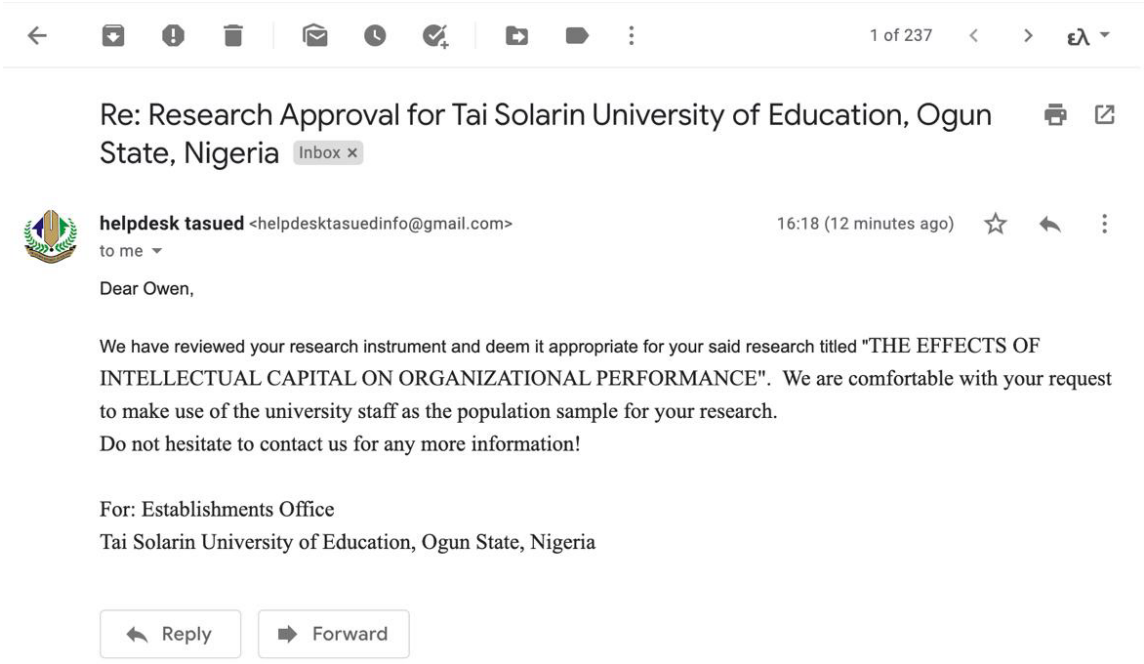
S/N	Questions	SA	A	SD	D
	What are the effects of human capital on organizational performance				
1.	Employees perform their tasks efficiently and effectively				
2.	Employees are Always creative and show initiative				
3.	Education/ higher education is high among employees				
4.	Revenue per employee has increased significantly				
5.	High investment in trainings				
6.	Employees' capacity allows task innovation				
7.	Pleasant atmosphere for task executions				
	What are the effects of structural capital on organizational performance				
8.	Investment increase in new methods and systems				
9.	Growing investments in information technology				
10.	Increase of new services compared to planning				
11.	Improvement of technical capabilities in production processes				
12.	Fast and efficient product delivery to students				
13.	Loss and waste reduction				
14.	Increase in the number of R&D employees				
15	Creative ideas are shared with everyone				

16.	Number of equipment against number of employees is adequate				
	What are the effects of relational capital on organizational performance				
17.	Institution has a great reputation among clients and suppliers				
18.	Institution recognizes and rewards employees' efforts				
19.	Students and parents are fully satisfied with the company				
20.	Number of clients and new businesses has grown				
21.	Strong partnership with the community and surrounding societies				
22.	Students and Parents/guardians' satisfaction with quality of education				
	Relationship between intellectual capital and organizational performance				
23.	High investment in trainings				
24.	Revenue per employee has increased significantly				
25.	Improvement of technical capabilities in production processes				
26.	Number of equipment against number of employees is adequate				
27.	Strong partnership with the community and surrounding societies				
28.	Students and parents are fully satisfied with the company				

Source: Clarissa Gracioli Camfield, Cíntia Paese Giacomello, Miguel Afonso Sellitto (2018) Journal of Technology Management & Innovation Volume 13, Issue 2.

APPENDIX B

Scale of Permission



1 of 237

Re: Research Approval for Tai Solarin University of Education, Ogun State, Nigeria Inbox ×

helpdesk tasued <helpdesktasuedinfo@gmail.com> 16:18 (12 minutes ago)

to me

Dear Owen,

We have reviewed your research instrument and deem it appropriate for your said research titled "THE EFFECTS OF INTELLECTUAL CAPITAL ON ORGANIZATIONAL PERFORMANCE". We are comfortable with your request to make use of the university staff as the population sample for your research.
Do not hesitate to contact us for any more information!

For: Establishments Office
Tai Solarin University of Education, Ogun State, Nigeria

Reply Forward

APPENDIX C

Ethical Committee Approval

APPENDIX D

Turnitin Report

EFFECTS OF INTELLECTUAL CAPITAL ON ORGANIZATIONAL PERFORMANCE IN TAI SOLARIN UNIVERSITY OF EDUCATION

ORIGINALITY REPORT

9%	6%	5%	3%
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