JOURNAL OF RISK AND FINANCIAL STUDIES
Vol. 6, No. 1, 2025, pp. 79-105

https://DOI:10.47509/JRFS.2025.v06i01.04

ARF INDIA
Academic Open Access Publishing
www.arfjournals.com

AN EMPIRICAL EXAMINATION OF THE RELATIONSHIP BETWEEN HUMAN CAPITAL DISCLOSURE AND VALUE OF LISTED SERVICE FIRMS IN NIGERIA

Israel S. AKINADEWO[1], Gbenga Ayodele FALANA[2], Adebola Abass JABAR[3] and Ayomikun Vincent ADEJUMO[4]

Department of Accounting, College of Social and Management Sciences, Osun State University, Ilesa, Osun State, Nigeria.
E-mails: [1]omoeri_akinadewo@unilesa.edu.ng; [2]falanaga@pg.abuad.edu.ng; [3]bolajabar@abuad.edu.ng; [4]adejumoayo@pg.abuad.edu.ng

Received 29 April 2025; Revised 30 May 2025; Accepted: 05 June 2025; Publication: 25 June 2025

Abstract: This study aims to empirically examine the relationship between human capital disclosure and the value of listed service firms in Nigeria. Using 23 samples of listed service firms in Nigeria, data were collected from annual reports from 2010 to 2022. The study employed regression analysis to explore the relationship between human capital disclosure and firm value, controlling for other variables. The findings of this study provided that while emotional capital disclosure indicated a negative relationship, knowledge and the social capital dimension on a firm's value showed a positive linear relationship. The study concluded that human capital disclosure proxy by knowledge, emotional, and social capital disclosures significantly influence the value of listed service firms in Nigeria. The study recommends that information regarding knowledge, emotional, and social capital should be explicitly stated in both narrative and numerical form, in the account notes and on the financial statement face, with broad headings designating these dimensions of human capital disclosure. The study's scope only covered the service sector of the economy while other sectors can be studied.

Keywords: Emotional capital disclosure, Firm value, Human capital disclosure, Knowledge capital disclosure, Social capital disclosure.

JEL Classification: D83, G32, J24, O34

To cite this article:

Israel S. AKINADEWO, Gbenga Ayodele FALANA, Adebola Abass JABAR and Ayomikun Vincent ADEJUMO (2025). An Empirical Examination of the Relationship between Human Capital Disclosure and Value of Listed Service Firms in Nigeria. *Journal of Risk and Financial Studies*, Vol. 6, No. 1, 2025, pp. 79-105.

1. INTRODUCTION

In the last two decades, there has been increased attention on the importance of human capital in driving firms' value. Human capital, which entails knowledge, skills, and abilities of employee, is considered a strategic asset in the contemporary business environment. However, despite its significance, human capital disclosure remains a considerable challenge for firms worldwide. This study empirically explores the global challenges associated with human capital disclosure and its impact on firm value.

On the one hand, firms' value is created by employing two forms of invested capital. This includes financial and intellectual capital. However, human capital, which is one of the elements of intellectual capital, has conventionally been the most valuable resource in an organisation. Human capital disclosure consists of information on firms' employee's experiences, skills, knowledge, and capabilities, its relevance, and its capability to improve through training and learning (Adelowotan, 2020).

However, human capital disclosure has been limited in the annual reports. This may be due to a lack of regulation and measurement basis, and the perception that human resources in firms are not owned (Wright & McMahan, 2011). The lack of standardised metrics, resistance to disclosure, and emerging workforce trends are among the key hurdles in human capital disclosure. This has led to the recognition of human capital as a mere expense without recognising its value-creating potential. This, according to Ma and Zhang (2023), has led to a large amount of unrecognised value in firms' financial reports.

In Nigeria, listed service firms have been facing the challenges of assessing human capital, and its contribution to firms' value. There is a difference between the cost and benefits of human capital and such needs to be weighed (Mangena, Pike, & Li, 2010). Also, there is disagreement on the volume of disclosure and how such should be reported in the financial reports. Disclosure of human capital has been specific to individual firms with inconsistencies in the volume of items disclosed in the financial reports.

This disparity has widened due to the quickening pace of technological development, as well as growing interconnectivity and intelligent automation. This has led to information asymmetry while limiting financial reports' value and relevance among stakeholder groups. However, the componentization of human capital, its accounting and disclosure were explored in this study as a

bridge in the difference between the assets reported and share prices of listed service firms in Nigeria.

This study investigated various ways and the extent to which each sub-component of human capital disclosure affects firms' value, the interrelationships of each component, and the extent, role and quality of such disclosure on firm value. It is believed this study will help determine each component's importance in the determination of firms' value while providing information to stakeholders on how human capital should be reported and the effect of such disclosure on firms' value.

2. THEORETICAL BACKGROUND AND LITERATURE REVIEW

This study reviewed various concepts, relevant extant literature as well as theories to gauge the effect of human capital on a firm's value.

2.1. Conceptual Review

This study reviewed the conceptual basis making up the variables understudied.

2.1.1. Firm Value

In recent times, the concept of firms' value has undergone different descriptions based on ownership and capital structure. The traditional concept of firms' value confined it to invested capital (Lonkani, 2018). In reference to this, Paul (2022) opined a firm's value is an economic concept that reflects the value of a business at a particular date. But recent consensus among researchers has shown that firms are important elements of society (Rindova, 2005; Lakoni, 2018; Paul, 2022). Lakoni (2018) stated, in this regard, that a firm value extends far beyond its invested capital. This has necessitated growing demands from different interest groups. The alignment of these demands with firms' objectives entails engagement, resource allocation, collaboration and partnership. All these create both economic value and social value in the short and long run.

Based on this, firms' value can be created by employing two forms of capital. This includes financial and intellectual capital. The combination of this capital, although firm-specific, together with earnings growth and return over time make up a firm's value. All firms depend on various forms of capital to be sustainable. A firm's value is a combination of different types of capital in various forms or nature (Akinadewo & Falana, 2024). The reflection of this in

firm value is a function of disclosure of every resource used by a firm. From this perspective, this study conceptualizes a firm's value as the entire market value of a business reflecting the sum of claims by all stakeholders including creditors (secured and unsecured), shareholders (preferred and common), non-controlling minority interest, and cash and cash equivalents.

2.1.2. Human Capital Disclosure

The concept of human capital disclosure has been limited to employee benefits in the financial report. This conventional approach recognizes human capital as an expense. Clayton (2019) contended that such conceptualisation might not be enough to fully determine and understand neither its value nor its contributions to the prospect of a firm. In this regard, Mangi (2009) and Huang, Luther, Tayles and Haniffa (2013) opined that human capital is one of the most essential value-creating assets of a firm. While it is the main source of competitive advantage in this era, investors' understanding of its usage and contributions forms the basis of demand for disclosures.

Dess and Picken (2000) and Yarrow (2022) submitted that human capital is the economic value of workers' capabilities, knowledge, skills, experience, and competencies. It is an agent of other forms of other capital. It also includes its relevance and the ability to improve through learning and training. Quintero-Quintero, Blanco-Ariza, and Garzón-Castrillón, (2021) opined that human capital is created by employees through their innate and acquired knowledge. While Karabay (2011) averred that it is a competitive intangible asset, the portrayal of its value and contributions needs to be disclosed in the financial reports.

However, Hansson (2009) stated that human capital includes relationships between staff and the firm, as well as stakeholders. Based on this, human capital comprises knowledge, emotional and social capital. In this regard, Magau, Roodt, and van Zyl, (2021) opined that human capital creates shareholder value when integrated with forms of capital. Accordingly, human capital has emerged as a crucial area because other forms of capital revolve around human capital.

Human capital is seen as a driver of innovation, strategy and value creation. In light of this, its disclosure has been a mechanism that contains information about its human resources (Gamerschlag & Moeller, 2011; Adelowotan, 2020). On the other hand, its reporting of economic value comes from worker's experience, skills, knowledge, and abilities (Eatough, 2021; Kenton, 2022). In

this study, human capital disclosure is all information about a firm's human resources and its contributions to the firm's goals.

2.1.2.1. Knowledge Capital Disclosure: Though the concept of knowledge capital disclosure has been equated to intellectual capital by some researchers (LaFayette, Curtis, Bedford, & Iyer, 2019; Jardon & Martinez-Cobas, 2021), a consensus has not been reached about the broad definition of knowledge capital. This was shown in a study conducted by Gordon (2022) that averred knowledge capital as the entirety of intellectual capital. But knowledge is a key attribute of humans and knowledge capital can, therefore, be confined to a component of human capital. Recognizing this, Lehtimaki and Lehtimaki (2016) stated that knowledge capital has become a major factor in a firm's success.

However, knowledge resides in humans and a firm is only as good as its people, their skills and knowledge (Kenton, 2019). It is the resources that are owned by the employee in a firm. These resources are acquired through training and education. Based on this, Spacey (2017) opined that knowledge capital is the potential of employees to perform work as a result of education, well-being, and culture. This is also shaped by experience, training and the environment (German-Soto & Hernández, 2021).

In this regard, Saeed and Yazdani (2021) opined such capital is limitless, priceless and social. These make it an essential resource which consists of qualities such as leadership, know-how, creativity, problem-solving and decision-making (Spacey, 2017). These exist in two forms minds and content. Kenton (2019) and Eatough (2021) submitted that knowledge capital is a narrow version of human capital. Based on this, knowledge capital disclosure represents the information on the value of employees' knowledge and its contributions to firms' success.

2.1.2.2 Social Capital Disclosure: Researchers might have misconstrued the concept of social capital to represent relational capital (Lin. 2001; Nahapiet, 2008). In recent times, scholars have distinguished the one that applies to employee as social capital and the one that applies to a firm as relational capital. Social capital is the connection among employees in a firm that helps achieve its goals. Based on this, Lin (2001) stated it is the resources embedded in a social structure, while Iyer, Soberman and Villas-Boas (2005) submitted that it is the firms' relationships, attitudes and values governing interactions.

Aldridge, Halpern and Fitzpatrick (2002) averred that social capital is the qualities that shape employee social interactions. This includes norms, relationships, and values. A firm is not an exception as its growth and profitability are dependent on this. This agrees with Staber (2007) that states social capital is the structural, relational and cognitive features of social interaction that facilitate coordinated action. This shows the amount of investment made by firms in fostering social cohesion between employees and the firm.

Stolle (2003), however, opined that social capital is the potential willingness of citizens to cooperate and engage in civic endeavours collectively. This potential willingness stems from the cooperation between employees and the organisation. In other words, it is the mutual dependence between the firm and employees for goal realisation. Such a relationship, in Stolle's (2003) opinion, should be complementary.

However, Reyes, Giovannoni and Thomson (2018) also argued that social capital is the resources derived from social interaction. The outcomes of this are cooperation, loyalty and learning. On the contrary, Meng and Clausen (2019) submitted that it is the actual and potential resource derived from interactions. While this entails both positive and negative relationships, Kenton (2022) opined that it is only limited to beneficial relationships developed over time.

Morel and Coburn (2019) explained social capital as resources that firms access through social ties. Here, it is related to the advantages derived as a result of social ties. And these advantages revolve around social participation and trust. Tsai and Ghoshal (1998) placed such value on the relationships among employees which facilitate a common understanding. The outcome of these social ties brings about social cohesion and resilience.

Bosbach and Maietta (2019) stated that it is firm-specific and an outcome of specific investment choices. In this study, social capital disclosure is the disclosure of the value of social relations merged with cooperation to achieve goals (Shanmugam, Gheni, Bin Yusof, & Karunakaran, 2019). It includes relationships, social status and professional network (Eatough, 2021). None of these are held by individuals but appear in the potential of these social ties among individuals (Kenton, 2022).

2.1.2.1.3. Emotional Capital Disclosure: Gendron, Kouremenou and Rusu (2016) averred the concept of emotional capital lies in a set of resources that are inherent in humans. These resources might be useful for personal,

professional and firms' development. It has also come into play in social cohesion, with personal, economic and social rewards. In line with this, emotional capital contributes to other dimensions of human capital. While this agrees with the study conducted by Khazaei, Holder, Sirois, Oades and Gendron (2021), Babalola (2010) opined that it is all the psychological assets and resources of the company. This might include employee's feelings towards the company.

Gendron et al. (2016) portrayed emotional capital as the set of emotional competencies which were missing in economics measurement. It is the driver of mind and behaviours which could change other dimensions of human capital. Like other dimensions of human capital, individuals may vary in the extent to which they possess emotional capital. Emotional capital finds its root in self-esteem, self-control, resilience, and optimism. These emotional resources are the drivers of other forms of human capital.

Cao, Gao, Fan, Jiao, Li and Ma (2022) averred that emotional capital is the skills and abilities of an employee to understand, recognise and function with other people. In recognition of this, Barrena-Martinez, López-Fernández, and Romero-Fernandez (2017) stated that firms' success largely depends on emotional capital. Other forms of human capital rely on emotion to function efficiently. Khazaei et al. (2021) stated that emotional capital can be personal, group or firm-based and shaped by socialisation. It is the driver of both knowledge and social capital.

Cahill (1999) explained this as a set of emotional dispositions that generate perceptions, reactions, and expressions. Such is critical to building influence, relationships, and loyalty that develops firms' values. It includes emotional intelligence, creativity, problem-solving, resilience, critical thinking, loyalty, and leadership behaviour (Eatough, 2021). It is the portrayal of employee's emotional resources and their contributions to firm's goals.

2.1.3. Knowledge Capital Disclosure and Firm's Value

The ability of a firm to create, grow and sustain value is directly related to its capability to generate income above its cost (Salman & Dandago, 2013). One of the resources used in this regard is knowledge capital. Adegbayibi (2021) stated that it forms the basis of firms' earning capacity and value creation. It is essential for effective provision of goods and services. Grant (1996) averred that a firm's competitive advantage lies in its ability to integrate and protect an

individual's specialised and tacit knowledge. It can be generated from a firm's experiences or innovation. This is because firm success is a function of its knowledge accumulation. Therefore, a firm's value can be increased when knowledge capital is increased, as such can be increased through training and learning.

Knowledge capital can serve as an agent of growth in a firm. It also creates value for firms' stakeholders while sustaining its overall performance. Laperche (2021) stated that such is derived through acquisition while combined and structured for productive purposes. It can also be scientific and technical for such to be relevant to firms' needs. Although a firm's knowledge entails workers' combined experience and expertise, it is firm-specific and valuable if it can be transmuted to goods and services. Its disclosure may show firms' competitive advantage, innovation and potential for future growth (Kamaºak, Bulutlar, & Yücelen, 2015).

Knowledge capital can be seen in all firm's functions. Firms need to understand their need for knowledge and value such in commercial terms. Knowledge is central to firms' management, but its presence in employee is difficult to measure directly (Li, Minnis, Nagar, & Rajan, 2014). Antonelli, Orsatti and Pialli, (2023) stated the way to assess its value is by measuring its costs. In value creation, knowledge capital has been the primary contributor to firms' value. Firm value may be increased or decreased by employee knowledge.

2.1.4. Social Capital Disclosure and Firm's Value

Here the concept of social capital has been limited to the interrelationship between the employee and the organisation. According to Schuller (2001), social capital focuses on the relationships among employee and the rules which govern these relationships. Hasan, Hoi, Wu and Zhang (2017) averred that there are benefits that firms gain from being a part of social networks. Such benefits include access to vital resources, information, and support. It can create trust, cooperation, reciprocal engagement and social cohesion. It, therefore, can be used as leverage for performance improvements.

Kenton (2022) submitted that it is the product of human interaction and social networks. The contribution of such interaction to firms' success needs to be disclosed in relation to the information needs of all stakeholders. It includes favours, information, ideas, opportunities, relationships and networks, trust and

respect among employees. All these are valued resources that need to be disclosed. These are firms' resources that enable firms' success. The perception of this is usually reflected in the firm's value.

2.1.5. Emotional Capital Disclosure and Firm's Value

The concept of emotional capital is all about the psychological assets and resources of a firm. Such includes employee's feelings about the company. This motivates people to take action in their business or personal relationship with the firm. It is the glue that holds employees together and creates commitment. Newman (2015) and Li (2020) suggested that emotions are thought-based beliefs involved in everything a firm does which help form and maintain relationships with each other. Thomson (1998) stated that there are values embedded in the stock of emotions, feelings, and beliefs held in and around a firm. It is the basis for other capital that may translate to an increase or decrease in a firm's value.

Gendron (2016) posited that emotional capital heavily influences the creation, acquisition, and use of human capital. It facilitates personal, social and economic well-being. This is what motivates human capital to function effectively. Sharma (2016) and Newman (2015) stated that emotional capital is at the heart of all other capital and the bottom line in financial performance. It creates benefits for both employees and the firm when there is a harmonious expectation. Emotional capital encompasses the emotions of employees and the resources that serve the needs of other forms of capital (Lashley, 2002). This can be, in particular, true for service-oriented firms.

2.1.6. Conceptual Framework

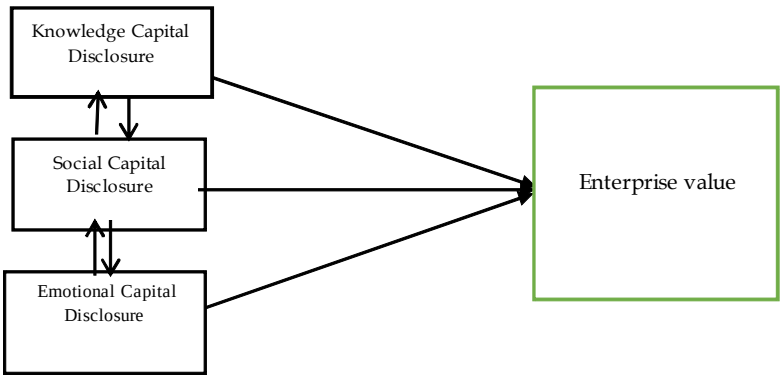

Figure 1: The Conceptual Framework

Figure 1 depicts the relationship between dependent variables and independent variables. The association of knowledge, social, and emotional capital are portrayed by the arrows shown in Figure 1.

2.2. Theoretical Review

2.2.1. Knowledge-Based Theory of a Firm

The knowledge-based theory was introduced by Stalk in 1992. The theory assumes that value-creation abilities are based on knowledge-driven competence and capability. According to Grant (1996), knowledge-based theory recognises and emphasises knowledge as the most strategically significant resource of a firm. While such knowledge finds its basis in the contributions of employee experiences, Kianto (2010) noted firms are communities of knowledge and innovation.

Grant (1996) posited that the knowledge-based theory constitutes firms' utilisation of knowledge to create values through input-to-output transformation. This theory emphasizes a firm's success highly depends on its ability to create, acquire, share and apply knowledge (Mahdi, Nassar, & Almsafir, 2019). This takes different forms and competitive advantage can be created by leveraging these resources. These resources entail skills, abilities, and learning capacity as well as their potential for adapting and acquiring new information (DeNisi, Hitt, & Jackson, 2003).

This knowledge is embedded in organisational culture, policies, routines, documents, systems, and employees (Alavi, 2001) while enabling distinct capabilities, value creation, growth and sustainability through management. These are shared, applied, and transferred through firms' culture and structure while related to a firm's investment in human capital. However, knowledge alone does not ensure value creation but capabilities, efforts and resources also play an important role (Kaplan, Schenkel, von Krogh, & Weber, 2001). Knowledge sometimes can be difficult to manage and protect.

2.2.2. Legitimacy Theory

The legitimacy theory was introduced by Dowling and Pfeffer in 1975. Legitimacy theory assumes firms' activities must agree with societal norms, values, and expectations (Deegan, 2014; Dewiyanti, 2021). A firm must maintain acceptance in the society to operate effectively. Accordingly, Holder-Webb et

al. (2009) stated that firms' disclosure presents a socially responsible image and operational legitimacy. In this regard, there is a social contract between business and society (Zyznarska-Dworczak, 2018). In adopting this perspective, a firm would voluntarily report on activities that meet the expectations of the societies (Cormier & Gordon 2001; Deegan 2014).

Guthrie (2001) averred that legitimacy theory forms the basis for voluntary disclosure of intellectual capital. Susanto, Pradipta and Handojo (2019) submitted that stakeholders' expectations entail adequate and appropriate disclosure. Olateju, Olateju, Adeoye and Ilyas (2021) posited that failure to meet these expectations may threaten the existence, performance and legitimacy of a firm. Firms must both understand and align their activities with these expectations. One of the ways to react to these is by disclosing information about firms' strategies, activities and resources. However, a lack of correspondence between how society believes an organisation should act and how it is perceived that the organisation has acted creates a "legitimacy gap" (Deegan, 2014).

2.3. Empirical Review

In America, Belo, Gala, Salomao and Vitorino (2022) investigated the economic variables determining a firm's market value. These variables include physical capital, labour, knowledge capital and brand capital. The study found that, on average and depending on the industry, human capital accounts for 14–21%, while physical capital accounts for 30–40% of firms' market value. Knowledge capital makes up 20–43%, while brand capital accounts for 6–25% of firms' market value.

By integrating textual analysis with a dataset containing 45 million individual career histories, Strickland-Jackson (2022) assessed the factors that influence how organisations disclose their human capital. It was found that changes in the underlying stock and employee flow affect human capital disclosures. While disclosure changes might be informative, greater disclosures are prompted by regulation amendments.

Onuoha and Okoye (2022) examined the motivations behind voluntary disclosure of human capital based on signalling and proprietary cost theories. A dataset was generated using content analysis from annual reports of 12 banks in Nigeria. The Panel Corrected Standard Error (PCSE) model was used to assess the dataset gathered. According to the analysis's findings, corporate

profitability has a negligible impact on the level of a company's human capital disclosure, although corporate size and human capital performance do.

Alharthi (2022) compared human capital (HC) disclosure in annual reports of firms operating in Saudi Arabia and the United Kingdom. Based on the quantity, concepts, and number of disclosing companies, the results showed that UK-listed companies greatly outperformed Saudi-listed companies. Additionally, there was a favourable correlation between ownership structure, quality of corporate governance, and HC disclosure.

Si and Xia (2022) examined the impact of human capital on the risk of stock price crashes for companies. The result showed human capital quality enhances enterprises' internal information environments, reduces bad news hoarding and lowers the danger of stock price crashes. The research clarifies the significance of human capital's internal informational role and its ramifications for capital markets and external investors.

Salvi, Raimo, Petruzzella and Vitolla (2022) studied the financial effects of the amount of human capital data that businesses disclose in integrated reports. The empirical results show that the cost of capital is significantly impacted negatively by human capital disclosure, but positively impacted business value. Firms cut their cost of capital by increasing human capital transparency and lowering the perceived firm risk among investors. Furthermore, higher degrees of HC disclosure are associated with better access to capital which in turn raises business value.

Ogundajo, Kujore and Kassim (2022) researched the connection between a firm's worth and its accounting disclosure of its human resources. In order to evaluate the variables, this study used the ex post facto research design. Results showed that firm value is greatly impacted by staff training and development disclosures. This study essentially finds that firm value is significantly impacted by the accounting disclosure of human resources.

Doghudje, Ibanichuka and Ogbonna (2023) examined the relationship between human capital investment and stock prices of manufacturing companies in Nigeria. The study uses a panel regression model and an Ex-post facto research design. The test result showed that there is no statistically significant correlation between stock prices and human capital investment. The findings refute conventional accounting methods that hold that stock prices and investments in human capital have a direct and favourable link.

Israel, Young, Akpan, Peter and Edem (2023) experimentally analysed how human resource investment disclosure affected banks' corporate financial performance in Nigeria. As a result, it was found that HRID and corporate financial success were positively correlated. Again, Enekwe, Udeh and Okwo (2022) assessed the attributes effect of human resources valuation on corporate performance. Human capital efficiency has a positive but insignificant impact on listed Nigerian oil and gas companies' return on equity, whereas human resource cost has a negative but insignificant impact.

From the Empirical reviews, the effect of disclosure of human capital and its component analysis on firms' valuation in Nigeria is still relatively new (Ogundajo et al., 2022; Enekwe et al., 2022 & Israel et al., 2023). Moreover, a firm's value has been proxied by Price/Earnings Ratio, Market-Book-Value Ratio, earnings per Share and Share Price in other studies. However, this study used enterprise value to assets ratio as a proxy for a firm's value. This study is an in-depth investigation of various ways each component of human capital disclosure affects firms' value, the interrelationships of each component, and the extent, role and quality of such disclosure on firm value. Hence, the following hypothesis is formulated:

H_0: *Human capital disclosures do not have a significant effect on a listed service firm's value in Nigeria.*

3. METHODOLOGY

3.1. Research Design

This study adopted an *ex-post* factor research design to analyse the variables being studied. Using the human capital disclosure index, the extent of disclosure of human capital was analysed. For the firm's value measurement, the enterprise value to assets ratio was used. Data were obtained from the annual reports of 23 listed service firms on the Nigerian exchange as of 31st December 2022. This forms the sample size as well as the population. This study covered a period of thirteen years, from 2010 to 2022.

3.2. Model Specification

This study specifies theoretical considerations of the relationship between dependent and independent variables. This is based on the mathematical

explanation of the model adopted by the study. The model specification is determined in line with the study conducted by Jardon and Martinez-Cobas (2021), as follows:

$$Y_{it} = f(HCD) \quad \text{Eqn (1)}$$

$$Y_{it} = f(KCD, SOCD, ECD)$$

$$Y_{it} = \beta_0 + \beta_1(KCD) + \beta_2(SOCD) + \beta_3(ECD) + \mu$$

Where Y_{it}: Firm's value as measured by enterprise value for a particular listed service firm in year t.

HCD: Human capital disclosure of the sampled firms

KCD: knowledge capital disclosure of the sampled firms

SOCD: Social capital disclosure of the sampled firms

ECD: Emotional capital disclosure of the sampled firms

β_0: constant and β_1, β_2, and β_3 represent the coefficient of knowledge, social and emotional capital disclosure. μ: Error term. It is expected that β_1, β_2, and β_3 will be greater than zero based on the literature reviewed and the theories used in the study.

3.3. Measurement and Description of Variables

Table 1: Firms' Value

Variables	*Description*	*Measurement*	*Source*
Firms' value	Enterprise value is the market capitalization plus short-term and long-term debt minus any cash divided by total assets.	Calculated as: (Market value of Debt + Market value of Equity + Minority interest – Cash – investment)/Total Asset	Jason (2022)

Table 1 shows the measurement description

Table 1 shows the description of dependent variable measurement. This portrays the way firm's values were calculated using the study's sampled firms using enterprise value. On the other hand, the independent variables were measured using the disclosure index as stated below:

Index = (Σ score / TN) x 100

Where: Index = Human Capital Disclosure Index (HCD Index).

Score 5: if HCD information is disclosed in quantitative/monetary form with narration.

Score 4: if HCD information is disclosed in quantitative/monetary form only, without narration.

Score 3: if HCD information is disclosed in narrative form.

Score 2: if HCD information is disclosed with limited references, or briefly presented when discussing other information.

Score 1: if the company states that the disclosure of HCD items is immaterial.

Score 0: if HCD information is not disclosed.

TN = Total number of items measured.

4. DATA ANALYSIS AND DISCUSSION OF FINDINGS

4.1. Descriptive Statistics

Table 2: Descriptive Statistics

Parameter	*EVTA*	*KCD*	*ECD*	*SCD*
Mean	0.924532	0.829320	0.140468	0.050836
Median	0.800396	1	0	0
Maximum	5.148235	2.4	1.5	0.8
Minimum	0	0	0	0
Std. Dev.	0.829043	0.616126	0.247133	0.133704
Skewness	1.839857	0.053118	2.305722	3.293908
Kurtosis	7.714633	1.966875	8.934374	15.55591
Jarque-Bera	445.6105	13.43798	703.6743	2504.752
Probability	0	0.001208	0	0
Sum	276.4351	247.9667	42	15.2
Sq. Dev.	204.819	113.1241	18.20033	5.327291
Obs	299	299	299	299

Table 2 shows the descriptive result

Table 2 shows the descriptive information of both the dependent and independent variables. The mean of enterprise value to asset ratio (EVTA) was

0.924532 while the median was 0.800396. This data ranges from 0.0000 to 5.148235. The standard deviation was 0.829043 indicating that, on average, each data points deviate from the mean by a spread of 82.90%. This was a high variability. The skewness of the dataset which was 1.839857 indicated that deviations from the mean are positive and on the right side of the mean. Kurtosis was 7.714633 indicating that distribution is peaked and possesses a thick tail closer to the mean called Leptokurtic distributions. The Jarque-Bera test's outcome demonstrated that the EVTA distribution considerably deviated from the normal distribution (V = 445.6105, p-value 0.0000).

Knowledge capital disclosure (KCD) had a mean value of 0.829320 with a median of 1.0. The range of its data points was between 0 and 2.4 denoting the lowest and highest values respectively. The data deviated from the mean by 0.616126. The skewness is 0.053118; indicating data points were more concentrated towards the left-hand side of the distribution. The kurtosis was 1.966875, indicating a moderately peaked platykurtic distribution. The Jarque-Bera test statistic was 13.43798, and the associated probability was 0.001208, suggesting that the distribution was significantly different from a normal distribution at a 5% significance level.

However, emotional capital disclosure (ECD) had a mean of 0.140468 with values range of 0 and 1.5. This showed the minimum and maximum values. The standard deviation was 0.247133. Both the skewness and kurtosis of 2.305722 and 8.934374 indicated a skew to the right and leptokurtic distribution. ECD test for normality using the Jarque-Bera test statistic showed a high departure from a normal distribution with 703.6743 departures and a p-value of 0.0000. The standard deviation was 0.247133.

Again, the social capital disclosure (SOCD) mean size was 0.050836. The minimum and maximum disclosure in this regard was 0 and 0.8 respectively, showing a small relative disclosure. The standard deviation of 0.133704 indicates a relatively small variation in the volume of disclosure across observations. The skewness of 3.293908 indicated a right-skewed distribution, and the kurtosis was 15.55591, indicating a sharply peaked distribution. The Jarque-Bera test statistic of 2504.752 and a p-value of 0.0000 indicated that the data did not follow a normal distribution.

4.2.1. The Effect of Human capital disclosure on listed service firms' Value in Nigeria

4.2.1.2. Variance Inflation Factors

Table 3: Variance Inflation Factors

Variance Inflation Factors		
Variable	*VIF*	*1/VIF*
KCD	1.92	0.520572
ECD	1.72	0.582106
SOCD	1.41	0.710086

Table 3 shows the VIF result

The study carried out a variance inflation factor (VIF) to assess the degree of multicollinearity in the panel variables. It measures whether one independent variable can be predicted from another in a regression model, indicating linear dependency among the independent variables. The highest VIF value, as shown in Table 3, is for the KCD variable at 1.95, which is still well below the threshold of 10. This suggests that there is no significant multiple correlation in the model.

4.3.1. The Effect of human capital disclosure on listed service firms' Value in Nigeria

Table 4a: Regression Estimate on the Effect of Human Capital Disclosure on Firms' Value

Variables	*Pooled OLS*			*Fixed Effect*			*Random Effect*		
	Coeff	*t-value*	*p-value*	*Coeff*	*t-value*	*p-value*	*Coeff*	*t-value*	*p-value*
KCD	0.567458	6.1	0.000	0.415839	6.04	0.000	0.429512	3.25	0.001
ECD	-0.3341112	-1.36	0.174	-0.569211	-2.82	0.005	-0.52609	-1.51	0.131
SOCD	0.7308027	1.88	0.061	-0.013965	-0.04	0.964	0.062312	0.21	0.832
Constant	0.4637087	6.17	0.000	0.660333	11.18	0.000	0.63906	4.47	0.000
R-squared	0.179				0.131			0.147	
Adj R-squared	0.1706				0.1191			0.118	
F-statistic	21.44				12.31			11.3	
P-value	0.000				0.000			0.01	
Hausman test	4.66(p=0.1983)								
Wooldridge test	11.44(p=0.0027)								
Breusch-Pagan	42.14(p-value=0.000)								
Redundant Fixed Effect Test	19.81(p-value=0.000)								
Lagrange Multiplier Tests	543.04(p=0.0000)								

The table above shows the result of the regression analysis carried out

The redundant fixed effect test was used to determine the most efficient estimator among these models. The null hypothesis entails no cross-sectional fixed effects, while the alternative hypothesis indicates otherwise. The null hypothesis would be rejected if the p-value was less than 0.05. The test statistic result of 19.81 and p-value of 0.0000 indicated the rejection of the null hypothesis. The study, therefore, concluded that the fixed effect model was more appropriate.

Hausman test was used to decide between fixed effects and random effects models. A significant test statistic indicates fixed effects model was more suitable, otherwise a random effect. The p-value of 0.1983 and a test statistic of 4.66 suggested the random effect model was better. Moreso, the study examined the effectiveness of random effect model and pooled OLS using the Breusch and Pagan Lagrange Multiplier test. The result shows a significant p-value of 0.0000 and a test statistic of 543.04 implying random effect is robust and more efficient.

Breusch-Pagan/Cook-Weisberg and Cameron & Trivedi's decomposition of IM-test was conducted to test homogeneity in error terms. Significant test statistics indicate homoskedasticity, otherwise heteroskedasticity. Both tests showed chi-values of 42.14, and 70.43 and p-values of 0.000, and 0.000 respectively, indicating heteroskedasticity. The Wooldridge test was used to measure the self-similarity of data over different delay times. The p-value (0.0027) of the test result showed there is a serial correlation in the model. Based on this, the study used robust standard error and GLS.

Table 4b also showed that the independent variables statistically and significantly predict the dependent variable at the F-statistic of 204.01, a p-value of 0.0000. This is well below the significant level of 0.05 indicating a good model. The constant coefficients of 58.53% also indicate how much the dependent variable varies when all other independent variables are held constant.

The Beta coefficients indicate the rate of change in the output as predictors change by one unit over time and across entities. An average increase in predictor by 1% increases the output by a beta coefficient (%). The coefficient of KCD is 0.3955824. It implies a unit increase in the level or volume of KCD will bring about a 39.55% increase in firm's value. Also, the coefficient of ECD is -0.1730021. This implies that a unit increase in the volume of ECD leads to a 17.30% decrease in firm's value. Also, a unit increase in the volume of SOCD

is associated with an estimated increase of 0.1961471 (19.61%) units in firms' value. At a p-value of 0.051, this is close to being statistically signiûcant.

Table 4b: *GLS Estimate on Effect of Structural Capital Disclosure on Firms' Value.*

Variables	*Generalized Least squares*		
	Coeff	*T-value*	*p-value*
KCD	0.3955824	14.22	0.000
ECD	-0.1730021	-2.51	0.012
SOCD	0.1961471	0.66	0.051
Constant	0.5853148	10.91	0.000
Wald	204.01		
Probability	0.0000		

Source: Author's computation (2023)

4.4. Discussion of Findings

The study's findings provided a positive linear relationship between knowledge and social capital dimension on firms' value, while emotional capital disclosure showed a negative relationship. The above findings were supported by the studies conducted by Belo et al. (2022) and Al-Hajaya, Altarawneh and Altarawneh (2019). While the most important item being disclosed has been knowledge capital (Hatane, Lamiki, & Stephanie, 2022; Ni Cheng, & Huang, 2020). Ahmed, Guozhu, Mubarik, Khan and Khan (2019) stated that social capital was a poor predictor of business performance, while human capital influences performance positively. Lestari and Suryani (2020), on the other hand, did not support this assertion.

5. CONCLUSION AND RECOMMENDATIONS

In an attempt to investigate the effect of human capital disclosure on listed service firms in Nigeria, the study employed multiple regression analysis. From the findings that emerged, the study concluded that human capital disclosure proxy by knowledge, emotional, and social capital disclosure significantly influences the value of listed service firms in Nigeria. This implied that the more the volume of disclosure of human capital, the more its impact positively or negatively on the value of firms. The study recommends information about

knowledge, emotional and social capital should be specifically stated both in narrative and numbers, in the notes to the account and on the face of the financial statements. There should be broad headings for these dimensions of human capital disclosure.

References

Adegbayibi, A. T. (2021). Intellectual capital and firms' performance measures of listed non-financial companies in Nigeria. *The Journal of Accounting and Management, 11*(2).

Adelowotan, M. (2020). Developing a Framework for Human Capital Disclosure in Corporate Annual Reports: Array. *The Journal of Accounting and Management*, *11*(1). Retrieved from https://dj.univ-danubius.ro/index.php/JAM/article/view/310

Ahmed, S.S., Guozhu, J., Mubarik, S., Khan, M. and Khan, E. (2020), "Intellectual capital and business performance: the role of dimensions of absorptive capacity", *Journal of Intellectual Capital, 21*(1), 23-39. https://doi.org/10.1108/JIC-11-2018-0199

Akinadewo, I. S., & Falana, G. A. (2024). An Assessment of the Influence of Structural Capital Disclosure on the Value of Listed Service Firms in Nigeria. Asian Journal of Economics, Business and Accounting, 24(6), 604-621.

Alavi, M., & Leidner, D. E. (2001). Knowledge management and knowledge management systems: Conceptual foundations and research issues. *MIS Quarterly*, 107-136.

Aldridge, S., Halpern, D. and Fitzpatrick, S. 2002. Social capital: a discussion paper, London: Cabinet Office Performance and Innovation Unit

Al-Hajaya, K., Altarawneh, M. S., & Altarawneh, B. (2019). Intellectual capital disclosure by listed companies in Jordan: A comparative inter-sector analysis. *International Review of Management and Marketing, 9*(1), 109.

Alharthi, A. (2022). A comparative study of the level of disclosure of human capital in annual reports of Saudi and UK listed firms. *Multi-Knowledge Electronic Comprehensive Journal for Education & Science Publications (MECSJ),* (52).

Angelini, M. S., Gennaro, A., & Labella, S. (2019). Disclosure on Intellectual Capital in the Age of Industry 4.0: Evidence from Italian Capital Market. *Management Studies, 7*(1), 1-14.

Antonelli, C., Orsatti, G., & Pialli, G. (2023). The effects of the limited exhaustibility of knowledge on firm size and the direction of technological change. *The Journal of Technology Transfer, 48*(4), 1359-1385.

Babalola, S. S. (2010). The Role of Socio-Psychological Capital Assets on Identification with Self-employment and Perceived Entrepreneurial Success among Spilled Professionals. *Journal of Small Business & Entrepreneurship, 23(*2), 159-172.

Barrena-Martinez, J., Gomez-Molinero, R., Fernández, M. L., & Romero-Fernandez, P. M. (2017). Emotional capital in family businesses: decisions from human resource management perspective. Issues Hum. Resour. Manag, 43.

Barrena-Martinez, J., López-Fernández, M., & Romero-Fernandez, P. M. (2018). Drivers and barriers in socially responsible human resource management. *Sustainability*, *10*(5), 1532.

Belo, F., Gala, V. D., Salomao, J., & Vitorino, M. A. (2022). Decomposing firm value. *Journal of Financial Economics, 143*(2), 619-639.

Birindelli, G., Ferretti, P., Chiappini, H., & Cosentino, A. (2020). Intellectual capital disclosure: Some evidence from healthy and distressed banks in Italy. *Sustainability, 12*(8), 3174.

Bosbach, M., & Maietta, O. W. (2019). The implicit price for fair trade coffee: does social capital matter? *Ecological Economics*, 158, 34-41.

Cahill, S. E. (1999). Emotional capital and professional socialization: The case of mortuary science students (and me). *Social Psychology Quarterly*, 101-116.

Cao, Y., Gao, L., Fan, L., Jiao, M., Li, Y., & Ma, Y. (2022). The influence of emotional intelligence on job burnout of healthcare workers and the mediating role of workplace violence: a cross-sectional study. *Frontiers in public health*, 10, 892421.

Cormier, D., & Gordon, I. M. (2001). An examination of social and environmental reporting strategies. *Accounting, Auditing & Accountability Journal, 14*(5), 587-617.

Deegan, C. (2014). An overview of legitimacy theory as applied within the social and environmental accounting literature. *Sustainability accounting and accountability*, 248-272.

DeNisi, A. S., Hitt, M. A., & Jackson, S. E. (2003). The knowledge-based approach to sustainable competitive advantage. Managing knowledge for sustained competitive advantage: Designing strategies for effective human resource management, 2

Dess, G.G. and Picken, J.C. (2000) Changing Roles Leadership in the 21st Century. Organizational Dynamics, 28, 18-34. - References - Scientific Research Publishing. (n.d.). https://www.scirp.org/(S(czeh2tfqw2orz553k1w0r45))/reference/referencespapers.aspx?referenceid=2541408

Dewiyanti, S. (2021). Legitimacy theory and its relationship to CSR. accounting. binus. ac. id.

Doghudje, U. S., Ibanichuka, E. A., & Ogbonna, G. N. (2023). Human Capital Investment and Firm Value of Quoted Manufacturing Companies in Nigeria. *American Journal of Research in Humanities and Social Sciences, 16*, 41-52.

Eatough. (2021, July 20). *Human Capital Development: 5 Ways to Improve It. Human Capital Development: 5 Ways to Improve It*. https://www.betterup.com/blog/human-capital

Enekwe, C. I., Udeh, S. N., & Okwo, I. M. (2022). Attributes Effect of Human Resources Valuation On Corporate Performance. *British International Journal of Applied Economics, Finance and Accounting, 6*(3).

Gendron, B., Kouremenou, E. S., & Rusu, C. (2016). Emotional Capital Development, Positive Psychology and Mindful Teaching: Which Links? *International Journal of Emotional Education, 8*(1), 63-74.

German-Soto, V., & Hernández, A. L. R. (2021). Measuring Knowledge-capital Stock and Its Relationship with Economic Growth in the Mexican States. *Review of Regional Studies, 51*(3), 317-342.

Grant, R. M. (1996). Toward a knowledge based theory of the firm. *Strategic Management Journal, 17*(S2), 109-122.

Guthrie, J. (2001). The management, measurement and reporting of intellectual capital. *Journal of Intellectual Capital, 2 (*1), 27-41.

Hansson, B. (2009). Employers' perspectives on the roles of human capital development and management in creating value.

Hasan, I., Hoi, C. K., Wu, Q., & Zhang, H. (2017). Social capital and debt contracting: Evidence from bank loans and public bonds. *Journal of Financial and Quantitative Analysis, 52*(3), 1017-1047.

Hatane, S. E., Lamiki, N., & Stephanie, V. (2022). *Intellectual Capital Disclosure Analysis based on Profitability in Tourism and Hospitality Sector in Indonesia and Thailand* (Doctoral dissertation, Petra Christian University).

Holder-Webb, L., Cohen, J. R., Nath, L., & Wood, D. (2009). The supply of corporate social responsibility disclosures among US firms. *Journal of Business Ethics, 84*, 497-527.

Huang, C. C., Luther, R., Tayles, M., & Haniffa, R. (2013). Human capital disclosures in developing countries: figureheads and value creators. *Journal of Applied Accounting Research.*

Israel, O. U., Young, I. A. A., Akpan, B. B., Peter, O., & Edem, E. A. (2023). Human Resource Investment Disclosure and Corporate Financial Performance of Deposit Money Banks in Nigeria.

Iyer, G., Soberman, D., & Villas-Boas, J. M. (2005). The targeting of advertising. *Marketing Science*, *24*(3), 461-476.

Iyer, S., Kitson, M., & Toh, B. (2005). Social capital, economic growth and regional development. *Regional studies, 39(*8), 1015-1040.

Jardon, C. M., & Martinez-Cobas, X. (2021). Measuring intellectual capital with financial data. *PloS one, 16*(5), e0249989. https://doi.org/10.1371/journal.pone.0249989

Kamaºak, R., Bulutlar, F., & Yücelen, M. (2015). Knowledge Asset Management: Knowledge Assets and Their Influence on the Development of Organisational Strategies. *The Journal of Knowledge Management, 1*(1), 6-14.

Kaplan, S., Schenkel, A., von Krogh, G., & Weber, C. (2001). Knowledge-based theories of the firm in strategic management: A review and extension. *International Journal of Project Management, 25*(56), 143-158.

Karabay, M. E. (2011). Assessing the measurement of intangible assets in telecommunication sector: evidence from Turkey. *International Journal of Business And Management Studies, 3*(1), 239-252.

Kenton. (2022, July 12*). Human Capital Definition: Types, Examples, and Relationship to the Economy*. Investopedia. https://www.investopedia.com/terms/h/humancapital.asp

Khazaei, M., Holder, M. D., Sirois, F. M., Oades, L. G., & Gendron, B. (2021). Development and assessment of the personal emotional capital questionnaire for adults. *International journal of environmental research and public health, 18*(4), 1856.

Khazaei, M., Holder, M. D., Sirois, F. M., Oades, L. G., & Gendron, B. (2021). Development and assessment of the personal emotional capital questionnaire for adults. *International journal of environmental research and public health*, *18*(4), 1856.

Kianto, A., & Waajakoski, J. (2010). Linking social capital to organisational growth. *Knowledge Management Research and Practice, 8*(1), 4–14.

LaFayette, B., Curtis, W., Bedford, D. and Iyer, S. (2019), "Knowledge Capital – The Big Picture", Knowledge Economies and Knowledge Work (Working Methods for Knowledge Management), Emerald Publishing Limited, Bingley, pp. 87-104. https://doi.org/10.1108/978-1-78973-775-220191005

Laperche, B., (2021). "Large Firms' Knowledge Capital and Innovation Networks," *Journal of the Knowledge Economy, Springer; Portland International Center for Management of Engineering and Technology (PICMET), vol. 12*(1), pages 183-200, March.

Lashley, C. (2002). Emotional harmony, dissonance and deviance at work. *International Journal of Contemporary Hospitality Management, 14*(5), 255-257.

Lehtimaki, J., & Lehtimaki, J. (2016). Impact of knowledge capital on the performance of firms: A case of firms in Finland. *Eurasian Journal of Business and Economics, 9*(18), 41-59.

Lentjushenkova, O., Zarina, V., & Titko, J. (2019). Disclosure of intellectual capital in financial reports: a case of Latvia. *Oeconomia Copernicana, 10*(2), 341-357.

Lestari, B. D., & Suryani, A. W. (2020). Firm's Value Exploration: The Impact of Intellectual Capital and Net Working Capital. *Jurnal Dinamika Akuntansi, 12*(2), 152-164.

Li, F., Minnis, M., Nagar, V., & Rajan, M. (2014). Knowledge, compensation, and firm value: An empirical analysis of firm communication. *Journal of Accounting and Economics*, *58*(1), 96-116.

Li, Y., Song, Y., Wang, J., & Li, C. (2019). Intellectual capital, knowledge sharing, and innovation performance: Evidence from the Chinese construction industry. *Sustainability, 11*(9), 2713.

Lin, N., Fu, Y. C., & Hsung, R. M. (2001). Measurement techniques for investigations of social capital. Social capital: *Theory and research, 4*, 57-81.

Lonkani, R. (2018). Firm Value. InTech. doi: 10.5772/intechopen.77342

Ma, S., & Zhang, W. (2023). How to improve IFRS for intangible assets? A milestone approach. China *Journal of Accounting Research, 16*(1), 100289.

Magau, M. D., Roodt, G., & van Zyl, G. (2021). A measurement scale for assessing intellectual capital disclosure. *SA Journal of Human Resource Management, 19*(14).

Mahdi, O. R., Nassar, I. A., & Almsafir, M. K. (2019). Knowledge management processes and sustainable competitive advantage: An empirical examination in private universities. *Journal of Business Research, 94*, 320 - 334.

Mangena, M., Pike, R. H., & Li, J. (2010). *Intellectual capital disclosure practices and effects on the cost of equity capital: UK evidence.*

Mangi, R. A. (2009). Human capital a source of competitive advantage "Ideas for strategic leadership". *Australian Journal of Basic and Applied Sciences, 3*(4), 4182-4189.

Meng, A., Borg, V., & Clausen, T. (2019). Enhancing the social capital in industrial workplaces: Developing workplace interventions using intervention mapping. Evaluation and program planning, 72, 227-236.

Möller, K., Gamerschlag, R., & Guenther, F. (2011). Determinants and effects of human capital reporting and controlling. *Journal of Management Control, 22*, 311-333.

Morel, R. P., & Coburn, C. (2019). Access, activation, and influence: How brokers mediate social capital among professional development providers. *American Educational Research Journal, 56*(2), 247-288.

Nahapiet, J. (2008). The role of social capital in inter organizational relationships.

Newman, M. (2015). Emotional Capital: the future balance sheet asset.

Ni, Y., Cheng, Y. R., & Huang, P. (2020). Do intellectual capital matter to firm value enhancement? Evidence from Taiwan. *Journal of Intellectual Capital.*

Ni, Y., Cheng, Y. R., & Huang, P. (2021). Does intellectual capital matter to firm value enhancement? Evidence from Taiwan. *Journal of Intellectual Capital*, *22*(4), 725-743.

Ogundajo, G. O., Kujore, O. A., & Kassim, S. K. (2022). Human Resource Accounting Information Disclosure and Firm Value. *South Asian Res J Bus Manag, 4*(5), 182-187.

Olateju, D.J., Olateju, O. A., Adeoye, S. V., Ilyas, I. S., (2021) "A critical review of the application of the legitimacy theory to corporate social responsibility" *International Journal of Managerial Studies and Research (IJMSR), 9*(3), pp. 01-06. doi: https://doi.org/10.20431/2349-0349.0903001.

Onuoha, N. E., & Okoye, G. O. (2022). Determinants of Voluntary Human Capital Information Disclosure: Evidence from Deposit Money Banks in Nigeria. *International Journal of Academic Research in Accounting Finance and Management Sciences, 12*(1), 144–154.

Paul. (2022, August 4). *Financial Management*. https://www.fm-magazine.com/news/2022/aug/value-meaning-measurement.html. Retrieved August 31, 2023, from https://www.fm-magazine.com/news/2022/aug/value-meaning-measurement.html

Quintero-Quintero, W., Blanco-Ariza, A. B., & Garzón-Castrillón, M. A. (2021). Intellectual capital: A review and bibliometric analysis. *Publications, 9*(4), 46.

Reyes, S., Giovannoni, G., & Thomson, A. (2018). Social capital: Implications for neurology. Brain and Behavior, 9(1), e01169. https://doi.org/10.1002/brb3.1169

Rindova, V. P. (2005, January 1). *Social Measures of Firm Value*. Elsevier eBooks. https://doi.org/10.1016/b0-12-369398-5/00548-x

Saeed, H., & Yazdani, N. (2021). Impact of Human Resource Management Practices on Sustainable Competitive Advantages for the Universities of Pakistan Keeping Knowledge Management Capacity as Mediator. *International Journal of Management Research and Emerging Sciences, 11*(3).

Salman, R. T., & Dandago, K. I. (2013). Intellectual capital disclosure in financial reports of Nigerian companies. *Intellectual capital disclosure in financial reports of Nigerian companies*, 1-17.

Salvi, A., Raimo, N., Petruzzella, F., & Vitolla, F. (2022). The financial consequences of human capital disclosure as part of integrated reporting. *Journal of Intellectual capital, 23*(6), 1221-1245.

Schuller, T. (2001). The complementary roles of human and social capital. *Canadian Journal of Policy Research, 2*(1), 18-24.

Shanmugam, M., Gheni, A. Y., Bin Yusof, A. F., & Karunakaran, V. (2019). The impact of social commerce determinants on social capital for energy sectors. *Journal of Information Technology Management, 11*(1), 60-75.

Sharma, K. (2016, December 21). Emotional Capital. Medium. https://sykartik.medium.com/emotional-capital-c4befafe83bf

Si, Y., & Xia, C. (2022). The effect of human capital on stock price crash risk. *Journal of Business Ethics*, 1-21.

Spacey. (2017, November 17). 10 Examples of structural capital. Simplicable. https://simplicable.com/new/structural-capital

Staber, U. D. O. (2007). Contextualizing research on social capital in regional clusters. *International Journal of Urban and Regional Research, 31*(3), 505-521.

Stolle, D. (2003). The Sources of Social Capital. In: Hooghe, M., Stolle, D. (eds) Generating Social Capital. Palgrave Macmillan, New York. https://doi.org/10.1057/9781403979544_2

Strickland-Jackson, T. (2022). Human Resource Accounting and Firm Performance: The Effect of Goodwill on Firm Performance (Doctoral dissertation, Trident University International).

Susanto, Y. K., Pradipta, A., & Handojo, I. (2019). Determinant of Intellectual Capital Disclosure. *International Journal of Business, Economics and Law, 20*(5), 83-89.

Thomson, K. M. (1998). Emotional capital: Capturing hearts and minds to create lasting business success. Capstone.

Tsai, W., & Ghoshal, S. (1998). Social capital and value creation: The role of intrafirm networks. *Academy of Management Journal, 41*(4), 464-476.

Wooldridge, J. M. (2010). Econometric analysis of cross-section and panel data. MIT Press.

Wright, P. M., & McMahan, G. C. (2011). Exploring human capital: putting human back into strategic human resource management. *Human resource management journal*, *21*(2), 93-104.

Yarrow, D. (2022). Valuing knowledge: The political economy of human capital accounting. *Review of International Political Economy, 29(*1), 227-254

Zyznarska-DSworczak, B. (2018). Legitimacy theory in management accounting research. *Problemy Zarz'dzania, 16*(1 (72)), 195-203.