

A Critical Review on the Trend of Integrated Reporting Capitals

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ABSTRACT

This paper analyzes the trend of Integrated Reporting capitals in Malaysia, by introducing of Integrated reporting <IR> framework on the 6 capitals and comparison with some countries across the continent. This research analyses the depth and breadth of IR capital reporting using a checklist derived from the IIRC's framework and conducted using content analysis. The analysis shows that IR capitals are becoming much more forthcoming with information as Financial capital, Manufacture capital, Intellectual capital, Human capital, Social and Relation capital, and Natural capital are all shown to have significantly increased in the sampled IRs. This study particularized each capital on its definition, purpose, and disclosures and help people in charge of governance keep an eye on how they're reporting on IR capitals. It's useful since it highlights where IR capitals may stand to enhance their level of disclosure. This

INTRODUCTION

Integrated Reporting, a topic that has been highlighted among higher bodies in Malaysia due to the rising stakeholder desire for greater transparency, as well as (PricewaterhouseCoopers, 2014, p. 4) says that to get more overview of a value, which is consistent with the principles behind Integrated Reporting. Although the companies are publishing more sustainability reports and corporate social responsibility reports they don't provide financial and non-financial information in an integrated manner that helps shareholders to become informed. In Malaysia, the Securities Commission and Bursa Malaysia, as well as other prominent groups such as ACCA Malaysia and the Malaysian Institute of Accountants (MIA), have recognized the benefits of Integrated Reporting and have lately taken initiatives to raise understanding of what it comprises. One of the numerous advantages of integrated reporting is an increase in one's understanding of the ways in which financial and nonfinancial performance are intertwined with one another. Because businesses are required to convey their nonfinancial performance in the context of strategy and how they create value, managers are required to consider when and under what conditions trade-offs and interdependencies between financial and nonfinancial performance exist. In addition, they must consider what conditions must be met. Another advantage of integrated reporting is that it improves internal measurement and control systems, which in turn helps offer accurate and timely information about nonfinancial aspects of the business. Companies that use integrated reporting are required to improve the quality of their information systems, as well as their internal controls and monitoring systems for nonfinancial data. This is because integrated reporting is a requirement for the use of integrated reporting. This is necessary in order for the integrated report to satisfy the criteria that are set forth by external auditors for independent assurance. Furthermore, <IR> advantage is to reduce danger to one's reputation.

First, it has the potential to narrow the gap between what is expected and what actually occurs between an organization and its external stakeholders by communicating in a comprehensive and open manner the organization's performance, position, philosophy, vision, and mission in terms of both financial and environmental sustainability. Second, it has the potential to be used as a platform for greater communication, engagement, and partnerships with all of the relevant parties. Customers, for instance, who are concerned about environmental impact will exhibit a higher level of commitment. Thirdly, it can promote higher employee engagement through internal coordination and collaboration (i.e., elimination of silos) because it requires different units within an organization to come together to produce an integrated report. This means that silos can be eliminated, which in turn promotes higher employee engagement. Last but not least, luring in long-term investors is yet another possible advantage. Integrated reporting is a mechanism that allows a company to communicate its vision about the future as well as how it will address nonfinancial challenges and opportunities. This increases the confidence of long-term investors in the company's leadership as well as the company's

ability to build sustainable value. The question aroused what is Integrated Reporting? A method based on integrated thinking that produces a periodic integrated report by an organization about value creation, preservation, or erosion through time, as well as associated communications about these elements. In December 2013, International Integrated Reporting Council made an objective to change the corporate system so that integrated reporting becomes the global norm. Through here, the companies get along with integrated thinking which leads to integrated decision-making and activities that address value generation, preservation, and erosion in the short, medium, and long term and it goes beyond meaningful and valuable reporting. Hence, IIRC has created a globally accepted framework which is known as the Integrated Reporting Framework which extracts the guiding principles and content elements of an Integrated Report.

Under (International Integrated Reporting Committee (IIRC), 2013, pp. 11-12) there are 6 broad base capitals to enhance the accountability and stewardship in an organization which is Financial Capital - to know the funds capital available to an organization to utilize the production of goods or provision of services, Manufactured Capitals - to know object available to organizations for the use on production of goods or provision of services, Intellectual Capitals - which comes from employees efforts that generate intangible assets, Human Capitals - is the skills, capabilities, and express of people in our organization, Social Relation Capital - which derives from the relationship between a company and the society from which it secures its license to operate, and last is Natural Capital - which the utilization of environmental resources that provide goods to organizations. These six capitals are very important in <IR> because it helps an organization to think rationally about their strategies and plan in the context of the business impact on the different capitals and also helps stakeholders to understand the company performs better and its prospect better so that they can manage systematic and unsystematic risk and validate decisions.

LITERATURE REVIEW

As expressed by the International Integrated Reporting Council (IIRC), thru integrated reporting, an employer is capable of demonstrating "how an organization"s strategy, governance, overall performance, and prospects, within side the context of its outside environment, result in the advent of cost within side the short, medium and lengthy-term.". (Serafeim, G. 2016, p. 7). The IIRC"s Framework shows how the unique varieties of capital are located within side the context of the employer"s commercial business model. The (IIRC: Technical Collaboration Group, 2013, p. 2) indicates that the phrase "capitals" used in <IR> emphasizes the function of multiple capitals as value stores that may be built up or decreased over time. Besides, capitals are also known as "resources and relationships" at times but the author was also curious about which capitals should maintain if they continue to produce a potential flow of benefits. The same research (IIRC: Technical Collaboration Group, 2013, p. 3) writes that there are still report preparers grappling with how to categorize and describe

capitals for their specific situations, as well as the proper narrative and data to report. Report consumers are also considering what information will be most valuable to them, how they want it implemented, and in what format. Therefore, the researcher made up to break down every capital in detail to obtain better clarification for the preparers to understand and use it as a reference.

Perspective from Financial Capital

Financial capital is generally known as “a pool of funds available to an organization. (IIRC: Technical Collaboration Group, 2013, p. 6) Which includes debt and equity finance. This part of financial capital emphasizes the source of money rather than the use of cash which results in the purchase of manufactured or other types of capital. The interrelation of financial capital and other capitals shared by (IIRC: Technical Collaboration Group, 2013, p. 6) is financial capital is a component of capital that may be converted into other forms of capital to release its value while not all capital can be purchased, most of the literature on other capitals considers how things that were previously classified as non-monetary variables in a business sense have increasingly come to be “monetized”(turning a non-revenue item into cash) and “commoditized”(product or service has become identical to the same type of offer presented by a rival, distinguished only by its price), to the point where a significant proportion of what is now regarded as financial capital actually relates to derivatives fundamentally based on other forms of capital. When looking into the economic base in integrated reporting (Cerbone, D. & Maroun, W. 2020, p. 5) share that 'Materiality' is defined as the relative importance of information to a user for decision-making purposes, and it is frequently framed in an accounting context using market and professional logic. Hence, the authors justify that the financial capital providers are more concerned with the materiality approach in the value of creation compliance with codes of best practices (Cerbone, D. et al, 2020 pg. 1). Examples of financial capital providers are shareholders, commercial bank and other sources that provide funds. In integrated reports, financial capital providers are known as primary users but it is not meant that other stakeholders are not matter. Nevertheless, the predominant role is the providers of financial capital, who influence by market pressures. On the other hand, (Torre, L.M. & Dumay, J. & Rea, A.M. & Abhayawansa, S., 2020, p. 18) argues that who are the privileged users of <IR>, being a broad group of stakeholders in the early stage, or specifically the providers of financial capitals. Hence, the choice of privileging certain classes of users (e.g. shareholders) at the cost of others (e.g. employees and society) reflects a deliberate maneuver to marginalize and denigrate the latter (Cerbone, D. et al., 2020, p. 13) shares that, although with no dominating professional group, reporting on financial capital changes is required, but this must be explained in the context of the firm's business model, risks, and other critical capitals. Wherefore, Abang, S. & Anifowose, M. & Zakari, A.M. (2020, pg. 12) concludes that without financial capital, an organization going concern might be threatened, and other capital might not be guaranteed.

Perspective from Manufactured capital

As (IIRC: Technical Collaboration Group, 2013, p. 9) writes that manufactured capital is known as physically seen man-made, production-oriented equipment and tools. The researcher also adds that material items and infrastructure owned, leased, or controlled by an organization that contributes to production or service supply but are not incorporated in its output are also referred to as manufactured capital. For example, technology, tools, buildings machines, and all forms of infrastructure. There are differences between inventory (as a short-term asset) and plant & equipment (tangible capital). Although their identification is widely accepted, their accounting treatment, notably in terms of valuation, depreciation, and taxation, is more disputed.

“Manufactured capital is important for the continual development of an organization in two ways” (Akpan, C.D. & Charles, J.U. & Robinson, G.A. 2022, p. 14). Firstly, the efficient use of manufactured capital enables an organization to be flexible, responsive to market or societal needs, innovative, and faster in getting its products and services to market. Secondly, manufactured capital and technology can reduce resource utilization and focus more on human creativity, thus enhancing both efficiency and viable development. Besides that, the researcher also wonders about the differences between “manufactured” and “manufacturing” capital. As adhere to (IIRC: Technical Collaboration Group, 2013, p. 9) both have slight distinguishment only which is it provides a distinction between ecological economics (manufactured capital) and the broader field of economics (manufacturing capital), despite manufactured capital used across all industry sectors. Based (IIRC: Technical Collaboration Group, 2013, p. 10), shares that the interrelation of manufactured capital and other capital is even though they frequently appear in financial statements, manufactured capital possessed by an organization is not financial capital. Rather, the ability to deploy resources to construct manufactured capital depends on the flow of financial capital. Besides, equipment made using patented technology, for example, is an example of manufactured capital that contains significant intellectual property, which is a part of intellectual capital, and manufactured capital also known as “tangible capital”. In the context of disclosures, (Cerbone, D. et al, 2020, p. 15) say that the majority of disclosures focus on manufactured and financial capital, while ESG indicators are separated from the "economic core" of the organization. This entails giving general information and staying away from specific reporting that would openly relate to economic, environmental, and social performance. Positive reports are emphasized while subduing negative ESG performance in order to avoid scrutiny. This suggests that integrated reporting is more of a formality than a sign of sustainable growth.

Moreover, (Shepherd, N.A., 2016) shares that “the larger and more global a corporate entity becomes, the greater the risk to both its home society as well as those it operates in”. This is due to face trade-off decisions between capitals, especially from manufactured capital because every corporate entity will hold

large tangible capital to run the entities. For example, a company invests in manufactured capital instead of completely depleting its human capital and uses automation and robotics to cut back on high labor costs. Although the result shows the depletion of financial capital by increasing manufactured capital, it helps to maintain or even grow human and social capital. Therefore, the researcher understands that positive effects on one capital might be the consequence of negative effects on another capital.

Perspective from Intellectual capital

In the context of intellectual capital, (Salvi, A. & Vitolla, F. & Giakoumelou, A. & Raimo, N. & Rubino, M., 2020, p. 1) writes that Academic literature offers various examples of how intellectual capital (IC) is viewed as non-financial resources or intangible assets, such as creativity, workforce development, expertise, research and development, and client satisfaction. In (European Commission, 2006, p. 9) writes that “intellectual capital is a hidden driver” which means only a very limited range of intangibles are reflected within financial statements because the traditional accounting model is founded on the idea of historic cost. Historic cost accounts are a good place to start when evaluating the performance of a corporation because they record the past; yet, without information about the future, the image they paint is lacking. Hence, a much larger range of intangibles must be considered since intellectual capital statements take a different and complementary perspective by taking into account those factors that are relevant in evaluating the future (rather than only the past). The approach of taking into account both past financial statements and prospective intellectual capital statements aims to increase the openness of how an organization seeks to create value.

Furthermore, intellectual capital stands as a corporate pillar that may ensure the creation and development of competitive advantage, as well as the accomplishment of business goals for organizations, says in (Salvi, A. et al., 2020, p. 1) and again supported that such circumstances rose the value of information. (Bai, T. & Dhal, K.S. 2020, p. 2) writes that they investigated how intellectual property and intangibles affected organizational governance and how they affect user behavior. By this, it deduced that there is a tone of room for additional investigation and analysis given the relationship between the three elements. In terms of intellectual capital disclosure, (Salvi, A. et al., 2020, p. 3) write that the shift to knowledge-based economies has given intangible resources a bigger role in enterprises' value generation processes. Therefore, into this, the authors agree that the level of information asymmetries between capital market investors and company managers has increased as a result of this transformation, which has highlighted the significance of intellectual capital disclosure and the integration of information about intangibles in corporate reporting. The methods through which disclosure influences corporate value could be more exaggerated in the case of IC disclosure since traditional financial disclosure does not contain such data and information about intangibles is more valuable and challenging for stakeholders to get. Therefore,

the authors (Salvi, A. et al., 2020, p. 3), justify that, it is reasonable to anticipate that IC disclosure in integrated reports will significantly increase firm value. To measure the independent variables in assessing the quality of IC disclosure, (Salvi, A. et al., 2020, p. 3) share that the practices of the scoreboard developed by Pistoni, et al. (2018, cited in Salvi, A. et al., 2020) as starting point for the definition of the areas of interest and the construction of the scoring model. There are four pillars that determine in scoreboard which are background, content, assurance, and reliability.

Considering of assurance, it surrounds the entire integrated report and not just IC disclosure but the other three pillars, the background area looks for text units that refer to each specific IC category. The taxonomy put forth by Abhayawansa and Guthrie (2016, cited in Salvi, A. et al., 2020) is used to pinpoint these categories. It divides IC into three categories: structural, human, and relationship capital. Both academics and practitioners regularly use this classification. Although there is an argument in <IR> framework that says that “not all capitals are equally relevant or applicable to all organizations” it is advisable to plug in the text unit regarding the type of intellectual capital. Next is the content area, which analyzes the topic, type of evidence, and level of information. The level of specificity defining the information disclosed is a crucial component of disclosure in IC in integrated reports. Although Melloni (2015, cited in Salvi, A. et al., 2020) says that quantitative information is more verifiable but in the IC disclosure framework quantitative, qualitative, non-monetary, and monetary information is compulsory as a content area. Under the reliability, IIRC emphasizes that an integrated report must favor concision as a fundamental principle as “plain language over the use of jargon or highly technical terminology”. (International Integrated Reporting Committee (IIRC), 2013). As a result, the approach assesses the inclusion of graphs, tables, summary indicators, and the degree of language reliability with regard to the readability and clarity of IC disclosure. With these pillars, the ratings are added together to determine the IC disclosure quality score and so the high quality of IC disclosure in integrated reports improves the firm’s value.

Perspective from Human Capitals

Digging into the <IR> capitals, (Serafeim, G., 2016, p. 26) explains human capital as people’s expertise and abilities that are profoundly significant in an organization and its operations. The capacity of individuals and their desire for innovation are 2 major components of human capital which consist of people's positive perceptions of the governance model, ethical issues, and the organization's risk management practices. In the same circle, (IIRC: Technical Collaboration Group, 2013, p. 12) also justifies that human capital consists of a person's abilities, the knowledge, expertise, and experience of the company's employees and management that are pertinent to the task at hand, as well as the ability to add to this pool of expertise through personalized learning.

As a factor in economic development and innovation, as an investment to ensure greater access to jobs, higher incomes, and lower poverty, and as one of the assets that should be preserved and developed - on par with natural capital and other types of resources, the concept of human capital enters contemporary debates in a variety of ways. Stieglitz, et al (2011 cited in IIRC: Technical Collaboration Group, 2013). The researcher also found that human capital is crucial to value creation in three ways: generating public wealth for society, additional funding for the state treasury, and benefits for their workers. Therefore, the purpose of human capital disclosures is to demonstrate the value made for the organization as well as the welfare of the workforce and society (Rimmel, G., 2018, p. 7). The (IIRC: Technical Collaboration Group, 2013, p. 12) writes that regarding the growth of human capital, leadership is a crucial idea that is considered.

Apart from that, (IIRC: Technical Collaboration Group, 2013, p. 13) the interrelations of human capital and other capitals include those intangible resources, such as intellectual capital and social and relational capital, which are considered to complement human capital. Besides, human capital needs other kinds of capital to be fully realized because intangible assets rarely have a direct impact on financial performance instead of acting through intricate chains of cause and effect, Kaplan & Norton (2004 cited in IIRC: Technical Collaboration Group, 2013). Another interrelation is as individuals "own" their human capital, there must be a willingness on the part of the individual or a specific relationship between the individual and the organization for individuals to invest in the business and for the business to reap the rewards. As aforementioned, since intellectual capital frameworks and models had emphasized human capital as an essential component of intellectual capital, it had been mostly inert.

Rimmel (2018), writes that the stakeholders require non-financial disclosures about assets that are not included in the financial position but are still crucial to the company's success in order to allow for the evaluation of future performance. From (International Integrated Reporting Council (IIRC), 2016, p. 17) states that in integrated reporting on human capital nowadays emphasizes inputs and activities more than outcomes and outputs. It is uncommon for businesses to explicitly show how their human capital is generating value. In terms of disclosure in human capital "Thesaurus-Bercy VI" which develop in France, practices an assessment method model by dividing into „leadership capital" and "employee capital". Leadership capital is viewed in the context of CEOs and directors and evaluated by the strategy, skills, leadership, responsibility, and stability while employee capital is viewed in terms of performances, hidden costs (based on factors such as absenteeism and employee turnover), and integrity and effectiveness (decomposed into factors such as skills and engagement). Ultimately, the purpose of human resource disclosures is to demonstrate employee welfare while also elucidating the value made for the organization. (Rimmel,G., 2018, p. 14). Therefore, it is imperative

that organizations voluntarily publish more data about people, including strategy and performance measures.

The perspective of Social and Relation Capital

Furthermore, in the context of social and relationship capital, (Akpan, C.D., 2022, p. 4) defines the ability of people to cooperate for common goals either individually or in groups within organizations as well as between organizations and their external stakeholders, such as the community and shareholders. The journal of Nahapiet, J. & Ghoshal, S. (1998, cited in Abang, S. et al., 2020) also shares that the buildup of social capital is described as “the actual and potential resources embedded within, available through, and derived from the network of relationships possessed by an individual or social unit” which enhances the degree of return on investment in other types of IR capitals (like human and financial) through a pattern of interrelations and exchanges that exist between friends and clients. The (IIRC: Technical Collaboration Group, 2013, p. 14) shares the interrelation of social and relationship capital and other capitals comprise that the social and relationship capital is considered as a complement to other intangible capitals, such as human and intellectual capital, as well as what is referred to as organizational, informational, and knowledge capitals, therefore, consideration should be made to draw clear boundaries between the capitals to prevent confusion.

Besides, for their realization, other intangible capitals usually rely on social and relational capital. Adding on about the interrelation Putnam (2004 cited in IIRC: Technical Collaboration Group, 2013) writes that the social, relational, and human capital are “clearly linked in a kind of virtuous circle, with education tending to increase social capital and at the same time social capital tending to increase educational performance.” Moreover, one typical component of social and relationship capital shared by (IIRC: Technical Collaboration Group, 2013, p. 14) is that trust is the key to measuring social capital such as “networks, norms, and social trust that make collaboration and coordination for mutual benefit possible”. Nahapiet, J. & Ghoshal, S. (1998 cited in IIRC: Technical Collaboration Group, 2013), says that “trust and cooperation have two-way interaction” which in a deeper way says that trust helps maintain cooperation and cooperation itself fosters trust. Hence, the researcher discovers that without trust, employees—no matter how knowledgeable—will hoard information, shun collaboration, and exhibit extremely low levels of creativity if they feel hostile or unwelcome at work. (Nahapiet, J & Ghoshal, S., 1998, p. 243) says that clarification of the dimensions of social capital has been suggested to be a high priority for research because social capital is a collection of resources rooted in relationships with many diverse characteristics. The dimensions of social and relation capitals are structural, relational, and cognitive. The structural dimension refers to the overall pattern of connections between actors which is a phrase used to identify “whom you reach and how you reach them.” (Nahapiet, J. & Ghoshal, S., 1998, p. 244). The characteristics of the social system and the network relations as a whole are covered by structural embeddedness.

Moreover, the presence or absence of the network that connects actors, such as network configuration or morphology, which specifies the pattern of links in terms of measure as density, connectedness, hierarchy, and proper organization, are a few aspects of this dimension. As it, "the existence of network creates for one purpose that may be used for another." (Nahapiet, J. & Ghoshal, S., 1998, p. 244).

Next, about the rational dimension, the author of the same journal as before contrast that rational embeddedness explains the types of interpersonal connections that people have made throughout the course of exchanges. Therefore, the particular relationships people have, such as respect and friendship that influence their behavior will affect the value in organizations. To make it clearer, (Nahapiet, J. & Ghoshal, S., 1998, p. 244) shares the example of two workers who are in the same position and have similar network configurations, but who differ in their emotional and personal ties to other network members. According to this, even though there are financial benefits available elsewhere, one employee chooses to remain in the company out of a sense of loyalty to the other employees, while an employee without such strong personal ties may take into account professional relationships when making career decisions. Therefore, (Nahapiet, J. & Ghoshal, S., 1998, p. 244) share when compared to the behavioral, the relational dimension is defined as the assets that are developed and used through relationships. (Nahapiet, J. & Ghoshal, S., 1998, p. 244) list "trust and trustworthiness," "norms and penalties," "obligation and expectations," and "identity and identification" as some of the important aspects of this dimension. The third component, known as the cognitive dimension, is concerned with the resources that allow participants to share representations, interpretations, and meaning systems, and it places a special emphasis on intellectual capital, such as common language and coding systems and shared narratives. (Nahapiet, J. & Ghoshal, S., 1998, p. 244). As a result, social and relationship capital is vital in the creation of firm value. The disclosure of this element, as specified by the Integrated Reporting Framework, may improve the company's reputation, foster inclusivity among stakeholders, and so increase the value of the organization. (Akpan, C.D. et al, 2022, p. 13).

Perspective from Natural capital

The final capital that influences integrated reporting is Natural capital. The article by (Abang, S. et al., 2020, p. 3) defines that natural capital refers to natural factors which are either directly or indirectly related to human welfare. The Brand (2009 cited in IIRC: Technical Collaboration Group, 2013) also explains the concept of natural capital as a current and future supply of valuable commodities or services from a stock of natural resources or environmental assets. Examples of natural resources are water, timber, minerals, renewable and non-renewable energy, and etch, which give essential ecological services. The (IIRC: Technical Collaboration Group, 2013, p. 15) shares the interrelations of natural capital and other capital in <IR> saying that several sources not only took into account how natural capital related to other

capitals but also saw it as the fundamental underpinning of them: Despite the widespread misconception that only labor and financial capital could be such a source of wealth, it was pointed out that human cultures depend on the extraction of natural capital and consume a variety of ecosystem services. Besides, social capital, human capital, and built capital are all founded on natural capital, and their utilization results in increased human well-being. From (Houdet, J. et al, 2014, p. 21) contrast that the three reporting methods (i.e., EFR, EFER, and DDE) need to be completely integrated by reporting organizations in order to generate credible and robust NC disclosure to stakeholders. Environmental Financial Reporting (EFR) purpose is to try to distinguish between business, economic, or legal developments with potential environmental effects that directly affect the reporting firm financially while Extra-Financial Environmental Reporting (EFER) is recommended as a result of EFR's failure to adequately disclose to internal and external stakeholders, companies' non-financial quantitative non-monetary consequences. Therefore, EFER aims to disclose the company's environmental footprint and impacts, as well as its goals, targets, and performance in addressing the latter. Nevertheless, the Disclosure of environmental externalities (DEE) was implemented due to the fact that EFR and EFER do not fully disclose the economic dimensions of the reporting business's NC dependencies and impacts, both for the sustainability of the reporting entity and the resilience of its stakeholders. Therefore, DEE calls for outlining the reporting entity's negative (and positive, if any) environmental externalities, which include the environmental influences on the economy.

Moreover, (Joint Nature Conservation Committee, 2016, p. 3) shares that Natural Capital Analysis examines and quantifies the business impacts and reliance on natural capital, enabling value creation via more integrated thinking. One of the analyses is by understanding which says that businesses often begin by identifying and then analyzing their impacts and dependencies using accessible, but often incomplete, data. For example, most organizations have in-house statistics on their water consumption and direct CO₂ emissions, or may easily acquire external data. Next is by assessing, following the identification of the initial effect, it is feasible to analyze what can be reported, which frequently includes each impact or dependency for which reporting is allowed, generally without regard to its relative importance. Next moving on to implementation, businesses begin to undertake environmental improvement efforts and employ recognized standard reporting and natural capital approach procedures, putting past learning into practice. The following analysis is embedded which says the next stage in effective integrated thinking applications is to include natural capital challenges in decision making. Consideration of natural capital impacts and dependencies in investment choices, analyzing natural capital dependencies in supply chain management, and comparing performance against peer organizations are some examples.

Materiality analysis also taken place after gaining sufficient experience, firms begin focusing on issues regarded substantial (i.e. vital) for value creation

and develop the capacity to recognize what natural capital truly regulates their potential to generate value and solidify their long-term performance and lastly is the depth of going through the preceding phases on a frequent basis over time allows a company to obtain a substantial depth of knowledge about how it generates value and allows it to illustrate how corporate strategies manage material capital constraints and offer sustainable and resilient value generation. As a result, this solution would enable reporting organizations to operationalize natural capital accounting and reporting from an integrated reporting standpoint. However, as previously said, this would necessitate the creation of a relatively well-standardized integrated accounting system designed to ease the disclosure of both NC dependencies and consequences (Joint Nature Conservation Committee, 2016, p. 3).

Title	Author & year	Country	Dependent variables	Independent variables	Findings
Statement of management accounting: external reporting & disclosure management	Serafeim, G. (2016)	United States of America	Integrated reporting		Through integrated reporting, an employer is capable of demonstrating <i>“how an organization’s strategy, governance, overall performance, and prospects, within side the context of its outside environment, result in the advent of cost within side the short, medium and lengthy-term.”</i> .
Capitals backgrounds paper for <ir>	Iirc: Technical Collaboration Group. (2013)	United States of America	Integrated reporting		The phrase <i>“capitals”</i> used in <ir> emphasizes the function of multiple capitals as a value store that may be built up or decreased over time.
Capitals backgrounds paper for <ir>	Iirc: Technical Collaboration Group. (2013)	United States of America		Perspective from financial capital	Financial capital is a component of capital that may be converted into other forms of capital to release its value while not all capital can be purchased.
Materiality in an integrated	Cerbone, D. & Maroun, W.	United Kingdom		Perspective from financial	Financial capital providers are more

reporting setting: insights using an institutional logics framework	(2020)			capital	concerned with the materiality approach in the value of creation compliance with codes of best practices
Effect of integrated reporting on firm's value: the Nigeria manufacturing sector experience	Akpan, C.D & Charles, J.U & Robinson, G.A (2022)	United Kingdom		Perspective from manufactured capital	Manufactured capital is important for the continual development of an organization in two ways.
Materiality in an integrated reporting setting: insights using an institutional logics framework	Cerbone, D. & Maroun, W. (2020)	United Kingdom		Perspective from manufactured capital	The majority of disclosures focus on manufactured and financial capital while ESG indicators are separated from the "economic core" of the organization
Intellectual capital disclosure in integrated reports: the effect on firm value	Salvi, A. & Vitolla, F. & Giakoumelou, A, & Raimo, N. & Rubino, M (2020)	Italy		Perspective from intellectual capital	Academic literature offers various examples of how intellectual capital (IC) is viewed as non-financial resources or intangible assets, such as creativity, workforce development, expertise, research and development, and client satisfaction
Reporting intellectual capital to augment research,	European Commission. (2006)	Belgium		Perspective from intellectual capital	"Intellectual capital is a hidden driver" which means only a very limited range of intangibles are reflected

development, and innovation in SMEs.					within financial statements because the traditional accounting model is founded on the idea of historic cost
Statement of management accounting: external reporting & disclosure management	Serafeim, G. (2016)	United States of America		Perspective from human capital	Human capital is people"s expertise and abilities that are profoundly significant in an organization and its operations.
Human capital disclosures in Swedish state-owned enterprises - a comparison of integrated reporting versus traditional reporting	Rimmel, g. (2018)	United States of America		Perspective from human capital	The purpose of human resource disclosures is to demonstrate employee welfare while also elucidating the value made for the organization
Effect of integrated reporting on firm's value: the Nigeria manufacturing sector experience	Akpan, C.D & Charles, J.U & Robinson, G.A (2022)	United Kingdom		Perspective from social and relation capital	The ability of people to cooperate for common goals either individually or in groups within organizations as well as between organizations and their external stakeholders, such as the community and shareholders
Social capital, intellectual capital, and the organizational advantage	Nahapiet, J. & Ghoshal, S. (1998)	Chicago		Perspective from social and relation capital	The buildup of social capital is described as "the actual and potential resources embedded within, available through, and derived

					from the network of relationships possessed by an individual or social unit”
The trend of integrated capital reporting: the Asian perspective	Abang, s. & anifowose, m. Zakari, a.m. (2020)	Malaysia		Perspective from natural capital	Natural capital refers to natural factors which are either directly or indirectly related to human welfare
What natural capital disclosure for integrated reporting	Houdet, j. Et all. (2014)	France		Perspective from natural capital	The three reporting methods need to be completely integrated by reporting organizations in order to generate credible and robust nc disclosure to stakeholders

PROPOSED RESEARCH FRAMEWORK

Based on the literature review, the following research framework was developed. The research framework focuses on the perspective of 6 elements in integrated reporting. The dependent variables of the study are Integrated Reporting, and the independent variables are perspective from financial capital, a perspective from manufactured capital, a perspective from intellectual capital, a perspective from human capital, a perspective from social and relationship capital, and a perspective from natural capital.

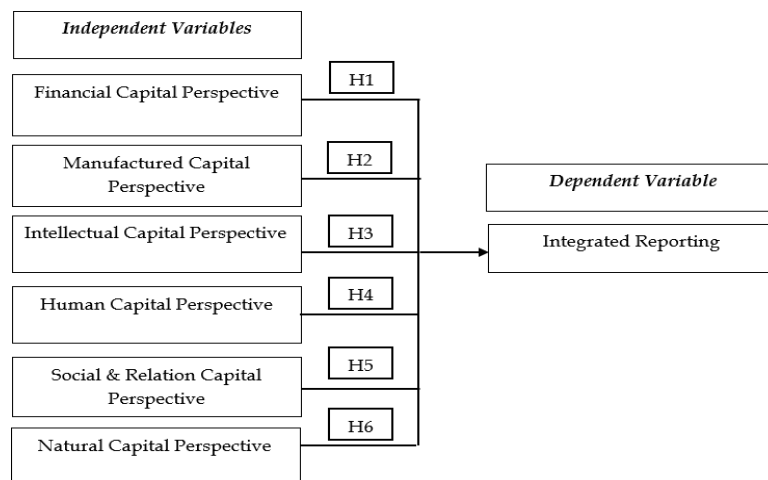


Figure 1. Proposed Research Framework on the Integrated Reporting Capital

CONCLUSIONS

Writes that integrated reporting supplements existing financial reports that businesses generate and publish, highlighting the value of the data (Navarrete-Oyarce, J. & Gallegos, J.A. & Moraga-Flores, H. & Gallizo, J.L., 2021, p. 13). Furthermore, the journals that disseminate this new information are, for the most part, the most productive and high-quality in their discipline, having a high scientific impact. These findings highlight the rising recognition of the significance of research on the issue of integrated reporting. Besides, extracting from (Abang, S. et al., 2020, p. 13), the Asian <IR> capitals disclosure study focused on the general trend of <IR> capitals disclosure as well as each of the capital subclasses. To do this, the study used content analysis to evaluate the degree and quality of disclosure in integrated reports. From the point of view of (Bai, T. & Dhal, K.S., 2020, p. 228) <IR>, an innovative corporate reporting method, necessitates integrated thinking and a shift in management's perspective. The information presented in <IR> under six capitals will assist all stakeholders of the company organization in making decisions. (Pavlopoulos, A. & Magnis, C. & Iatridis, E.G., 2019, p. 35) claims that businesses with high levels of internal reporting (IR) disclosure quality are more likely to have high levels of market value per share, and data imply that higher market valuation results from businesses having high levels of leverage, profitability, and liquidity.

Large companies with a high proportion of fixed assets to total assets, companies with a large number of employees, and companies that establish audit committees and also suggest the value relevance of permanent changes have more valid and effective valuations. These changes support the IRCC's long-term goal by clarifying a company's approach to its long-term strategic opportunities and risks, securing long-term funding, and developing long-term endorsements from supra-national or international organizations. For large firms with a high proportion of fixed assets not only do these integrated methodologies make it possible to arrive at an accurate assessment of fair value, but they also make valuation models more robust. Besides, non-financial elements are becoming an increasingly significant component of risk, rating agencies ought to incorporate them into their ratings as well. In order for boards of directors, who owe a fiduciary duty to shareholders and other stakeholders, to discharge their responsibilities in an appropriate manner, integrated reports are required. They can also persuade management to make the information available to the public, or even compel it to be done so. Last but not least, (EY Climate Change and Sustainability Services, 2016, p. 10) shares the only thing that sets these customer experiences apart is their individuality: the beauty of reporting as an integrated whole is that each set is unique. For this reason, the international framework issued by the IIRC works on a principled basis, rather than prescribing the details of the application of its approach. The Key Performance Indicators (KPIs) an organization selects and the specific issues it reports on must be related to its own unique story of value creation. In conclusion, the researcher states that integrated reporting gives an appealing

opportunity for firms to adapt to more sustainable business models and strategies while creating long-term value.

RECOMMENDATIONS

In terms of the outlook for future integrated reports, it is important to note that the broad adoption of integrated reporting in the future will call for a convergence of commercial and regulatory considerations. The voluntary adoption of integrated reporting by companies is an important market force because these companies recognize the benefits of integrated reporting, which include a better understanding of the relationship between financial and non-financial performance, improved internal measurement and control systems for producing reliable and timely nonfinancial information, reduced reputational risk, increased employee engagement, more committed customers who care about sustainability, and more long-term investments. Besides, pressure from major institutional investors participating in both the public and private equity markets is another market force that will boost the voluntary adoption of integrated reporting. In the public markets, investors who control a large number of a company's shares can exert pressure on the firm to implement integrated reporting in a variety of methods, such as pressing the matter at the Annual General Meeting or requesting that the topic be included in the proxy statement.

Large institutional investors, as limited partners (LPs) in private equity funds, might push these funds to furnish them with short integrated reports at the portfolio-company level. Moreover, customers can also be influential likewise individual customers who buy from firms that have implemented policies that lead to a more sustainable strategy and more sustainable goods will both help to their success and put pressure on those that have not. Corporate clients may support integrated reporting in their supplier chains and even make it a criterion in RFPs. Furthermore, legislation, such as the current European Union legislation on mandatory nonfinancial reporting, can hasten the implementation of integrated reporting. 34 Multilateral organizations, such as the G20, can help coordinate this on a global scale, ensuring that national legislation is broadly similar. Regulatory measures taken by national securities regulators (for example, the SEC in the United States and Malaysia in Securities Commission Malaysia) can also help to support the practice of preparing integrated reports. Similar coordination and homogenization functions can be performed by the International Organization of Securities Commissions (IOSCO). Integrated reporting can promote the practice of integrated reporting through stock exchange listing requirements. Last but not least, market intermediaries, which include accounting firms, data aggregators, proxy firms, rating agencies, and boards of directors, also have an important part to play in enabling companies to implement integrated reporting and in enabling investors to use the information that is made available to them. This is because market intermediaries help companies implement integrated reporting and help investors use the information that is made available to them. Accounting

companies have the ability to make contributions to the formulation of measuring and reporting standards, in addition to the formulation of procedures for giving independent third-party assurance on such standards. If an integrated assurance statement is included with an integrated report, then the report will have the highest possible level of credibility.

FURTHER STUDY

This research still has certain sector to be further research on which related to the topic The Relevant Accounting Disclosure through Integrated Reporting is digital investment.

REFERENCES

- Abang, S. &. (2020). The Trend of Integrated Capitals Reporting: The Asian Perspective. *Asian Journal of Accounting Perspectives*, 1-16.
- Akpan, C. &. (2022). Effect of Integrated Reporting on Firm's Value: The Nigeria Manufacturing Sector Experience. *European Journal of Accounting, Auditing and Finance Research*, Vol 8, 10-26.
- Bai, T. &. (2020). Integrated Reporting: It's Impact on Value Creation. *International Journal of Recent Technology and Engineering*, Vol 9, 225-229.
- Cerbone, D. &. (2020). Materiality in an integrated reporting setting: Insights using an institutional logics framework. Elsevier: *The British Accounting Review*, 1-18.
- Coleman, S. (1988). Social Capital in the Creation of Human Capital. In S. Coleman, *Chicago Journals* (pp. 95-120). Chicago: The University of Chicago Press.
- European Commission. (2006). *Reporting Intellectual Capital to Augment Research, Development and Innovation in SMEs*. Brussels: Official Publications of the European Communities.
- EY Climate Change and Sustainability Services. (2016). *Integrated Reporting: Linking strategy, purpose and value*. London: EYGM Limited.

- Houdet, J. e. (2014). What Natural Capital Disclosure for Integrated Reporting. Paris: Synergiz.
- IIRC: Technical Collaboration Group. (2013, March). Capitals Backgrounds Paper For <IR>. 1-32. State of Delaware, United States of America.
- International Integrated Reporting Committee (IIRC). (2011, September). Towards Integrated Reporting Communicating Value in the 21st Century. 1-29. State of Delaware, United States of America.
- International Integrated Reporting Committee (IIRC). (2013). The International <IR> Framework. State of Delaware: The International Integrated Reporting Council ('the IIRC').
- International Integrated Reporting Council (IIRC). (2016, June). The value of human capital reporting. 1-30. United of Delaware, United States of America.
- Joint Nature Conservation Committee. (2016). Integrated Value Creation from Natural Capital. eftec, Joint Nature Conservation Committee, 1-7.
- Nahapiet, J. &. (1998). Social Capital, Intellectual Capital, and the Organizational Advantage. Academy of Management Review: Vol 23, 242-266.
- Navarrete-Oyarce, J. &-F. (2021). Integrated Reporting as an Academic Research Concept in the Area of Business. Sustainability , 1-16.
- Pavlopoulos, A. &. (2019). Integrated reporting: An accounting disclosure tool for high quality financial reporting. Elsevier: Research in International Business and Finance 49, 13-40.
- PricewaterhouseCoopers. (2014). The State of Integrated Reporting in Malaysia. Kuala Lumpur Sentral: PricewaterhouseCoopers.

- Rimmel, G. (2018). In G. Rimmel, Human capital disclosures in Swedish state-owned enterprises - a comparison of integrated reporting versus traditional reporting (pp. 1-32). Palgrave Macmillan.
- Salvi, A. &. (2020). Intellectual capital disclosure in integrated reports: The effect on firm value . Elsevier: Technological Forecasting & Social Change, 1-8.
- Serafeim, G. (2016). Statement of Management Accounting: External Reporting & Disclosure Management. Montvale: Institute of Managements Accountants.
- Shepherd, N. (2016, April 8). New Bottle, Old Wine? Six Capitals Framework Will Require Trade-offs. Retrieved from IFAC: <https://www.ifac.org/knowledge-gateway/preparing-future-ready-professionals/discussion/new-bottle-old-wine-six-capitals-framework-will-require-trade-offs>
- Torre, L. &. (2020). A journey towards a safe harbour: The rhetorical process of the International Integrated Reporting Council. Elsevier: The British Accounting Review, 1-22.