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Conceptualising a human capital measurement and reporting framework

Queen Mpofua Favourate Y Sebele-Mpofub

University Technology, Science and Lecturer-Department Accounting queen.mpofu5@gmail.com

University Technology, Lecturer-Department Accounting of Science and of

fsfsebele@gmail.com

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Abstract

Purpose: This paper proposes a context-based framework for measuring and disclosing human capital in the financial statements of the Zimbabwean mining companies. The study was prompted by the lack of universal standardised framework that can be adopted by companies for use and existing of varied models with conflicting measurement metrics. The developed model is meant to bring harmony within the industry and across other sectors, particularly in developing countries such as Zimbabwe.

Methodology: This paper adopted an integrative literature review approach also known as the critical review approach in the development of the human capital measurement and disclosure framework. Corporate annual reports, existing related literature, and various human capital models were critically and systematically reviewed to conceptualise different views from various authors concerning human capital measurement and disclosure framework. A thematic analysis approach was adopted to analyse the qualitative findings. The analysis was conducted until a point of saturation was reached.

Findings: The paper proposed a context-based human capital measurement and disclosure framework with six key primary factors. Furthermore, the paper proposed the measurement criteria and the disclosure requirements of the six primary factors established. The framework also acts as a starting point for human capital reporting since there is a lack of an established and generally accepted reporting framework in Zimbabwe. The benefit of this framework is that it is flexible, and it allows companies to develop human capital reporting guidelines based on key features specific to an individual company's human capital and can be applied to other similar contexts in the SADC region. This paper recommends the adoption of the human capital measurement and disclosure framework as to increase companies' value, financial performance as well as economic growth at large.

Originality/Value: The proposed framework is envisaged to reduce information asymmetry and improve corporate governance practices for both practice and policy formulation.

1. Introduction

In the 21st century, where technological advancement and economic change are inevitable, human capital has become the center of success and innovation for many companies. According to Higson (2016), "with increasing demand for flexibility and innovation as well as the production of knowledge assets, the importance of human capital can only grow". Globally, human capital has been proven to be a critical and valuable resource in the value creation of an organization (Moloi & Adelowotan, 2019). This entails that human capital can distinguish a business and sustain its competitiveness and economic growth. Guthrie et al (2004), April et al (2003), Abeysekera (2008) adduce that the accounting professional bodies have been lagging in terms of developing a universal framework that appropriately measures all the key aspects of human capital. In addition, there is a lack of a guideline that outlines the reporting of qualitative information regarding human capital's key aspects in financial statements. Still, on the matter of human capital aspects, integrated reporting (2013) made an initiative on the reporting of human capital. However, in developing countries such as Zimbabwe, the adoption of IR is done voluntarily and based on contextual settings, which then hinders the progress of full disclosure of human capital. In light of the above, a deduction was made that disclosure practices that are done voluntarily result in varied ways of reporting an element in the financial statements. For instance, Adelowotan (2013) contends that the lack of a framework that gives guidelines on human capital reporting to multiple methods being adopted leads to conflicting information being presented to different stakeholder groups. Even though some companies in different countries fully report human capital in their financial statements, literature has shown that in Zimbabwe, there is currently a lack of a context-based single standardised guideline that outlines the reporting procedures of human capital in their financial statements.

The study identified varied models for accounting for human capital as an intangible asset that is adopted by other companies and these are but not limited to cost-based models such as historical cost models; value-based models such as market value approach, present value model as well as replacement models. These models have some drawbacks that are discussed in detail later in the study.

The purpose of this paper is to propose a context-based framework to measure and disclose human capital in financial statements. This has been prompted by the lack of context-based human capital measurement and disclosure frameworks in Zimbabwe.

2. Methodology

This paper adopted an integrative literature review approach also known as the critical review approach in the development of the human capital measurement and disclosure framework. Corporate annual reports, existing related literature, and various human capital models were critically and systematically reviewed to conceptualise different views from various authors concerning human capital measurement and disclosure framework. According to Snyder (2019) and Mpofu (2021) "an integrative review of literature enables researchers to gather relevant literature, discuss it, appraise, comment on it, and synthesize it". As a result, researchers can establish new conceptual and/or theoretical models. "A critical literature review aids researchers in drawing out divergent and converging views on the subject area as well as identifying research gaps, policy gaps, and methodological gaps that could be explored further by future researchers" (Mpofu, 2021). The research gaps include that there are multiple methods adopted by different companies to report on human capital in their financial statements. As a result, this has resulted in the impracticality of comparing human capital information and making informed decisions.

Qualitative data analysis was conducted until a point of saturation was reached. The paper considered the point of saturation from two angles as guided by Sebele-Mpofu (2021). These two angles are as follows: "the point where no additional codes and themes were emerging and also where no further standpoints were originating from the data. This presents a scenario where data analysis was considered unnecessary and futile". Data were analysed and interpreted using thematic analysis. This paper adopted the structure presented by Attride-Stirling (2001) to draw the thematic network but was driven by the process from Braun and Clarke (2006, 2019).

3. Discussion of existing human capital measurement and disclosure models

This section of the paper discusses existing human capital models as well as outlines their advantages and disadvantages. These models include cost-based models, value-based models as well an indicators approach. The discussion of these models and approaches will enable the study to establish a solution through the development of a guideline that is based on contextual settings.

Cost based models

The problem statement section outlined that there are varied models designed by various human capital theorists for the valuation or accounting of human capital directly and indirectly. This study discusses a cost-based model known as the historical cost-based model. This model was developed by Flamholtz (1971), after enhancing the concepts that were initially established by Likert (1961), (1967) and Pyle (1966). This model was developed through the guidance of the accounting conceptual framework. The human capital value using the model consists of costs such as employment, section, training, and development of manpower. This model is equated to international accounting standard 16 (Property, plant, and equipment). The model further outlines that human resources must be technically amortised during their employment (Flamholtz, 1999). From the aforementioned, it can be deduced that human capital measurement and disclosure is probable, given that key aspects of human capital to report are fully identified.

Nonetheless, the historical cost model suffers some drawbacks. These include the probability of employees resigning before their expected time of retirement. Also, there are difficulties in estimating the amortisation rate and as a result, those charged with governance need to have professional judgement. Failure to do that there is a high probability of the financial statements being materially misstated. Flamholtz (1999) contends that the historical cost model lacks the measurement criteria of an employee's estimated life span.

In conclusion, the cost-based model, that has been reviewed above takes into consideration elements such as net sales, organizational tenure, experience, and learning imperative when measuring human capital intangibles.

Value-based models

The value-based models include but are not limited to the market value approach, present value model as well as replacement cost model.

Market value approaches

Various researchers developed different approaches to measure the market value of human capital as an intangible, hence the term market value approaches. From the analysis, the majority of the techniques were developed based on the number of employees. This study focuses on the technique designed by Davison and Fitz-Enzo (2012). This is because the technique was well-articulated and clear to understand. To

establish the "market value" of human capital, they considered metrics such as "human economic value added, human capital cost factor, human value-added and human capital revenue factor" (Davison and Fitz-Enzo, 2012). Nonetheless, since the year 2012, the aforementioned human capital approach has remained at the infancy stage and making it less popular with the majority of the stakeholders.

Lev and Schwartz (1971) Model

The second value-based model was pioneered by Lev and Schwartz (1971), popularly known as "Present value of future earnings". Using this model, employees' future earnings are discounted using the cost of capital. The discounted future earnings are then equated to the value of employees in a company. This model seeks to distinguish between physical and human capital. The difference is that physical tangible assets can be trade-in and new assets get acquired as well and this is not the same with human capital except in a few instances in the soccer industry. This is because productive people possess unique and specific skills. In addition, the model explains the significance of companies to differentiate physical tangible assets and human capital assets in a tentative context. This is because the company value is affected by both the PPE and human capital.

Lev and Schwartz model has the following drawbacks: The fact that the value of human capital is equated to the future earnings of an individual remains a bone of contention and this has to be resolved. In addition, factors such as level of education, innovation, training and development, Health and Safety, and equity issues aspects are not taken into account.

Replacement cost model by Likert and Flamholtz (1973)

Lastly, this study discusses the Replacement cost model industrialised by Likert and Flamholtz (1973). The model advocates that the value of human capital is established from the replacement cost. That is, the capitalisation of total costs that are spent on recruiting, training, and developing a new employee. The replacement model does consider that there is a high risk of failing to attract and retain skills that match the outgoing person. This implies that the skills of human capital are unique, scarce, and non-substitutable.

From the aforementioned, it can be concluded that the above models are currently adopted based on the discretion of the company. This entails that there is a lack of

harmonisation among the models discussed and their shortcomings contribute to the limited measurement and disclosure of the phenomenon.

4.0 Summary of findings

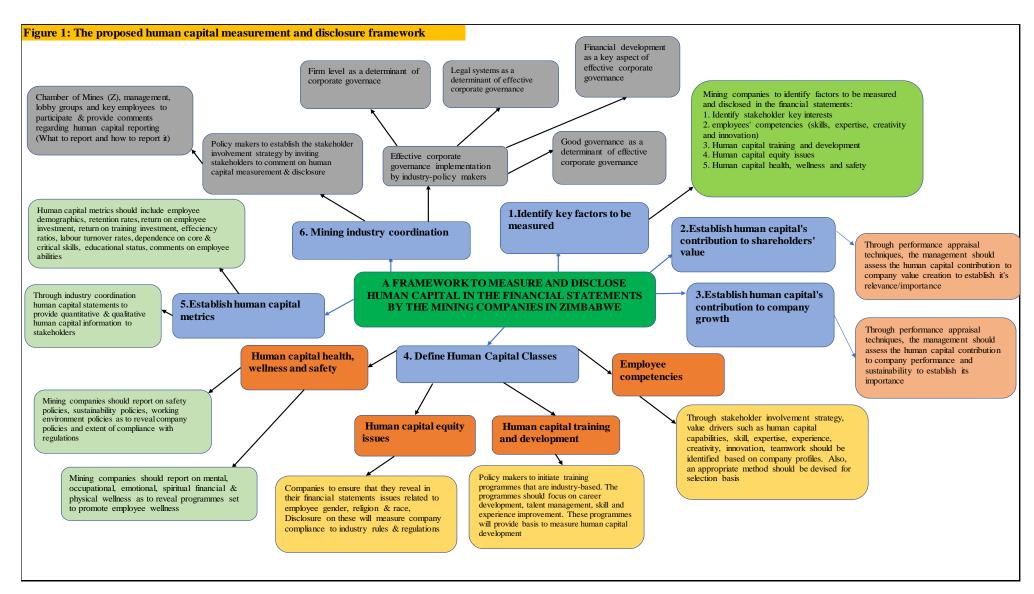
From the literature analysis, this paper identified shortcomings with the existing human capital measurement and disclosure frameworks or models. A context-based framework was designed to cater for the identified drawbacks. This section adduces the identified shortcomings gained from critical analysis of related literature found in the Google scholar search engine.

- Lack of human capital factors identification
- Absence of universal human capital measurement and disclosure framework
- The relationship between human capital value and the value of a company is not known with certainty.
- Accounting professional bodies and other key bodies are silent on the key aspects of human capital to be reported and the procedures to report them in the annual reports

Given the above problems, this study established six primary factors. The purpose of these primary factors was to address the problems identified from the data analysis. From the literature analysis, the study found that human capital disclosures just like any element in the financial statements vary and depend on different factors. Through the analysis of the literature, the study established human capital factors that are discussed comprehensively in the following respective sections. Figure 1 below presents a proposed framework for human capital measurement and disclosure based on the research findings from the Zimbabwean mining companies.

The findings revealed a lack of factors identification and through the proposed framework, this study identified certain factors and these factors should be universal and applicable across the globe. In addition, the framework suggests criteria on how companies can establish the correlation among the three factors: human capital, financial performance, and value creation. The literature findings indicated a lack of consensus on the reporting of human capital aspects and disclosure requirements. This study suggests a category of human capital classes that are deemed critical and should be disclosed for the decision-making process. Lastly, the study established that across the globe, there is a lack of a standardised framework. Based on the findings, this study established that, for the suggested approach to be considered, there is a need for the

total involvement of all key stakeholder groups. The stakeholders' coordination focused on two key strategies these are stakeholder engagement and effective corporate governance.



Source: Own formulation

4.1 A proposed context-based framework as a solution to the identified shortcomings

According to Maul et al. (2015), the term measurement within the scientific context is defined as "the assessment of quantity". Using the context-based framework proposed above, key aspects of human capital were assigned quantitative values, as a means of measurement. The key aspects of human capital were based on six primary factors established in the framework. These include:

- 1. Human capital factors' identification
- 2. Establishment of the correlation between human capital and the success of a company
- 3. determination of human capital resource relationship with the company's value,
- 4. Identification of human capital metrics, including the classes
- 5. Existing human capital models and indicators' approach
- 6. Coordination of different industry stakeholder groups

Based on the above six primary factors, this study further analysed and synthesised them, developing three categories, that are discussed in detail below. Number 1 summarises the key human capital factors and how they should be measured and disclosed in the financial statements, given the opportunity that this proposed framework to be adopted and put into practice. It then followed the consolidation of factors 2, 3, 4, and 5. Taking into consideration that human capital has a significant contribution to the company's sustainability, competitiveness as well as value creation, the aforementioned factors were measured using employee competency and/or productivity. The study also included the non-financial aspects such as employee "training and development, equity issues, and health and safety". Lastly, the third category includes the coverage of the stakeholders' group key interests as well as the corporate governance aspect.

4.2 Proposed metrics for measuring and disclosing human capital

According to Drucker (2014) "you cannot manage without measuring". It can be deduced that for a resource to be effective manage it, it is important to measure and

establish its quantitative value. From the introduction section, the study emphasised that currently human capital aspects are measured using the salary aspect and that on its own is not enough. This is based on the notion that says human capital "people are the greatest assets in an organisation". According to Cronje and Moolman (2012); Moloi and Adelowotan (2019) human capital is a primary resource that significantly contributes to value creation, competitiveness, and sustainability of a company. This statement fits perfectly in today's line of thinking, where human capital contributes immensely to the adoption of the fourth industrial revolution during the 21st century. That is, for companies to take leading positions in their respective industries locally and beyond, there is a need to utilise "brain power". The research findings outline that brain power is made up of individuals' skills, expertise, knowledge, productivity, and so on. Based on the research findings, it is then arguable that human capital has the qualities of an intangible asset. The following subsections provide details on how to measure and disclose human capital aspects.

4.2.1 Proposed measurement criteria of human capital aspects

The table below outlines the key aspects of human capital and the narratives of how companies should measure them in the financial statements.

Table 1: Measurement of human capital aspects

Factor	Measurement criteria
Skills and expertise	The quantitative value of this aspect can be established through assessing the productivity of each employee (efficiency and effectiveness component factors to be considered per each employee).
Creativity and innovation	Using the total costs incurred on the research and development can, the company can establish the value and assign it to employees' innovativeness.
Training and	Time taken (measured in hours) to complete the training and
development	development programme divided by the number of the workforce that was under training. Training programmes are important are vital as they develop the workforce and enhance their productivity as well as competency.

Health, wellness and	Companies can measure health, wellness and safety based on the
·	number of fatalities, the loss due to absenteeism, returns lost due to
safety	
	injuries, etc.
Human capital equity	The gender factor can be utilised to measure human capital equity
issues	issues. That is the total number of males and females in a workplace.
	Also, the percentage of those that are occupying senior positions and
	the percentage of employees with disabilities
	r again a grant and a grant an
Investors' value	This study suggests that companies can use discounted future cash
	flows (DCF) to measure the value of investors.
	Using the secondary market values, the present value of returns
	through additional dollars per investment can be used to establish
	investors' value
	Using the economic perspective, the cost of capital can be reduced and
	investors' value increases if all key aspects are fully reported. For
	example, human capital
Defaulting	The bad debts written off by the supplier can be used to establish the
J	value of defaults
Lead time	Lead time can be calculated using the time taken to order goods and the
	expected time/actual time of delivery, expressed as a percentage.
Responsiveness of the	It can be measured using the frequency the supplier attends to requests
supplier	and complaints from customers.
	•
Quality of the product	Total revenue made during the years less the returns made by
	customers due to faulty products, as well as the abnormal losses rate
Donald and the	
Product quality	the returns inwards/ sales returns due to defaults can be used as a
	surrogate to measure product quality
Product's share market	Quantity of produced goods sold and delivered the active market can
	be used as a measurement criteria.
	From the research findings competent and skilled workforce largely
	contribute to the company's market share.

Host community's value	The value of the host community: calculate the total expenditure spent
	on corporate social responsibility.
Quality of the Governing	Composition of the highest governance body and its committees by:
body	competencies relating to economic, environmental, and social topics;
	executive or non-executive; independence; tenure on the governance
	body; the number of each individual's other significant positions and
	commitments, and the nature of the commitments; gender;
	membership of under-represented social groups; stakeholder
	representation.
In a stand	-
Investors' rights	The reporting entities can utilise the total amounts of money that were
protection	spent hedging the risk of investors' rights exploitation
Government	Government effectiveness can be measured using the total amount of
effectiveness	money spent by the government on good quality provision to its
chectiveness	
	citizens and the costs expended on policy formulations and
	implementations.
	The effectiveness of government promotes fair regulation of
	companies, protection of investors, and efficient utilisation of
	resources.
Regulatory quality	This study suggests that regulatory quality can be measured using the
	total amount of money spent on promoting private sector development.
	This study suggests that regulatory quality, to some extent, influences
	the development of effective corporate governance. This can be only
	achieved when companies operate in a country with a sound legal
	system.
Financial development	This study recommends that financial development costs on the
	company can be measured using the total costs incurred by the
	company to access capital from financial markets expressed as a
	percentage of returns/profits attained from accessing capital from both
	local and international markets.
	Financial development promotes the implementation of corporate
	governance because companies are interested in access to finance in
	the capital market

A good measurement of financial development is crucial to assess the
development of the Zimbabwean sectors and to understand the impact
of financial development on economic growth.

Source: Own Formulation

4.2.1.1 Discussion of human capital aspects measurement criteria

The measurement of employees' competencies

Using the research findings, it was established that employee competencies encompasses skills and expertise as well as creativity and innovation. Hence, this study proposed that productivity as well research and development costs can be used to measure the value of the the employees' competencies as indicated in **Table** 1 above.

The measurement of the training and development aspect

The World Bank (2010) provided the measurement of the training and development aspect that is aligned with the human capital component. It used the corporate governance measures and this study also suggested the measurement of training and development using metrics developed by the World Bank (2010).

Measuring health, wellness, and safety

Literature revealed that human capital health, wellness, and safety also need full disclosure practices. This implies that a company needs a sound mind to increase productivity as well as creativity, innovativeness, and competitiveness. This study utilised the WEF (2020) "stakeholder capitalism report" which had some measurement guidelines on various corporate governance aspects. As result, the study adopts the measurement principles found in the report that relates to human capital.

The measurement of human capital equity issues

The measurement of human capital equity issues is based on the WEF (2010) Global Competitiveness Report. For companies to sustain competitiveness, value creation as

well as financial performance, this study suggests that companies should have an understanding of the issues of gender equality.

Measuring Stakeholder Engagement aspects

The research findings revealed that less is known regarding stakeholder engagement in human capital measurement and disclosure. It was concluded that it is vital for companies to establish stakeholder coordination. King IV report (2016) recommends that companies should meet the heterogeneous needs of their various stakeholders. This might have a positive impact on the primary goal of shareholders' maximisation of wealth. In light of the above, this study through the contextualised framework provides a correlation of these users of financial statements with the human capital. According to Matashu (2016), "the neo-classical theory says that investors provide capital to companies to maximise their wealth". Laitinen (2019) is also in agreement with the measurement process of investors' value in the financial statements. In addition, measurement of suppliers' value was also proposed in this paper. The study suggests metrics for measuring suppliers' value based on the work of Aberdeen Group (2002). Moreover, metrics for customers' satisfaction were also suggested in the table above. Its measurements is based on the work of Mc-Coll and Schneider (2010), Broeze, (2018), and WEF, (2020). The metrics to be measured include product quality, product market share (product performance), timely response to a customer as well as ethical behaviour. Lastly, this paper also measured the host community interests for legitimacy purposes.

The measurement of effective corporate governance

The framework suggests effective corporate governance and this can also be achieved through appropriate reporting of components such as human capital. This will aid to achieve accountability as well as transparency to stakeholders. In addition, the primary objective of profit-making organisations can also be achieved, which is the shareholders' wealth maximisation. According to World Economic Forum (2015) "control and regulation systems should adhere to the four aspects of corporate governance, which are company level, legal systems, good governance and financial development". The measured aspects of corporate governance include quality of

governing body and protection of investors' rights. World Bank (2020) asserts that to aid the level of investors' confidence, there is a need to put in place sound legal systems. According to La Porta et al. (2000) "a country with weak legal systems and poor corporate governance systems, investors seek protection". This is the reason why most of the investors in a country with weak legal systems tend to pay more equity and debt as a strategy to hedge the risk of expropriation.

Furthermore, the study measured the government effectiveness aspect, which is key in achieving effective corporate governance. According to Kaufmann et al (2011) "the quality of public and civil services, the degree of its independence from political pressures, the quality of policy formation and implementation indicators can be used to measure the effectiveness of the government". This study adopted the work of the aforementioned authors to quantify the effectiveness of the government. Similarly, the regulatory quality aspect was also measured. Based on the guidelines provided by Kaufmann et al. (2011), this study suggests that regulatory quality can be measured using "the rate at which the government formulates and implements sound policies and regulations that permit and promote private sector development". Lastly, the study proposed the measurement of the financial development aspect. According to WEF (2020) "financial development relates to factors, policies, and processes that are necessary for the realisation of effective financial intermediation and markets and access to capital". This study's suggestions for measuring financial development are based on the guidelines of WEF (2020).

4.2.2 Proposed human capital reporting requirements

Table 2: Disclosure requirements of human capital

Factor	Reporting requirements
Skills and expertise	Estimated duration of the activity and time taken to complete. Also, the quality of work produced as well as the training and development costs
Creativity and innovation	The quantity of new products developed and the revenue generated. The injected capital that was specific for the innovation portfolio

Training and development	Sums of money allocated to the training and development as well the
	number of sessions that were done throughout the financial reporting
	period compared to the total revenue gained during the year.
	The management should be able to align the development costs with
	the company's returns
Health, wellness, and	The study suggests the following issues be disclosed: statement of
safety	working environment policy, social, occupational, intellectual,
	physical, and financial wellness
	Also, the extent to which all the environmental, occupational and
	corporate social responsibility policies and systems were adhered to.
Human capital equity	Companies should disclose the following:
issues	Total workforce presented by gender, race, and age
	Efficiency ratio based on gender
	 Senior positions should be presented by gender, race, and age
	as well as disabilities
Value of Capital providers	The following matters should be reported:
(Investors)	Cost of capital for the previous and current period, so that
	comparisons can be made
Suppliers' value	The study recommends the reporting of the following: the quality of
	the products, the responsiveness of suppliers, time taken to deliver
	goods and services, lead time, costs associated with the acquisition of
	goods and services, time of payment, and defaulting.
Customer satisfaction	The quality of infrastructure and products, personal relationships and
	affinity, product's market share, service efficiency such as
	responsiveness to queries, professionalism, and workforce
	competency.
Host community's	Statement of working environment policy, description of community
interests	involvement as well as ethical business policy
Conserving Do 1	
Governing Body	The reporting company shall report on the following information:
	Composition of the highest governance body and its committees by:
	Executive and non-executive
	• Independence
	Tenure on the governance body
	Gender

	Stakeholder representation
	 Competencies relating to economic, environmental, and social
	topics
Protection of investors'	The reporting companies shall disclose the following:
rights	 Statement that provides systems and policies put in place to
rights	protect capital providers' investments.
	 Total amount of money spent to on hedging the risk investors'
	rights exploitation
Government effectiveness	Companies should disclose the quality of services provided by the
	government, the statutory instruments put in place to promote
	business growth and value creation, systems and policies that
	promote human capital development, and the total expenditure by
	the government on providing quality services to its citizens,
	particularly at the company level.
Regulatory quality	This study suggests that companies should disclose policies and
	regulations that promote their development of effective corporate
	governance and private sector development.
Financial development	This study recommends that financial development costs on the
	company can be measured using the total costs incurred by the
	company to access capital from financial markets expressed as a
	percentage of returns/profits attained from accessing capital from
	both local and international markets.
	Financial development promotes the implementation of corporate
	governance because companies are interested in access to finance in
	the capital market
	A good measurement of financial development is crucial to assess the
	development of the Zimbabwean sectors and to understand the
	impact of financial development on economic growth.

Source: Own Formulation

4.2.2.1 Discussion of the human capital aspects disclosure requirements

Based on the research findings, this study concluded that human capital aspects such as skills, expertise, innovation and creativity should be disclosed in the financial statements. This is because stakeholders will gain a deep insight into the importance

of human capital and appreciate how the value of human capital relates to companies' value creation and financial performance. This study utilised the work of Abeysekera and Guthrie (2004) to come up with disclosure requirements of employees' competencies as well as the integrated reporting report (2013). In addition, WEF report (2010; 2020) guided this study on the reporting requirements of human capital training and development, health, wellness and safety as well as the human capital equity. The investors' value disclosure requirements were based on the measurement criteria proposed for this aspect and discounted cashflows and dividends yielded were part of the factors that determine the investors' value.

King IV report of corporate governance (2016) was utilised as guideline on key aspects that companies should disclose in their corporate annual reports when engaging with the stakeholders. These stakeholders included suppliers' interests, customers' satisfaction as well as the community interests. Furthermore, the study proposed the disclosure requirements of effective corporate governance in the financial statements that are directly linked with the human capital aspects. This study adopted the guidelines that are discussed in the GRI report (2016) and WEF (2020). These corporate governance aspects included the quality of the governing body and protection of investors' rights.

The disclosure requirements of government effectiveness as well as the regulatory quality suggested in this study are in line with the work of Kaufmann et al. (2011). The suggestions include the disclosure of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, as well as the credibility of the government's commitment to such policies. The study considers that the belowmentioned disclosure requirements are also key for Zimbabwean companies. Lastly, the disclosure requirements of the financial development were based on the guidelines provided by the WEF (2020).

Conclusion

Using the research findings of this study, shortcomings in the measurement and disclosure of human capital were identified using the qualitative critical literature

review. The shortcomings are presented above in a summary form. This study suggests solutions to the identified problems through the development of the context-based human capital measurement and disclosure framework. Six primary factors are identified through the use of the proposed framework and these factors act as a way forward in the measurement and disclosure of human capital in the financial statements. For the proposed framework to work appropriately, a dedicated team of experts is required from all fields, for example, the accounting profession, policymakers as well as key stakeholders from different industries. Currently, in Zimbabwe there is no established and generally accepted human capital reporting framework in Zimbabwe, hence the proposed framework is a starting point. The benefit of this framework is that it is flexible. This implies that it allows companies to develop human capital reporting guidelines based on contextual settings. The framework may need to be advanced further and design a new model as new information that may enhance its accessibility and usability is availed given the fact that there has not yet been any existing human capital measurement and disclosure framework in Zimbabwe.

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