



Saxion University of Applied Science

Bachelor's Degree in Accounting

**Social and Environmental Accounting**

A study of Understanding True Value and Social Human Capital Protocol  
and their Application in Company.

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## PREFACE

This research report was made to fulfil my final project to get a bachelor's degree at Saxion University of Applied Science. I choose this topic about social and environmental accounting because I am interested in learning more about social and environmental accounting since the tool is a representation of the company's ambitions in terms of improving its social and environmental ties.

I learned something new about social and environmental accounting while writing this report. Companies need one of the social and environmental accounting tools to represent the environmental and social consequences that arise from companies more precisely and to show how they intersect. This will help increase the contact of the company's stakeholders and assist their clients or consumers in making more informed decisions.

I would like to thank everyone who helped make this report possible. First and foremost, I'd like to express my gratitude to the company coach, Mr. Jan Noeverman, as well as the supervisors Mr. Rob Berkhof and Mr. Stefan Schenke, for offering a valuable viewpoint for this study and for directing my report so that the results were not misled unduly. I also want to thank my family for their support and for allowing me to study abroad to gain experience in pursuing new knowledge. Finally, I want to express my thankfulness to my friends in Indonesia and Netherlands for their support and assistance in completing this report.

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## TABLE OF CONTENTS

COVER	
PREFACE	2
TABLE OF CONTENTS	3
SUMMARY	4
CHAPTER 1: INTRODUCTION	5
1.1 Study Background	5
1.2 Problem Description	6
1.3 Management Problem	7
1.4 Research Question	7
1.5 Research Methodology	8
1.6 Research Objective	9
1.7 Conclusion for Introduction Chapter	9
CHAPTER 2: THEORETICAL FRAMEWORK	10
2.1 Relationship between Social and Environmental Accounting Tools with Company	11
2.1.1 Relationship between Social and Environmental Accounting Tools with NS	11
2.2 True Value by KPMG as Social and Environmental Accounting Tools	12
2.2.1 True Value by KPMG Implementation in Company	13
2.2.2 True Value by KPMG Implementation NS	14
2.3 Social and Human Capital Protocol by WBCSD as Social and Environmental Accounting Tools	16
2.3.1 Social and Human Capital Protocol by WBCSD Implementation in company	17
2.3.2 Social and Human Capital Protocol by WBCSD Implementation in NS	19
2.4 Conclusion for Theoretical Framework Chapter	20
CHAPTER 3: DATA ANALYSIS	24
3.1 True Value by KPMG works for company's social and environmental performance	24
3.2 Social and Human Capital Protocol by WBCSD works for company's social and environmental performance	25
3.3 Differentiation between Social and Human Capital Protocol by WBCSD and True Value by KPMG	26
3.4 Methodology Suitable for NS	28
3.5 Conclusion for Data Analysis Chapter	29
CHAPTER 4: CONCLUSION	30
CHAPTER 5: POLICY	34
REFERENCES	35

## SUMMARY

### **Purpose**

*Social and environmental accounting tools were established to measure the socio-economic and environmental value provided and reduced by companies in a style that business executives can understand and apply to influence critical business decisions using quantitative data. Based on the True Value by Klynveld Peat Marwick Goerdeler (KPMG) and Social and Human Capital Protocol by the World Business Council on Sustainable Development (WBCSD) methodology, this social and environmental accounting tools tries to provide a way to measure in financial terms the value generated and deducted by a company for society. This research discusses the reasons behind creating the true value by KPMG and the social and human capital protocol by WBCSD and provides examples of their application to company.*

### **Design/ methodology/approach**

*This research will explain the presentation of the true value by KPMG and the social and human capital protocol by WBCSD to company. To make it easier to understand, this research uses a railway company in the Netherlands named Nederlandse Spoorwegen (NS) as an example of a company that will be implemented using the true value by KPMG and the social and human capital protocol by WBCSD. This research is based on a document evaluation of the true value by KPMG and the WBCSD social and human capital protocol detailing its methodology, previous research journals on social and environmental accounting and NS company newly report which is in 2020.*

### **Findings**

*Although both true value by KPMG and the social and human capital protocol by WBCSD to company are social and environmental accounting tools, the true value by KPMG and the social and human capital protocol by WBCSD has a different way of measuring social and environmental issues within the company. Many companies have already implemented these two tools. Companies that adopt the true value by KPMG and the social and human capital protocol by WBCSD and follow it consistently will get benefit from being able to identify the social and environmental values generated by the company.*

### **Keywords**

*Accounting, social accounting, environmental Accounting, Social accounting tools, environmental accounting tools, true value by KPMG, social and human capital protocol by WBCSD.*

## CHAPTER 1: INTRODUCTION

*The background and problem description of the social and environmental accounting and the implementation of its tool to company are presented in this introduction chapter. Also included this research management problem, research problem, research question, research methodology, and research objective.*

### 1.1 Background

Social and environmental accounting is essential because company need to convey information to stakeholders of the company about social activities and environmental conservation. There is a considerable link between company and the natural environment. Climate change and other environmental problems associated with industrial production have been widely debated and agreed upon in recent decades, putting further pressure on industrial enterprises (Lieder and Rashid 2016). If the organization incorporates the environment into its operations, then financial reporting must also include environmental components. Therefore, company must be focus on reporting social and environmental accounting. Companies not only provide current investors and creditors with financial details, as well as prospective investors or corporate creditors, but they also need to pay attention to the social priorities under which the company operates. Due to increasing stakeholder pressure on businesses to minimize the negative and optimize the positive effect of their activities and thereby contribute to sustainable growth, awareness of environmental and social issues has increased in the business world (Epstein and Widener, 2010). The community requires information on the areas where the company has carried out its social and environmental activities to accomplish the obligation of the community to live in safety, peace, and welfare environment. Accounting have become an important factor in the era of the company's movement towards a green corporation.

It is reasonable to believe that companies need management accounting tools to effectively integrate sustainability dimensions into corporate practices and assess their business's environmental and social impact (Christ and Buritt, 2013). Accounting's goal is to deliver financial information to the business's stakeholders: management, investors, and creditors. Accounting tracks and analyses the company's performance and reports the findings to management and stakeholders (Robert et al., 2015). As a result, financial accounting assists

organizations in developing budgets, understanding public views, tracking efficiency, analyzing product performance, and developing short- and long-term goals, among other decisions aided by accounting numbers for accountability decision-making and report it transparently. In the financial world, accountability refers to holding someone or a department accountable for completing a given task (Dworczak, 2019). Accounting transparency refers to the financial reporting procedure in which companies share their financial information to the community which involves the delivery of standard financial reports such balance sheets, retained earnings, cash flow, and financial statements (Gheorghe et al., 2009). Because the accountant is responsible for presenting operational information in a financial statement report to every company. The provision of transparent information from companies and accountability organizations forces companies to provide information about their social and environmental activities to the public to attract public views of the company.

## **1.2 Problem description**

The establishment of the industry certainly has an impact, both for the social and environmental (Ridwan, 2016). Any change to the environment, whether negative or positive, because of a company's activities or services is referred to as an environmental impact (Donev et al., 2020). The effect of an action or inaction, an activity, initiative, program, or policy on individuals and communities is known as social impact (Parrett, 2021). It is important to pay attention to social and environment issues. This is because, for both customers and companies, environmental issues are currently a problem. In fact, social and environmental issue often emerges because of numerous supports from parties outside the sector, including government, customers, investors, and competitors.

Nowadays, many companies only have communicated to client's information on the performance of the company's financial performance but have overlooked the externalities of their operations. Companies should not just look at internal operations to improve their performance, but also externalities such as social and environmental impacts that they cause and have a responsibility on it. In recent years, companies have tended to emphasize stakeholders and shareholders, while other parties' interests, such as workers and society, have been overlooked, seen as externalities to enhance company efficiency and productivity. To improve attempts to reduce social and environmental issues, social and environmental accounting practically includes the knowledge of companies that have taken advantage of the

social and environment. Over time, the implementation of social and environmental accounting started to be broadly applied. The efficacy of social and environmental accounting is now being adopted by several industry and service companies. In order to be responsible for the externalities that a company provides, companies must report on the social and environmental impacts that have been achieved or compromised. To measure the social and environmental impact that the company has created, company needs a help of social and environmental accounting tools to be able make a sustainable report.

Companies may use the social and environmental accounting tool to gather, assess, and understand the data they need to assess their cleaner production savings potential and make the best choice possible for cleaner production (Chang & Deegan, 2009). This research uses two social and environmental accounting tools to assess the social and environmental reports as a form of social responsibility for a company. The two tools are true value by KPMG and social and human capital protocol by WBCSD. Social and human capital protocol by WBCSD is a framework for enterprises to assess and evaluate their social and environmental consequences. It helps businesses make better decisions and communicate the overall value they provide for society (WBCSD, 2019). True Value by KPMG is a methodology to help businesses to fully comprehend the influence of economic, environmental, and social factors on their operations (KPMG, 2020).

### **1.3 Management Problem**

The Importance of Social and Environmental Accounting Tools for Company's Performance.

### **1.4 Research Question**

Research question for this report is:

Do the two methods provide the needed information to realise the goals for company to give insight in the positive and negative impacts on social and the environment and also the basic element form implementing adjustments to only provide positive impact?

Sub-research questions:

- a. Does the quality of the data gathered is critical for the quality of the outcome? (This research will summarize and evaluate the criteria for the quality of the data)

- b. What is the difference between True Value by KPMG and Social and Human Capital Protocol by WBCSD tools? (This research will provide a table which compares the functions, see 3.3)
- c. What are outcomes from the application of True Value by KPMG and Social and Human Capital Protocol by WBCSD tools for company? (This research will find out the outcomes produced by both tools from the way these tools work for the company)
- d. Which tools is suitable for NS as the example of the company choose for the implementation of social and accounting tools in this research? (Described in data analysis, point 3.4)

### **1.5 Research Methodology**

This research uses a review approach to answer research questions. A review is a detailed assessment of previous research on a particular issue, as well as a method for extracting evidence (Uddin & Arafat, 2016).

This research data is secondary data collected from sources:

1. Collection of previous research about true value by KPMG
2. Collection of previous research about social and human capital protocol by WBCSD
3. WBCSD's framework of Social and Human Capital Protocol
4. KPMG's framework of True Value
5. Annual report of NS company in 2020
6. Journals from previous researcher taken using Saxion Library and Google Scholar search engines

This study did not use interview approach because the data taken from several sources already met the needs of this research. The papers were chosen referred to the purpose and scope of this research paper, also related to the main topic: Social and Environmental Accounting. To collect valid material, publications written before 2000 were not chosen because the contents may not be very reliable with the current situation and there are no accounting tools journal for social and environmental in the year before 2000.



## **1.6 Research Objective**

The goal of this research is to provide readers with an explanation of social and environmental accounting tools which this research focus on true value by KPMG and social and human capital protocol by WBCSD. This also explain how true value by KPMG and social and human capital protocol by WBCSD can be implemented as a tool used in company practice. To explain the implementation of true value by KPMG and social and human capital protocol by WBCSD within the company, this research uses a NS company as an example of a company that will be implemented by true value by KPMG and social and human capital protocol by WBCSD. In the final section, this report will cover the explanation about data gathered and its outcome from true value by KPMG and social and human capital protocol by WBCSD , the differences of true value by KPMG and social and human capital protocol by WBCSD, and this report will also include suggestion for NS company regarding which one of the methods that is suitable for NS to implement.

## **1.7 Conclusion for introduction chapter**

The company creates social and environmental impacts for the community. The resulting social and environmental impacts can also affect the performance of a company. Therefore, accounting tools are needed to help companies identify the social and environmental impacts caused to improve social and environmental management efforts to help companies minimize and eliminate social and environmental costs and increase social and environmental efficiency from negative impacts on the company's overall sustainability. This research will answer the research question by using literature from the document evaluation of the true value by KPMG and the social and human capital protocol by WBCSD detailing its methodology, previous research journals on social and environmental accounting, and the NS company newly report which is in 2020. This study aims to provide an explanation of the social and environmental accounting tools that this study focuses on the true value by KPMG and the social and human capital protocol by WBCSD, and their application to companies. This research chose NS company as an example company to explain the implementation of true value by KPMG and the social and human capital protocol by WBCSD within the company. This report will discuss the differences in true value according to KPMG and the social and human capital protocol by WBCSD and some suggestions and recommendations for NS companies to implement true value by KPMG and the social and human capital protocol by WBCSD to build corporate social and environmental responsibility.

## CHAPTER 2: THEORETICAL FRAMEWORK

*This chapter explores the observations presented in the selected literature and provides applicable information to this research. This chapter explain a summary of the usage of the KPMG's True Value and the WBCSD's Social and Human Capital Protocol method. This research also provides a discussion of the relationship between companies.0 and KPMG's True Value and the WBCSD's Social and Human Capital Protocol method is presented. To make it easy to understand the application of accounting tools in the company, this chapter provides explanation and relates it with NS company as an example.*

### **2.1 Relationship between Social and Environmental Accounting Tools with Company**

Companies must be conscious of their environmental and social responsibilities, as well as the financial implications of their activities and goods. Using social and environmental accounting tools, this ambiguity in calculating the financial effect may be eliminated (Beer & Friend, 2006). Therefore, companies need social and environmental accounting tools to identify corporate social and environmental sustainability. Economic efficiency is not enough for the survival of the company. Social and environmental responsibility also plays an important role for the company's sustainability. Stakeholders want businesses to be socially and environmentally responsible, and in today's economic context, balancing financial performance with corporate sustainability is seen as a fundamental issue (Abdalla., et al, 2014). Social and environmental issues become a problem for the company's sustainability because many social and environmental issues have increasingly occurred in recent years that affect the surrounding environment which make the stakeholders and shareholders possess a strong concern for environmental issues. As a result, stakeholders and shareholders of the company want to work with companies that have a positive reputation for growing and maintaining their businesses in a socially and environmentally responsible manner. Companies must manage connections with stakeholders and stakeholders and shareholders by meeting their current desires and requirements, particularly with stakeholders and shareholders who control the availability of resources needed in corporate operations (Donaldson et al., 2009). Stakeholders and shareholders are people who get impact from the company because they indirectly have a need with the company, therefore the company must manage relationships with stakeholders and shareholders in harmony by following what stakeholders want, in this context stakeholders want the company to have a social and environmental report.

### **2.1.1 Relationship between Social and Environmental Accounting Tools with NS**

This research uses NS as an example of how to apply social and environmental accounting tools to company, because NS is a public transportation company which provide train and bus for people in the Netherlands to take every day, so NS have a social and environmental impacts on public.

Social and environmental accounting tools can assist NS in recognizing the value it adds to society by facilitating mobility, as well as the fact that it has certain negative social and environmental consequences (the examples are provided in chapter 2 point 2.2.2). The use of social and environmental accounting to NS has the effect of increasing the value it delivers to society while limiting its negative impact and generating a financial return. An important step from social and environmental accounting tools to help NS better understand and manage the value it provides and lowers to society, measuring the value that NS adds to society gives fact-based statistics for stakeholders to discuss, as well as transparency to the public. NS require social and environmental accounting to express the environmental and social impacts of NS much more explicitly and to illustrate how these impacts intersect. In keeping with NS's vision for the future in the Dutch mobility sector, which is based on extensive dialogue with internal and external shareholders, NS wants to provide customers with social and environmental convenience by ensuring responsible and comfortable travel for passengers, inspiring the belief that trains and stations are safe environment, the way NS will do it is by responding to lower density levels, more services, flexibility around the time travel, and more door-to-door travel control (NS annual report, 2020). This will help to strengthen NS shareholder interaction and help NS passengers make better informed choices for their own flexibility. European law obliges NS to measure its performance against the requirements of service quality.

The social and environmental aspects of NS entail several essential duties, including maintaining a careful balancing of interests when conducting operations. Since 2014, NS has used one of the social and environmental accounting tools, namely True Value by KPMG to estimate the monetary benefits and operating costs for the community and publish the results in their annual report. NS implemented true value by KPMG to have a better knowledge of their social impact and to participate publicly in the formulation of NS impact evaluations. since then, NS has made a lot of progress in terms of social and environmental responsibilities as an example is presented in the NS annual report, in 2020 NS has a significant impact on

society, particularly in terms of mobility, safety, and expenditure. NS has made a deliberate decision to increase its social impact. Through employment and wage payment, NS spend 2,250 millions of euro for wages, salaries, and social security changes. Furthermore, for the impact in natural capital, over the last few years NS's use of 100 percent renewable power for trains and buildings has significantly decreased their negative effects as compared to 2016 as this figure below illustrate.

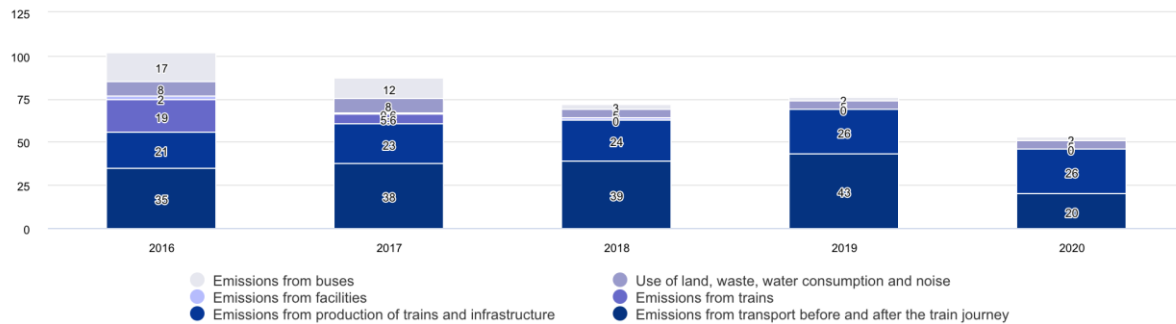


Figure 1: Graph of NS negative impact on environment based on NS annual report 2020

## 2.2 True Value by KPMG as Social and Environmental Tool

Since its founding in 2014, the KPMG True Value methodology has been used by hundreds of companies around the world to assess their social impact and apply what they have learned to their business (Draaijer, 2020). Companies in a variety of industries, including food retail, transportation, telecommunications, private equity, and construction, have successfully piloted true value by KPMG. True value by KPMG assists businesses in demonstrating that they are contributing positively to society while still creating shareholder profits. The positive influence of a company on society may be the difference between winning and losing contracts in today's numerous sectors and markets.

The purpose of true value by KPMG is to:

- KPMG's true value service assists businesses in measuring and managing these effects.
- True value by KPMG is designed to stay up to date with developments by expressing all economic, social, and environmental aspects in the same financial measure (Draaijer, 2020).
- Create useful discussions in executive board and management, as well as assist businesses improve their decisions for social and environmental impact to public.

Boosting the positive externalities and the value they provide for society while minimizing the negative externalities allows more enterprises to grow revenue, lower expenses, and reduce risk (KPMG, 2014). By converting social and environmental performance into more understandable measurements of value, risk, and return, the true value methodology intends to aid company develop their social and environmental performance.

### **2.2.1 True Value by KPMG Implementation in Company**

KPMG created a True Value methodology to cover the gap between standard accounting with social and environmental issue. This methodology aims to identify ways to measure the value added or reduced by companies to society through their most financially significant environmental and socioeconomic impacts, as well as to understand the relative size of those impacts and the value creation or reduction that companies need to manage. (Henderikson et al., 2016).

KPMG created a three-step methodology to help company connect their True Value creation with their communities and include sustainability factors into their financial decision-making processes (KPMG, 2020). The process is broken down into three steps:

Step 1: Determine the value that the company contributes and reduces to society and environment.

The value of a company to adds and subtracts from society is calculated by identifying and describing its material externalities in financial terms. KPMG uses “true value bridge,” a type of data visualization known to financial professionals and extensively used to analyse the long term effects of value creation and value reduction. Monetized externalities are defined as economic, social, or environmental externalities, as well as value created or decreased, inside the true value bridge. The data for monetizing environmental and socioeconomic externalities comes from a variety of research and analyses that are necessary to identify the monetization variables that are most suitable to the business, its industry, and the geographical location of the operations under consideration. The true value bridge let company to consider the most critical positive and negative environmental impacts of the company and consider where social impact can be generated or diminished by company’s practices.

Step 2: Recognize potential profitability risks and opportunities in the future.

The material externalities discovered in Step 1 are assessed in Step 2 of the process to see how probable they are to be absorbed in the future. Financial approaches are used to estimate the potential impact on the company's revenues and costs when internal risk is discovered to be high. New legislation, risks to shareholder action, and changing market dynamics are the three key drivers of internalization in this research.

Step 3: Developed a company to adds value to society while both producing and securing potential value for shareholders.

In this step, KPMG use a technique that familiar to financial experts, the marginal cost true value curve. The marginal cost true value curve is a graphical representation of producers' marginal costs at various stages of production to determine at what point a company is able to achieve economies of scale, which is the value of the profits it makes when their products or services become more efficient. Marginal cost true value curve is obtained by dividing the change in required production costs by the change in the quantity of product. In the context of true value, when company's executives use the marginal cost true value curve, they can see not only the immediate financial return on an investment, but also the potential additional returns from internalized externalities and the value that investment will provide for society. This gives a more comprehensive and complete framework for evaluating potential investments. The marginal true value curve assists the company to ensure optimum corporate and social benefit is generated by programs introduced under mandatory corporate social responsibility.

### **2.2.2 True Value by KPMG Implementation in NS**

NS acknowledges the critical role it plays in terms of mobility within the country as the country's major rail operator that employs public transportation extensively by train. With this in mind, the company believes it is critical to consider the value it adds and subtracts from society. KPMG's application of true value will help NS to categorise the organization's financial externalities as positive or negative in social and environmental. The first stage is to figure out and quantify where the company adds and subtracts the value to society. The generation of value was classified into four categories: mobility, safety, corporate expenditure, and the environment, and was quantified in financial terms utilizing a variety of internal and external data sources (NS Social impact analysis methodology handbook, 2020). Based on NS's social impact analysis methodology handbook, in 2020 by implementing true value by

KPMG, NS has a significant impact on society and environment, particularly in terms of mobility, safety, corporate expenditure, and the environment follows:

**Mobility:** NS is aiming to reduce travel times by reducing waiting times, enhancing time management, and increasing passenger capacity, among other things. It also aims to make switching between trains and other public transportation as simple as possible, as well as supplying passengers with the best possible detail.

- Positive impact: Make it easier for passengers to travel
- Negative impact: Delays, changeover time, crowded train.

**Safety:** Via initiatives such as tougher safety standards and vitality schemes, NS is trying to eliminate physical and mental injury among its employees.

- Positive impact: Crashes, derailments, and dangerous conditions are avoided.
- Negative impact: Accidents at the station, and incidents occurs in employee's health.

**Environment:** NS is aiming to reduce population by use 100% green power for its trains and buildings.

- Positive impact: When opposed to automobile travel, it reduces the effects of air pollution to a certain extent.
- Negative impact: CO<sub>2</sub>, SO<sub>2</sub>, NO<sub>x</sub>, and particulate matter are all emitted by fossil fuels, which pollute the air.

**Corporate expenditure:** By improving its employees' expertise, abilities, and talents, aiming to keep them in long-term jobs, and being a diverse and inclusive organization, NS has a positive socioeconomic effect. Our training programs increase our people's economic worth and boost their potential on the job market after they leave NS. There is no negative impact occur for socio-economic impact.

Based on the positive and negative impacts that have been identified by the company, NS uses a true value bridge for the company to consider the most critical positive and negative environmental impacts of the company and consider where the social impacts can be generated or reduced by the company's practices.

In step 2, a short list is developed utilizing the G4 Global Reporting Initiative's (GRI) materiality guidelines, which is a non-governmental organization that creates and disseminates globally applicable sustainability reporting guidelines. KPMG specialists use expert advice and the finest available academic data sources to calculate these externalities and assign a financial value to NS. The Dutch Institute for Transport Policy Analysis, the US Environmental Protection Agency (EPA), and the Dutch Ministry of Infrastructure and Environment all contributed the data (KPMG International Corporate report, 2015).

### **2.3 Social Human Capital Protocol by WBCSD as Social and Environmental Tool**

WBCSD established social and human capital protocol in 2018 as a social impact assessment practice to urge businesses to progressively demand a standardized approach to monitoring and analysing their interactions with people and society. More than 30 nations and 20 main industrial sectors are represented on the board of directors. In addition, the organization has a global network of more than 50 national and international business networks and partners (WBCSD, 2020). For more than two years, WBCSD develop practical solutions for measuring social and human capital problems that will influence the changeover toward social and environmental dependency issues and establish a measure of continuity. Social and Human capital protocol by WBCSD users are well-known global sustainability leaders, professional services firms, multilateral institutions, and international NGOs (non-governmental organizations). The social and human capital protocol establishes a standardized methodology for organizations to evaluate their social and human capital relationships. It provides an overall framework for collaborative action to unify various methods to the measurement and value of social and human capital to be capable of comprehending the broad range of business relationships with the whole society.

The Social & Human Capital Protocol aims to:

1. Create a reliable methodology for leading businesses through the process of measuring, evaluating, and managing social and human capital.
2. Offer WBCSD members a platform for collaborative action towards an integrated methodology on the value of social and human capital.

Social and human capital protocol by WBCSD is produced to help companies in assessing their influence on social and human capital, as well as to standardize techniques to



measuring, monitoring, and reporting on social and environmental impacts from a company. The social and human capital protocol by WBCSD will assist company in better understanding their social responsibilities and how to make decisions that will grow the stock of social capital for the advantage of both company and society. Social capital itself is the connection formed and the standards that determine the quality and quantity of social ties in society in general, especially as a social glue that facilitates collaboration and collective action for mutual benefit (Bhandari et al., 2009). The Protocol creates a standardized method for companies to monitor and analyse their positive and negative impact on society, as well as the human and social resources and connections that they rely on to produce and sustain social value.

### **2.3.1 Social and Human Capital Protocol by WBCSD implementation for company's social and environmental performance**

Social and human capital protocol makes no assumptions or demands that companies publicly reveal the results of the examination. Because this Protocol is a technical document, it will not be available to the general public. It will also not allow the company to do a social and human capital assessment on their own right away. However, in certain circumstances, the Protocol provides the necessary knowledge and insight to engage professionals. The company, on the other hand, may seek to find an evaluation to demonstrate how it has evaluated non-financial impact for the company, such as key social and human resource risks, possibilities, and value creation.

The following are the steps needed by the company to implement the social and human capital protocol:

Step 1: Considering the objective of decision-making.

The primary user of this protocol is perfectly suited to a company with knowledge of business strategy and operations, as well as have a comprehension of socioeconomic concerns. This company should be given the task of assembling a team of specialists to carry out the protocol that will be developed, as well as presenting the results to important internal and external stakeholder.

Step 2: Ensure that the company's capital is properly utilized.

Apart from financial capital, the company is involved with social resources. Briefly said, businesses use and convert investments into products as part of their business operations, which has an impact on the stock of various assets as well as the company's long-term sustainability.

Step 3: Develop and maintain resources to improve society's cohesiveness and resilience, as well as company performance.

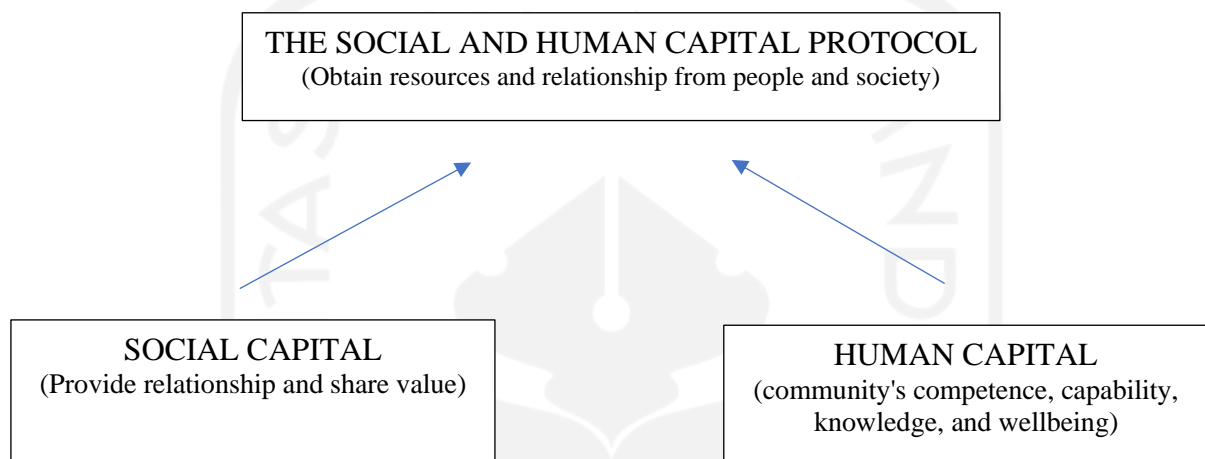


Figure 2 : Scope of social and human capital protocol (WBCSD, 2018)

Apart from financial capital, the company is involved with social and human capital. Based on the graph above, WBCSD refers to the resources and relationships supplied by people and society in this social and human capital protocol. Social capital is a relationship skill between employees and managers at every level of the organization that can be obtained by the company in ways such as building networks with various parties, establishing cooperation with certain parties, building trust with employees, suppliers, and customers, maintaining business relationships, and having policies that benefit both parties. This comprises social capital, which is defined as community interactions and shared values, as well as human capital, which is defined as the community's competence, capability, knowledge, and wellbeing. On the other hand, human capital is added value to employees or human resources of the company every day through motivation, commitment, competence, and the effectiveness of team work. The level to which a company's activities contribute positively or negatively to changes in the wellbeing, relationships, or occupations of the individuals is referred to as impact on social and

human capital. Positive impacts result in societal advantages, whereas negative impacts result in societal disadvantages.

A team produced in step 1 will handle social and human capital in the company. The team is tasked with reducing the negative impacts that arise from social and human capital that threaten the achievement of company goals. The way to reduce the negative impact is to conduct a performance evaluation. Performance evaluation is an activity to compare employee performance in one period against a mutually agreed agreement. In the performance evaluation there is a reporting and monitoring function that helps to evaluate employees in carrying out their duties. This social and human capital management team must have certain standards to evaluate employee performance. To have this evaluation standard, WBCSD which will provide professional organizations in the field of social capital and human capital to explore social problems that arise within the company. With performance evaluation, company's social and human capital have a significant operation because employees will be given a result from performance evaluation that can be used for the employee to correct their mistakes and learn so that they can do their jobs well, correctly, and quickly.

When a company has a significant operation, its social license to operate completely dependent on local content - for example, how much of the company's value chain is made up of local staff, vendors, and distributors. Measurement and valuation methodologies are being used by businesses to guarantee that their local content plans benefit the local economy and community while also improving corporate performance.

When all this data is collected, WBCSD technical specialists will begin to incorporate it into the broad nomenclature and finalize the protocol. The outcomes of the protocol can assist organizations in receiving or maintaining a social license to operate, as well as improving the business environment, human resource management, strengthening value chains, and driving product and service growth and innovation which allows the company to have a beneficial social influence on the surrounding community.

### **2.3.2 Social and Human Capital Protocol by WBCSD implementation for NS's social and environmental performance**

To adopt social and human capital protocols, NS will need to assemble a specific team of specialists to create and implement the protocols, as well as deliver the outcomes to key

internal and external stakeholders. In the NS office, there is a logistics and execution team. This logistics and execution team will be a suitable partner to take on the task of social and human capital, which is to reduce the negative impacts that arise from social and human capital that presenting a danger to the company's objectives, because this team has the task of managing the NS network by finding answers to the challenges of emerging situations by working together to find innovative solutions that adapt to the changing demands of customers.

To assist NS in using and converting investments into products that impact the stock of various assets as well as the long-term sustainability of the company as part of their business operations, WBCSD will assist NS to communicate with professional organizations, as well as investors, non-profits and other specialists in the sector, to explore social problems that arise within the company.

To ensure that NS has significant operation, the team that has been created will produce a performance evaluation to the company made by exploring social problems that arise within the company with professional organizations in the field of human resources and capital provided by WBCSD for NS. The results of the performance evaluation will be given to employees to correct their mistakes and learn so that they can do their jobs. Therefore, the results of the work evaluation can help companies to make good use of the company's social and human capital. If NS has conducted the survey and received the appropriate response, it can be said that the company is operating significantly which means its social license to operate relies on local content. However, until now, NS has never implemented social and human capital protocols by WBCSD, so this research cannot identify what local content is in NS. However, by following the steps above and finding their results and local content plans, NS can derive the measurement and assessment methodologies used to ensure that their local content plans benefit the local economy and community while improving company performance. When all of this data is gathered, the WBCSD's technical specialists will begin incorporating it into the broad nomenclature and finish the protocol.

## **2.4 Conclusion for theoretical framework chapter**

The relationship between social and environmental accounting tools and companies is that companies need social and environmental accounting tools to explain and clarify how environmental and social affect company performance and provide responsibility for companies to social and environmental factors that have an impact on public. This research

discusses true value by KPMG and social and human capital protocols as representatives of social and environmental accounting tools. True value by KPMG is a financial reporting system that allows companies to openly express their views on social and environmental issues. The information collected by this tool assists companies in communicating their views on social and environmental issues to the public. The role of KPMG's true values approach This is the company's mechanism for measuring social and environmental measures in financial terms. On the other hand, the social and human capital protocol by WBCSD involves the disclosure of social interests. This tool assesses corporate social impact reporting to the community, which represents the company's social responsibility to the community. For the social and human capital protocol tools by WBCSD, data insights on solid corporate social benefits are needed to guide social investment possibilities.

True value by KPMG and social and human capital protocol by WBCSD both have 3 steps to help companies get results from each method. However, the steps given are different for each method. Therefore, the table below will explain the differences in each step from true value by KPMG and social and human capital protocol by WBCSD.

	True Value by KPMG	Human Capital Protocol by WBCSD	Explanation
Step 1	Determine the value that the company contributes and reduces to society and the environment.	Considering the objective of decision-making.	KPMG's first step aims to find information about positive or negative values by using a true value bridge that combines the company's financial income with the monetization value of its externalities. Meanwhile, the social and human capital protocol by WBCSD first step is to find the right team for the companies to make decisions about social and environmental impacts generated by the companies.
Step 2	Recognize potential profitability risks and opportunities in the future.	Ensure that the company's capital is properly utilized.	In the second step, true value by KPMG analyzes the company's externality data generated from step 1 and finds out the data that is most significant to the company by understanding the positive

			<p>and negative externalities that have an impact on the company's profitability. Meanwhile, the social and human capital protocol by WBCSD WBCSD helps companies to communicate with professional organizations, as well as investors, non-profits, and other specialists in the sector, to explore emerging social issues within the company that could have an impact on company assets as part of business operations.</p>
Step 3	<p>Developed a company that adds value to society while both producing and securing potential value for shareholders.</p>	<p>Develop and maintain resources to improve society's cohesiveness and resilience, as well as company performance.</p>	<p>In this step, the two tools develop the company performance in a different way. True value by KPMG builds the company's performance by using the marginal cost curve to analyze the business case related to social and environmental issues to determine how the company achieves economies of scale which is the value of profits obtained when the company's products or services become more efficient. The results of the analysis will be in the form of a report that is included in the company's annual report that can be accessed by the public. On the other hand, social and human capital protocol by WBCSD build company performance by pooling resources from social capital and human capital. When all this data is collected, WBCSD technical specialists will begin to incorporate it into the broad nomenclature and finalize the protocol. The resulting protocol is a technical document that may not be published outside the company.</p>

Figure 3: Steps provided by true value by KPMG and social and human capital protocol by WBCSD

From the table above, it can be concluded that the steps given by each method are different. It can be seen by how the usefulness of the methods explained above that they have different step approach. In the first step, true value by KPMG determines the positive and negative values generated by the company to the community, while social and human capital protocols start the step by forming a team to find out the purpose of the decision to be made. In the second step, true value by KPMG looks for positive and negative externalities that have an impact on the company's profitability. While the WBCSD social and human capital protocol explores social issues that arise within the company with the help of experts in the fields of social capital and human capital. In the third stage, these two tools are the same for building company performance but in different ways. True Value by KPMG uses the marginal cost curve to determine how companies achieve their economies of scale. The result given from true value by KPMG is a report on the social and environmental impact of the company that can be accessed by the public. On the other hand, the final step of social and human capital by WBCSD is to pool resources from social capital and human capital. When all this data is collected, the WBCSD technical specialist will start writing a report on the social impact generated by the company and finalize the protocol. The resulting protocol is a technical document that should not be published outside the company.

## CHAPTER 3: DATA ANALYSIS

*This chapter will describe the outcome from the previous chapter on how social and environmental accounting tools work, their implementation in companies and the differences between true value by KPMG and the social and human capital protocol by WBCSD to help company develop their social and environmental performance to achieve the objectives of this research.*

### **3.1 True Value by KPMG Works for Company's Social and Environmental Performance**

True value work by discover where companies add and reduce value to society and build a list from holding stakeholder meetings or conducting customer surveys. Then the resulting list is developed using materiality guidelines. The materiality guideline goal's is to show how much misstatement the auditor can accept so that users of financial statements are not affected by the misstatement. Auditors frequently utilize the following criteria to determine materiality: Total asset, total revenue, gross profit, net profit before tax, and total expenses. This materiality guideline then will be reviewed by auditor in the field of social and environmental accounting to help companies get expert advice and the best sources of academic data related to social and environmental impacts from the company. When it comes to determining materiality, there are no particular guidelines. As a result, depending on the auditor's experience and professional judgment, the method may vary from one accounting company to another. Outcome published in the company's annual report on the social and environmental impacts of companies generated with true value can help businesses build stronger partnerships with key stakeholders such as consumers, states, clients, and non-governmental organizations. It can also help in improving a company's performance.

The following is how true value works for company:

- Provide favorable and negative evaluations of the company's major economic, social, and environmental implications.
- The evaluation can be used to evaluate the company's operations or the full value chain, including suppliers and downstream applications of the company's goods.
- KPMG experts assign a financial value to companies after determining their material effect. They choose the most relevant evaluation elements from a KPMG



database that is continually being developed and updated and is based on academic research from across the world.

### **3.2 Social and Human Capital Protocol by WBCSD Works for Company's Social and Environmental Performance**

The social and human capital protocol believes that in addition to financial success, social and human capital must be included when evaluating and managing organizational performance. The social and human capital protocol is committed to providing a reliable, comparable, and widely agreed approach to measuring and assessing the social and human capital effects of a company, enabling the company to have a positive social impact on the surrounding community from its company performance. The social and human capital protocol seeks to enable companies to identify assessments of social and human capital as key aspects of business decision making. The outcome provided from the social and human capital protocol to the company are in the form of technical documents, which cannot be disseminated to the public. However, this social and human capital protocol can be a valuable guide for the company, as it lays out many basic standards for assessing social and human capital.

The following is how social and human capital protocol works for company:

- Identifying social capital in a company which built through information channels, effective norms and sanctions, authority relations, adapted social organization, intentional organization.
- Identifying human capital in a company which is a qualitative dimension of human capital, such as expertise and skills, that will affect human productive abilities that these qualitative dimensions are obtained through education, training, and health.
- Use and change business investment not only based on financial but also from social and human capital into products as part of business operations. The company may seek to find an evaluation to demonstrate how it has evaluated non-financial impact for the company, such as key social and human resource risks, possibilities, and value creation.

### 3.3 Differentiation between Social and Human Capital Protocol by WBCSD and True Value by KPMG

Aspect	Social and Human Capital Protocol by WBCSD	True Value by KPMG	Method Evaluation
Result (financial and non-financial) obtained by a company	Looking for non financial effects from social and environmental activities. Not really pay attention at the financial effects.	Looking for financial effects from social and environmental activities.	True value gets a positive score in this aspect because it helps companies develop financial performance from social and environmental impacts given by company. While the social and human capital protocol does not focus on companies to generate an impact on financial performance.
Target of community who will receive the impact	Giving importance to the surrounding community from the company's social effects.	Prioritizing the impact that will occur on the customer first.	In this case, the social and human capital protocol gets a positive value because it provides impacts with a wider reach, namely to the surrounding community. Meanwhile, true value only focuses on giving impact to its customers.
General objectives	<ol style="list-style-type: none"> <li>1. Help businesses make better decisions about the social impacts that companies produce.</li> <li>2. Communicate the overall value they provide to society.</li> </ol>	Help businesses fully understand the influence of economic, environmental, and social factors on the outcomes of a company's business operations.	True value results in an analysis of the impact generated by the company on the environment, while the social and human capital protocol only focuses on social capital and human capital. However, it is not known which method is better for the company in this case because each company has different goals for implementing social and environmental accounting tools.
Outcome form	1. Produce technical documents that are not available to the public but companies can use as knowledge and insight needed to engage professionals.	1. Generate data on social and environmental impacts produced by the company and report it in the company's annual report	Both methods help the company to analyze the company's impact on social and environmental internally. However, KPMG gets a plus point because the public can easily access data about a company's social and environmental impact by viewing it in the annual report.

Figure 4: Differences of true value by KPMG with social and human capital protocol by WBCSD

This report provides table of scores for true value by KPMG with social and human capital protocol by WBCSD to corporate customers and the whole society. This table is based on the opinion of the author taken based on data analysis for true value by KPMG with social and human capital protocol by WBCSD in chapter 3 point 3.1 and 3.2 to make it easier to find out which tools are more suitable for customers and the whole society.

### Customer

Aspect	Social and Human Capital Protocol by WBCSD	True Value by KPMG
Result	6	9
Target of community who will receive the impact	6	8
General objectives	5	9
Outcome form	3	7
<b>TOTAL</b>	18	31

Figure 5: Scores for impacts of true value by KPMG with social and human capital protocol by WBCSD to the company's customers.

### Whole society

Aspect	Social and Human Capital Protocol by WBCSD	True Value by KPMG
Result	4	2
Target of community who will receive the impact	6	4
General objectives	8	3
Outcome form	4	4
<b>TOTAL</b>	22	13

Figure 6: Scores for impacts of true value by KPMG with social and human capital protocol by WBCSD to the whole society.

From the tables above, the score given is on a scale of 1 to 10. 1 is irrelevant and 10 is very relevant. it can be concluded that companies cannot use both accounting tools simultaneously to measure the same impact because each tool has a different purpose and

approaches different problems from a different point of view. True value by KPMG has a higher total score in the customer table. This means that the results of the true value by KPMG have an impact on the company's customers, while the social protocol and human capital by WBCSD have a higher total score in the whole society table. This identifies the social and human capital protocol by WBCSD that has more impact on the whole society.

### **3.4 Methodology suitable for NS**

Although in this study NS is used as an example of applying the method in companies, this study also provides suggestions to for NS to apply a suitable methodology to build corporate social and environmental responsibility. From the tables of differences between true value by KPMG and human capital protocol by WBCSD, it can be seen from the total score true value by KPMG get is this method has a better impact on the company's customers than social and human capital by WBCSD. Therefore, it is better for NS to use true value by KPMG because the purpose of NS using social and environmental accounting tools is to genera a positive impact on its customers. In addition to that, according to the analysis, NS is better to use true value from KPMG because of several things:

1. NS is a public transportation company that generates social and environmental impact. In this case, true value give outcome in an analysis of the impact generated by the company on the environment and social as required by NS, while the social and human capital protocol only focuses on social capital and human capital. Applying true value can help NS to achieve quantification approaches for measuring NS's social and environmental consequences as well as a methodology for calculating the socio-economic and environmental value that NS produces and decreases for society. When NS applied true value by KPMG, it will help NS to achieve quantification approaches for measuring its social and environmental impact. And since NS does not recognize its value, NS must find out where companies add and subtract value to society and make a list of it. This can be found out by holding meetings with stakeholders or making surveys to customers. Then the resulting list was developed using the materiality guidelines of the G4 Global Reporting Initiative (GRI). Then KPMG will assist NS to hire specialists in social and environmental accounting to obtain expert advice and the best available

academic data sources to calculate these externalities and establish a financial value for NS.

2. True value can help NS enhance its relations with stakeholders and assist customers make decisions about their thought of the company, because true value can define our economic, environmental, and social implications precisely and show how these impacts connect to the public through NS annual report. Meanwhile, social, and human capital protocols do not provide data that is accessible to the public since they create technical documents that are only available for companies and not accessible to the public.

### **3.5 Conclusion for Data Analysis Chapter**

According to this chapter, the use of KPMG's true value allows companies to evaluate the various impacts that the company has on social and environmental and then report the results in the company's annual report as the outcome from true value by KPMG for the company. Meanwhile, the social and human capital protocol by WBCSD is to integrate consideration of social consequences and dependencies into performance evaluation. Although the outcome of the social and human capital protocol by WBCSD are not accessible to the public, this methodology can help companies make decisions that explain best practices, increase positive business impact, and increase company credibility internally. This chapter also reveals the differences between the two methodologies, but it is impossible to decide which methodology is better and which methodology should be applied in a company because the use of the methodology is different depending on the goals that the company wants to achieve, depending on what the company wants to use the methodology for. If the company wants to provide outcome from the implementation of social and environmental accounting tools to the public, the company can use true value by KPMG because this methodology produces reports on the social and environmental impacts of the company which are included in the company's annual report. However, if the company only wants to identify the company's social and human capital and does not want to publish it to the public, then the company can use the social and human capital protocol by WBCSD. From the differences, it can be said that company cannot use both method to measure the same problem. However, for the NS company which is an example of the implementation of the two methodologies to the company, true value by KPMG is more suitable for NS because of several things that have been mentioned above.

## CHAPTER 4: CONCLUSION

Along with the increasing social and environmental problems can cause discomfort or danger to the community. Therefore, companies are required to pay attention to the social and environmental impacts of company activities. Accounting tools are needed to help companies identify their social and environmental impacts. The results can be used by companies to become their sustainability report. The sustainability report is used for company management in carrying out company activities and as a form of management responsibility in managing social and environmental issues to help companies minimize social and environmental costs and increase the efficiency of positive social and environmental impacts that occur in the company. Sustainability report itself also can be review by stakeholders or shareholders who want to invest in the company.

As representative instruments of social and human capital, this research uses KPMG's real value and WBCSD's social and human capital protocol. The quality of the data collected is very important for the quality of the method results, the data collected will affect the calculation results of the methodology. Accurate data is essential for proper planning, making right decisions, and for proper program execution. The information collected by true value by KPMG helps companies in communicating their views on social and environmental issues to the public. By implementing this tool, the company gets KPMG's experts to provide accurate financial value to the company after determining the material effect. They select the most relevant evaluation elements from the KPMG database which is constantly being developed and updated and based on academic research from around the world. The result of true value is a report on the social and environmental impact given by the company and can be included in the company annual report that can be accessed by shareholders and the public. For the social capital and human capital protocol tool by the WBCSD, data insights on solid corporate social benefits are needed to guide social investment possibilities. In that case, if the company uses this tool, the WBCSD will help the company to communicate with professional organizations in the field of social and human capital to explore social problems that arise within the company. The protocol will provide a forum to integrate and harmonize methods, collect examples, and direct companies to the most recent technologies, data sources, and best practices in applicable strategies.

Although the true value by KPMG and the social and human capital protocol by WBCSD are both social and environmental accounting, these two tools have differences:

1. Results for company: True value by KPMG assists company in improving their financial performance by utilizing the company's social and environmental consequences. While the social and human capital protocol by WBCSD does not focus on an influence on financial success of a company.
2. User of the final product of the tools: True value by KPMG prioritizing the social and environmental impacts from the company for their customer. While social and human capital protocol by WBCSD give the impacts from their final product to the whole society.
3. General objectives: True value by KPMG is determined by examining the company's social and environmental impacts, whereas the social and human capital protocol by WBCSD only considers social capital and human capital. However, because each firm has various aims for applying social and environmental accounting tools, it is unknown whether strategy is preferable for the organization in this circumstance.
4. Outcome: True value by KPMG produces results in the form of reports that can be easily accessed by the public to obtain data on the company's social and environmental impacts by viewing them in the annual report. While social and human capital by WBCSD does not provide results to the public but places the results of measuring social and human capital into the context of business decision making.

Therefore, companies cannot implement both tools to measure the same problem because these two tools have different scopes, depending on what the goals of the company to use this social and environmental accounting tool. Where true value by KPMG aims to provide results with a financial calculation of the social and environmental impact used by their customers. Meanwhile, the social and human capital protocol by WBCSD aims to identify social and human capital generated by the company for the company's internal interests which are expected to be able to build the company to provide comfort for the whole society.

In this study NS is used as an example of applying the method in a company, this study also provides suggestions for NS to apply the right methodology to build corporate social and environmental responsibility. The social and human capital protocol can be implemented for NS to identify its social and human capital to develop and maintain resources to increase

community cohesiveness and resilience, as well as company performance. However, this method is not suitable for NS because NS's goal by implementing social and environmental accounting tools is to give a report about the company social and environmental impact to public, while social and human capital protocol's outcome is cannot be access to public. The use of true value by KPMG will assist NS in classifying the company's monetary externalities as positive or negative in terms of social and environmental impact. True value will help NS to determine and quantify how much value the firm adds and subtracts from society. Furthermore, it is better for NS to use the true value by KPMG because NS has an impact not only on social impacts but also on environmental impacts on the community. In this case, true value by KPMG results in an analysis of the company's environmental and social impacts, while social and human capital protocols only focus on social and human capital. Then, true value can help NS to publish the results of the company's social and environmental impact analysis in the form of reports in the annual report to shareholders and the public, but social and human capital protocols do not produce technical documents that cannot be accessed by the public.

In summary, true value by KPMG and social and human capital protocol by WBCSD provide the information needed to realize the company's goals to provide insight into the positive and negative impacts on social and environment by gathering data that is critical for the quality of the outcome using original financial and non-financial data from the company, meetings with stakeholders or shareholders and company management, and conduct consultations with specialists in the field of social and environmental accounting provided by KPMG or WBCSD, from the data generated, it can help companies to reduce negative impacts and provide adjustments that only have positive impacts on social and environmental. All economic, social, and environmental aspects are increasingly being reflected in a single financial metric; this may assist stimulate meaningful discussions in company boards and management discussions, as well as influence a company's thoughts and actions. Since its inception, the true value by KPMG and social and human capital protocol by WBCSD approach has been at the vanguard of this movement. KPMG True Value helps business decision makers see more than just a return on financial investment while deciding which programs and events to participate in. On the other hand, the WBCSD social and human capital protocol aims to calculating and valuing the social and human capital impacts and interdependencies of whole company or a single project, commodity, or service. The protocol aims to decide how and by how much social and human capital practices raise or decrease.



However, the financial sector must encourage the development of social and environmental accounting tools so that more businesses can minimize their negative social and environmental impacts. In future research, it may be favourable to compare social and environmental accounting tools that have the same identification goal, as this will make the research results more comparable, as making comparisons which methodology is better when examining social and environmental accounting tools with different identification goals will be difficult.



## CHAPTER 5: POLICY

Despite the low number of journal entries for each tool, most organizations were found to use at least one tool from each of the three categories: environmental, social, and integrative. The most frequently used category is social tools, followed by integrative tools, and finally the environment (Carlsson, 2017). The primary objective of using social and environmental accounting tools was discovered to be internal compliance control and external reporting.

This paper provides an overview of true value by KPMG and social and human capital protocol by WBCSD as a representative from social and environmental accounting and how they are implemented in companies. Due to space limitations, this study does not discuss in depth how indicators are calculated. Long-term results are not yet available because this methodology is new and has not been implemented by company for a long time. Furthermore, because of the time constraints and complexity of this study, web-based surveys are the best option. However, conducting a survey has drawbacks, primarily because of the risk of survey error and non-response bias mentioned earlier. True value by KPMG and social and human capital protocol by WBCSD were chosen because they were relevant in the literature among the few tools available. The inquiry's decision to focus at two tools is also an advantage, as other research have only looked at one tool.

From some of the limitations of these limitations, to gain a better understanding of the tools, further research is required to determine how important and useful various tools are in various sectors or tasks. This type of research will help people understand how useful different resources are. Environmentally conscious industries were found to use more tools in the category of environmental management. It would be important to see how some industries use more social resources than others if they could be classified according to their social and environmental aspect. As the approach evolves, there will be several opportunities for academic study into the approach, such as examining how community value generation is linked to profitability to stakeholders and shareholders or environmental and social performance to government.

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