# Designing Performance Measurement for Developing Sustainability of Social Enterprise

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#### ABSTRACT

This paper aims to contribute to the state-of-the-art literature by developing an approach that social Enterprises could apply to measure their results concerning social, environmental, and economic impacts. The proposed system uses the concept of deep ecology to find a broader dimension of performance that follows a social enterprise's characteristics. This research applies a quantitative approach using a questionnaire to collect data. Questionnaires were distributed with random sampling to the founders and managers of Social Enterprise across Indonesia and then the hypotheses were tested. The results are that the dimensions of employment, income increase, community contribution, and government budget reduction significantly influence social enterprise sustainability. In contrast, self-development & self-esteem, and deep ecology have insignificant effects on the sustainability of the social enterprise because these two factors have not become a priority and indirectly affect social enterprises in Indonesia.

Keywords: performance measurement, sustainability, social enterprise.

#### 1. INTRODUCTION

Social enterprise has proliferated globally in this decade, especially in the agriculture, health education, and creative industries (Hasanah, 2019; Maulinda, 2019; Tenrinippi, 2019). This significant increase was due to social enterprise innovation, which positively impacted economic development, especially in empowering minority groups (British Council, 2020). In addition, social enterprises are also considered capable of providing solutions to social and natural environmental problems (Tykkyläinen & Ritala, 2020a). Although still newly developed in Indonesia, the success of this social enterprise contributes around 1.91 percent of Indonesia's GDP or Rp. 19.4 billion (Kumparan, 2019). As a hybrid business, social enterprise combines profit-making orientation with charity (Nielsen & Lund, 2014a; Yunus, 2010a) which is expected to broaden the outlook and exposure of a business. So, the company is not only focused on pursuing profit but also pays attention to the natural and social environment. Thus, this concept will enable management to generate profits by caring for and empowering the natural and social environment (Halberstadt et al., 2020; Nielsen & Lund, 2014; Yunus, 2010; Yunus, 2007).

The hybrid nature of this social enterprise makes performance measurement a critical discourse to measure the achievement of the objectives of business activities and sustainability

(Gali et al., 2020). Social enterprise performance measurement can assist in decision-making, provide information for managers to guide their decisions, and improve the effectiveness and efficiency of operating business activities (Arena et al., 2015a; Wannamakok & Chang, 2020). It can also contribute to ensuring accountability and transparency to internal and external stakeholders (Arena et al., 2015a), including volunteers, employees, local communities, investors, and banks (Islam, 2020). In addition, performance information causes local communities and the public to increase awareness of the existence of social enterprises (Cheah et al., 2019). Thus, performance measurement plays an essential role in maintaining the sustainability of a social enterprise. At the same time, measuring performance in social enterprises is not easy because it requires consideration of various perspectives, goals, and results for internal and external stakeholders (Yunus, 2010a), sometimes stakeholders' interests' conflict (Dart, 2004). The social mission is at the core of social enterprises, so different measures are needed that focus on social value creation and social impact measurement instead of quantitative monetary figures, as is often the case with commercial businesses (Arena et al., 2015b).

Numerous frameworks have been proposed, including Social Return on Investment (SROI) (Yates & Marra, 2017), balanced scorecard (Somers, 2005), and multidimensional model (Rametse & Shah, 2013). However, the problem of measuring performance in Social Enterprises is often caused by the difficulty of measuring the quantity of impact and performance caused by complex social phenomena and the interests of different stakeholders. As a result, existing performance measures only focus on dimensions that they can measure quantitatively. SROI is considered inadequate for Social Enterprise because the conversion of social value into monetary contradicts social goals. In addition, SROI also adapts the performance measurement of profit companies so that it has a focus on the mission of maximizing profits using social values. SROI is also considered not to have intense environmental and social dimensions (Bagnoli and Megali, 2011; Crisan and Borza, 2012; Mair, 2012; Luke, Barraket and Eversole, 2013b; Arena, Azzone and Bengo, 2015). On the other hand, the BSC is deemed not to reflect the goals and achievements of Social Enterprise because there is no significant weight on the social and environmental dimensions (Arena, Azzone and Bengo, 2015; Luke, Barraket and Eversole, 2013a). Meanwhile, the multidimensional model still focuses on concrete economic-financial calculations resulting from social values, so this causes the social-environmental dimension not to be a top priority in measuring performance.

Deep ecology is a promising ethical perspective to guide the dimensions of performance measurement in the interactions of business entities such as Social Enterprises with the social and environment (Tresca, 2020). The highlights of deep ecology are the need to recognize the intrinsic values of all living things and the maintenance of ecology and cultural differences (Rothenberg, 2012). It also has the potential to pursue sustainability in Social Enterprise. The principles of ecological ethics from Naess (2013) have a broader dimension, especially in studying the sustainability of entities with the environment and society. Deep ecology offers guidance for long-term sustainability and institutional mechanisms for the operationalization of ethically based business principles (Akamani, 2020). Akamani (2020) integrates the principles of deep ecology with public policies in building a sustainable management area. However, deep ecology has not been used as a fundamental concept in business practice, especially in performance measurement

Studies on Social Enterprise, especially performance measurement, are relatively new, so there are still not many studies on this topic. In this context, this paper aims to contribute to the state-of-the-art literature by developing an approach that Social Enterprises could apply to measure their results concerning social, environmental, and economic impacts. The proposed system uses the concept of deep ecology to find a broader dimension of performance that

follows a social enterprise's characteristics. It will use a step-by-step method to develop and construct the performance measurement. This paper is prepared by studying the sustainability attributes of social enterprise and deep ecology to determine the conceptual framework. We offer an alternative to expanding the performance measurement aspects of Social Enterprise, especially in Indonesia, using the deep ecology dimension. Finally, we conclude this study in the "conclusion" section. This study provides insight into the development of accounting and management, theoretically and practically.

## 2. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

## 2.1 Theory Development

## The Nature of Social Enterprise

The combination of orientation between social and business causes social business or social enterprise to have two perspective dimensions (Yunus, 2010b). First, the dimension of social entrepreneurship leads to the pole of charity. This dimension relates to solving social problems with an entrepreneurial approach, a process with the empathy stage of the issues – design & test the solution – and execute to the market (Moorthy, 2014). Second, the dimension called conventional business which leads to the profit pole. Two sizes of perspective shape the goals of a social business or social enterprise, which not only generates material or profit but also generates social impact (selfless-driven business) (Dwivedi & Weerawardena, 2018; Farjaudon & Morales, 2013; Gali et al., 2020; Torres & Augusto, 2020; Tucker & Croom, 2021). Social business or social enterprise is more than just charity and has a social entrepreneurship attitude, and it also improves social life and a sustainable natural environment (Halberstadt et al., 2020; Yunus, 2010b). Social business or social enterprise are often considered the same, but in this study, social enterprise is used. It is because social interaction has meaning as an organization that has dual motives, namely commercial (seeking profit) and social (defined as social, environmental, and ethical or referred to as SEE) (Bielefeld, 2009; Dart, 2004). Meanwhile, social enterprise has a meaning as an organization that, although sustainable through a revenuegenerating model, is focused on creating social impacts or providing solutions to environmental problems (Lane, 2015). With this simple terminology, the use of the term social enterprise in this research study is more suitable and describes the elements of the object of this research.

Social enterprises combine innovation, resources, and opportunities to achieve social or natural life sustainably through business activities to overcome social and environmental challenges or problems. In overcoming these challenges or problems, social enterprises focus on system transformation and community empowerment (Yunus, 2007, 2010; Lane, 2015; Gali et al., 2020). Profit creation is essential, although not the primary goal. With these advantages, the social enterprise can develop and strengthen community empowerment to make it bigger and broader (Chandra et al., 2021; Halberstadt et al., 2020; Lang & Fink, 2019). Concerning the complexity of the nature of Social Enterprise, it is closely related to community empowerment, self-development, and contribution to the community (Kim & Ji, 2020).

#### **Deep Ecology**

Deep ecology is brought by Naess (2013) as a form of criticism from anthropocentrism, which sees environmental problems from a broader and holistic relational perspective. Deep ecology tries to look at the root causes of environmental damage and pollution more comprehensively and holistically and then deal with them more deeply. Social and human aspects are also a significant concern in deep ecology. Meanwhile, shallow ecology is more likely to address the symptoms or symptoms of an environmental issue and not the root of the problem, as is the case with current business thinking and public policy (Klemmer & McNamara, 2020). Human positions are closely related to the social and environmental surroundings and influence each

other ((Capra, 2002; Rothenberg, 2012; Naess, 2013; Klemmer and McNamara, 2020). Thus, in this deep ecology view, the economic value system has an intrinsic that cannot be assessed conventionally by economic tools (Diesendorf & Hamilton, 2002). The behavior of respect and stewardship obligation is the basis of ethics in activities in this world. The main factor driving the use of natural resources is human welfare which is determined by the degree of 'friendship' of humans with nature, including in terms of consumption, production, and distribution. Human status in the ecosystem is humans as citizens of the ecosystem who have the same status as other creatures in consumption and production activities. Decisions to use natural resources are based not only on market institutions but also on politics, the environment, and society (Diesendorf & Hamilton, 2002). In addition, ecocentrism or deep ecology is closely related to the beliefs of indigenous peoples as a way to see themselves as part of this world other ((Capra, 2002; Rothenberg, 2012; Naess, 2013; Klemmer and McNamara, 2020). It and the evolutionary, empathetic, and aesthetic abilities combined with the rational faculties have enabled humans to understand how all of life came about (Rowe, 2001).

The values contained in this deep ecology are eight values (Naess, 2013a). First, the welfare and growth of human and non-human life on earth have an inherent value where it does not depend on using the non-human world for human purposes. Second, the variety of life contributes to the realization of these values and the values themselves. Third, humans have no right to reduce diversity except to fulfill their vital needs. Fourth, the growth of human life and culture is commensurate with the substance of the smaller human population. The growth of non-human life requires a smaller human population. Fifth, human interference with the nonhuman world has crossed the line, and the situation worsens. Sixth, policies must be changed so that they can affect the economy's basic structure, technology, and ideology. Conditions resulting from changes will differ significantly from the conditions that exist at this time. Seventh, ideological change leads to valuing the quality of life (thinking of situations that have inherent value) rather than adhering to increasingly high standards of living. There will be a deep awareness of the difference between greatness and greatness. Eighth, those who have access to the points above must implement the necessary changes directly or indirectly. Technically, it is closely related to the goal of paying attention to the balance between the social and natural environment. Second, the values of wisdom form the basis of the vision and mission. They are third, exploiting natural potential without destroying or using resources excessively. Fourth, operational activities do not pollute the natural environment. Fifth, activities follow public policy. Sixth, the balance of business survival with the quality of life of the perpetrators. Seventh, good adaptability to changing external conditions.

In its development, the concept of deep ecology was adapted and implemented in several technical studies. Samkin & Schneider (2010) reviewed the reporting and evaluation framework to see the level of biodiversity in conservation organizations through the concept of deep ecology. In this study, applying deep ecology can technically affect the organization's sustainability. Maroun & Atkins (2018) conducted a comprehensive study on the integration of accounting with theories related to sustainability, one of which is deep ecology which has a close relationship with complex values to build long-term sustainability. Akamani (2020) examines sustainable development using deep ecology and recommends it in public policy to support adaptive governance, especially in protected and industrial areas. Roberts et al. (2021) presented the first systematic literature review on the relationship between accounting, biodiversity, and its impact on the economy and health. It was studied with the concept of deep ecology and legitimacy theory.

#### **Sustainability of Social Enterprise**

Ketprapakorn & Kantabutra (2019) explained that the sustainability of social enterprises must start with ensuring the best fit for impact and viable business. By giving the complexities of

social enterprise is skeptical of its long-term sustainability. One of them is the practice of resourcefulness directly related to social enterprise, which is a challenge for the entity. In addition, performance measurement metrics are one of the main challenges surrounding measuring the success and sustainability of social enterprises. Many social enterprises try to measure using SROI. However, it is difficult to do so because it is not easy enough to convert the social value into monetary value, so many dimensions are not evaluated. Ketprapakorn & Kantabutra (2019) argues that social enterprise has two sustainable sides. The first aspect is that financial sustainability shows resilience over time. The second side is related to the impact generated by the social enterprise concerning its social mission. Maintaining and deepening the enterprise's social impact is an essential factor that must be considered. Therefore, Ketprapakorn & Kantabutra (2019) advocates separating social impacts' production and operational costs. This separation would make it realistic to create social impact and resilience in social enterprises in a sustainable manner. (Cheah et al., 2019) believe that social enterprise requires organizational capacity, culture, and financial viability. Such integration enables the organization to achieve the right goals and impacts.

Ketprapakorn & Kantabutra (2019) proposes a continuum table for the survival and sustainability of social enterprises with various aspects, especially on the financial side and social impact. First, financial sustainability is related to generating a surplus; second, operational sustainability is related to covering costs or breaking events. Third, balance sheet sustainability is related to building equity. Fourth, impact sustainability which is related to the maximum enduring impact.

#### 2.2 Hypothesis Development

Kim & Ji (2020) explained the complexity of the nature of social enterprise incorporated in two poles of vision: social and business. Several factors that have been studied by Kim & Ji (2020) related to the sustainability of social enterprises are: first, Employment and Income Increase, which consists of indicators: Newly Hired Personnel, Social Work Participant's Switch to Similar Work After Contract Expiration, Income Increase for the Vulnerable and Income Increase of Worker's/Service User's Family Through Economic Activities.

H1: Employment & Income Increase affects Sustainability on Social Enterprise

The second factor that influences the sustainability of social enterprises, according to Kim & Ji (2020), is Self-Development & Self-Esteem, which consists of indicators: Certification Through Vocational Activities, Enhancement of Technical Competence Through Vocational Activities, Free Social Training for Workers, Family Counseling and Free Education, and Free Cultural Program for Workers.

H2: Self-Development & Self-esteem affect Sustainability on Social Enterprise

The third factor that influences the sustainability of social enterprises, according to (Kim & Ji, 2020), is Community Contribution & Government Budget Reduction, which consists of indicators: Affordable Social Services, Free Provision of Social Services, Reduction of Family Care cost, Budget Reduction Through Consignment Management of Social Welfare Service, Reductions of Safety Accidents in Social Enterprise, Reduction of Use of Tertiary Care Institutions, and Reduction of Hospitalization Days.

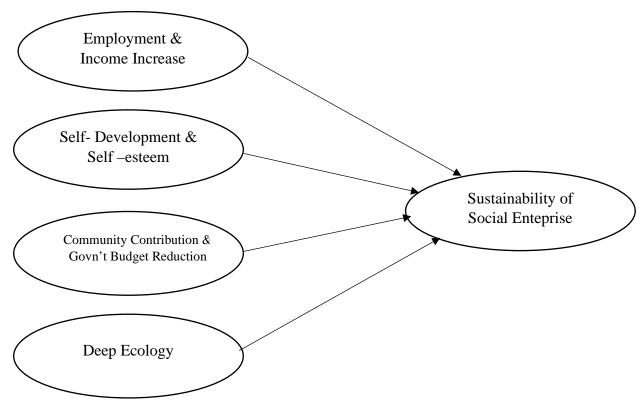
H3: Community Contribution & Government Budget Reduction affect Sustainability on Social Enterprise

Samkin & Schneider (2010) reviewed the reporting and evaluation framework to see the level of biodiversity in conservation organizations through the concept of deep ecology, in which the application of deep ecology can technically affect the organization's sustainability. Maroun & Atkins (2018) examines deep ecology, which is closely connected with complex values to build long-term sustainability. Akamani (2020) examines sustainable development using deep ecology and recommends it in public policy to support adaptive governance,

especially in protected and industrial areas. Roberts et al.(2021) present the first systematic literature review on the relationship between accounting, biodiversity, and its impact on the economy and health, which is studied with the concept of deep ecology and legitimacy theory. *H4: Deep ecology affects Sustainability on Social Enterprise* 

## 2.3 Conceptual Framework

A conceptual framework is a type of framework that can be applied to problem solutions. In most cases, this study framework takes a scientific approach and displays the linkages between variables during the analytic process.



Source: Author

Figure 1. Relationship hypothesis model (conceptual framework) (Author, 2022)

#### 3. RESEARCH METHOD

Collecting data using an instrument with a questionnaire measured using a Likert scale (1-5) with five answer options, namely Strongly Disagree (STS) with a value of 1, Disagree (ST) with a value of 2, Neutral (N) with a value of 3, Agree (S)) scored 4 and Strongly Agree (SS) scored 5. Questionnaires were distributed via Google Forms by random sampling to the founders and managers of Social Enterprise across Indonesia. This type of research uses research design to test hypotheses.

The independent variables in this study are Employment & Income Increase, Self-Development & Self-esteem, Community Contribution & Government Budget Reduction, with indicators referring to (Kim & Ji, 2020) and Deep Ecology, with indicators referring to Naess (2013) research. The dependent variable is Sustainability in Social Enterprise, with indicators referring to the research of Ketprapakorn & Kantabutra (2019). An explanation of operational definitions of variables and variable measurement can be seen in the following table:

Table 1. Operational Definitions and Variable Indicators

Variable	Definition Definitions a	Indicator
Employment &	Kim & Ji (2020)	1. Newly Hired Personel
Income Increase	,	2. Social Work Participant's Switch to
		Similar Work After Contract Expirantion
		3. Income Increase for the Vulnerable
		4. Income Increase of Worker's/Service
		User's Family Through Economi Activities
Self- Development	Kim & Ji (2020)	1. Cerfitication Through Vacational
& Self –esteem		Acvities
		2. Enhancement of tehnical Competence
		Through Vocational Activities
		3. Free Social Training for Workers
		4. Family Counseling and Free Education
		5. Free Cultural Program for Workers
Community	Kim & Ji (2020)	1. Affordable Social Services
Contribution &	11111 & 31 (2020)	2. Free Provision of Social Services
Government Budget		3. Reduction of Family's Care cost
Reduction		4. Budget Reduction Through Consignment
Trease tron		Management of Social Wellfare Service
		5. Reductions of Safety Accidents in Social
		Enterprise
		6. Reduction of Use of Tertiary Care
		Institusions
		7. Reduction of Hospitalization Days
Deep Ecology	Humans are trying to change	1. Have a goal that pays attention to the
z etp zeeregj	the paradigm of how to treat	balance between the social and natural
	the environment as an	environment
	integral unit in the process of	2. Having wisdom values that form the
	life and the diversity of life	basis of the vision and mission
	forms, contribute to values,	3. Harnessing the potential of nature
	human intervention in the	without destroying it or using it
	world needs to be improved,	excessively
	economic sustainability and	4. Ensure that its operational activities do
	human interest in	not pollute the natural environment
	environmental values (Naess,	5. Run in accordance with public policies
	2013).	6. Pay attention to the balance of business
	=010).	survival and the quality of life of its
		employees
		7. Have the ability to adapt well to
		changing external conditions
		(environment, policies, or other
		conditions)
Sustainability on	Advancing social goals in a	Operational Sustainability (Covering Costs/
Social Enterprise	financially sustainable way.	Breaking Even)
(Y)	Provide income-generating	- Can we consistently cover the costs of our
Ketprapakorn &	opportunities that meet the	operations and all associated overheads
Kantabutra(2019)	basic needs of people living	and on-costs?
	in poverty. The income	- Is our cash flow adequate, do we have
	1 3	adequate liquid funds?
		and and relate terres.

earned from sales is reinvested in their mission.

- Have we been able to project and plan for our operational costs into the future and meet our financial obligations over time?

Financial sustainability (Generating acsurplus)

- Are we generating a profit or surplus?
- Is our surplus adequate to meet our ongoing growth and development needs?
- Do we have adequate plans and projections in place that will help us to shape our financial future?
- Are we making use of our current resources most effectively and efficiently?

Balance sheet sustainability (Building equity)

- Are we building equity and savings over time?
- Could we weather a financial storm or change in our our circumstances?
- Have we built up our asset base over time
- How long would our savings allow us to continue operating if we lost a major source of income?

Impact Sustainability (Maximizing enduring impact)

- Are we delivering the sort of social impact that we envisaged we would?
- Are we able to sustain and depend on this impact over time?
- Are we finding ways to measure and report on our social impact?

Source: Author

## **Technical Data Analysis**

Data analysis using Partial Least Square (PLS) with SmartPLS 4 application. The analysis technique includes the outer model for convergent validity test, discriminant validity test, and reliability test and evaluation of the inner model is carried out R-squared test (R2) and significance test through path coefficient estimation and hypothesis testing.

## 4. RESULT AND DISCUSSION

## 4.1 Result

#### **Descriptive Statistics**

This study uses a descriptive statistical analysis model. Descriptive analysis will provide a description (description) of data, including the average (mean), maximum value, minimum value, and standard deviation of each data or variance, which is a measure of variability, minimum and maximum values. The following are the results of descriptive calculations processed using SmartPLS version 4.0.

Table 2. Descriptive Statistics

Tuble 2. Descriptive Statistics					
Variable	Minimum	Maximum	Mean	Standard deviation	
Employment & Income Increase, Self Development & Self Esteem, Community Contribution &					
Government Budget Reduction, and Deep Ecology					
Employment &	2	5	4,293	0,353	
Income Increase	<u> </u>	3	4,293	0,333	
Self Development &	2	5	3,988	0,560	
Self Esteem	<u> </u>				
Community					
contribution &	2	5	3,955	0.500	
Governmental	2	3	3,933	0.300	
Budget Reduction					
Deep Ecology	2	5	4,327	0,341	
Sustainability on Social Enterprise					
Sustainability on	2	5	3,851	0.560	
Social Enterprise	2			0,569	

Source: Processed Data - Author

Based on the results of the frequency distribution of respondents' answers in the table above, it can be seen that the employment & income increase variable as a whole has an average value of 4.293. It shows that respondents agree that employment & income increase is an essential factor for the sustainability of the social enterprise. The self-development & self-esteem variables as a whole have an average value of 3.988. It shows that respondents agree that self-development and self-esteem are important factors for social enterprise sustainability. The community contribution & budget reduction variables as a whole have an average value of 3.955. It shows that respondents agree that community contribution & budget reduction are essential factors for social enterprise sustainability. The deep ecology variable as a whole has an average value of 3.851. It shows that respondents agree that deep ecology is essential for social enterprise sustainability.

#### **Inner Model Design**

The relationship structural model design between latent variables in PLS is based on formulating the problem or research hypothesis. The inner model, which means the specification of the structural relationship model, or the inner relation, describes the relationship between latent variables based on the substantive theory of research. The exogenous latent variable of employment and income increase (X1) has four indicators: Newly Hired Personnel, Social Work Participant's Switch to Similar Work After Contract Expiration, Income Increase for the Vulnerable, and Income Increase of Worker's/Service User's Family Through Economic Activities. Self-Development & Self-esteem (X2) has five indicators: Certification Through Vocational Activities, Enhancement of technical Competence Through Vocational Activities, Free Social Training for Workers, Family Counseling and Free Education, and Free Cultural Program for Workers. Community Contribution & Government Budget Reduction (X3) has seven indicators: Affordable Social Services, Free Provision of Social Services, Reduction of Family Care cost, Budget Reduction Through Consignment Management of Social Welfare Services, Reductions of Safety Accidents in Social Enterprise, Reduction of Use of Tertiary Care Institutions, and Reduction of Hospitalization Days. Deep ecology (X4) has seven indicators: Having a goal that pays attention to the balance between the social and natural environment, Having the values of wisdom that is the basis of the vision and mission, Utilizing the potential of nature without destroying or excessive use, Ensuring that its operational activities do not pollute the natural environment, Running following public policies, Paying attention to the balance of business survival and quality of life of its employees and Having the ability to adapt well to changing external conditions (environment, policies, or other conditions).

#### **Outer Model Evaluation**

Outer model to measure how far the indicator explains the latent variable. The measurements taken are the convergent validity test, discriminant validity test, and reliability test.

## Convergent Validity Test

The validity test uses a reflective indicator model using the correlation between the indicator and constructs scores. The following are the results of calculations with Smart PLS 4.0

	Employment & Income Increase	Self- Development & Self –	Community Contribution &	Deep Ecology	Sustainability on Social Enterprise
		esteem)	Government Budget Reduction		
	X1	X2	X3	X4	Y
X11	0,836				
X12	0,729				
X13	0,885				
X14	0,857				
X21		0,847			
X22		0,910			
X23		0,826			
_X35			0,882		
X36			0,853		
X37			0,964		
X43				0,742	
X44				0,761	
X45				0,755	
X46				0,889	
X47				0,894	
_Y1					0,847
Y3					0,846
Y5					0,857
_Y6					0,863
Y7					0,772
_Y8					0,734
Y10					0,870
<b>Y11</b>					0,769

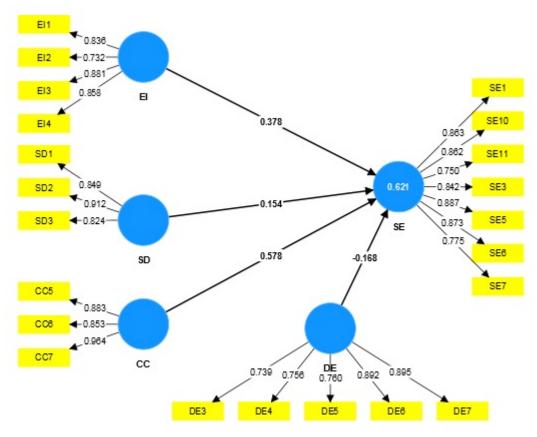


Figure 2. Output Loading Factor Model

The convergent validity test results in Table 2 show that all indicators have an outer loading value of > 0.7. It means the indicators on the variables Employment & Income Increase, Self-Development & Self-esteem, Community Contribution & Government Budget Reduction, Deep Ecology, Sustainability on Social Enterprise is declared valid to measure the variables.

#### Discriminant Validity Test

A good AVE value is required to have a value greater than 0.50. In this study, the value of the variance extracted can be seen in the following table:

Table 4. Avarege Varian Extracted (AVE) Result

Variabel	AVE	Information
Employment & Income Increase	0,687	Valid
Self-Development & Self-	0,743	Valid
Esteem		
Community Contribution &	0,812	Valid
Government Budget Reduction		
Deep Ecology	0,658	Valid
Sustainability on Social	0,675	Valid
Enterprise		

The table above shows the value of the Average Variant Extracted (AVE) on the variables Employment & Income Increase, Self-Development & Self-esteem, Community Contribution & Government Budget Reduction, Deep Ecology, and Sustainability on Social Enterprise. Each

variable has a value of AVE 0.5, so the research model can be said to have good discriminant validity and is valid in measuring.

## Reliability Test

The latent variable can be said to have good reliability if the composite reliability value is more significant than 0.7 and Cronbach's alpha is more significant than 0.7.

Table 5. Composite Reliability and Cronbach's Alpha Result

Variabel	Composite Reliability	Cronbach's Alpha	Conclusion
Employment & Income	0,902	0,883	Reliable
Increase (EI)			
Self- Development & Self –	0,901	0,870	Reliable
esteem (SD)			
Community Contribution &	0,876	0,849	Reliable
Government Budget			
Reduction (CC)			
Deep Ecology (DE)	0,838	0,828	Reliable
Sustainability on Social	0,937	0,930	Reliable
Enterprise (SE)			

Table 3 shows that all variables' Composite Reliability and Cronbach's Alpha values are 0.70. All variables have good reliability values following the minimum value limits required and are reliable to continue the measurement.

#### **Inner Model Evalution**

The evaluation of the inner model using Smart PLS is carried out using the R-squared (R2) test and the significance test through the estimation of the path coefficient. Testing R2 output for the value of R2 using the smartPLS 4.0 computer program is obtained as follows:

Table 6. Coefficient of Determination Results

Sustainability on Social	R-square (R <sup>2</sup> )	R-square adjusted
Enterprise	0,624	0,573

The value of R-square (R2) measures how much influence certain independent latent variables have on the latent dependent variable. The results of R2 on the Sustainability on Social Enterprise variable have a value of 0.624 or 62.4%. The Sustainability of Social Enterprises variable variance is explained by the Employment & Income Increase, Self-Development & Self-esteem, Community Contribution & Government Budget Reduction variables, and Deep Ecology by 62.4%. The remaining 37.6 is explained by other variables that are outside this study.

#### **Hypothesis Testing**

This study has four hypotheses that were tested and measured using the innovative PLS tool, carried out utilizing a bootstrapping process, in order to obtain the relationship between the influence of exogenous variables on endogenous variables as follows:

Path Standard Т P **Hypothesis** Coefficient **Deviation Statistic Values** Employment & Income Increase  $(X_1) \rightarrow$ 0,386 0,153 Sustainability on Social Enterprise (Y) 2,517 0,012 Self- Development & Self –esteem $(X_2)$   $\rightarrow$ 0,170 Sustainability on Social Enterprise (Y) 0,170 1,001 0,317 Community Contribution & Government Budget Reduction $(X_3) \rightarrow Sustainability on$ Social Enterprise (Y) 0,575 0,273 2,109 0,035 Deep Ecology  $(X_4) \rightarrow Sustainability on$ -0,187Social Enterprise (Y) 0,271 0,688 0.492

Table 7. Results of Research Data Bootstrapping Calculations

This T statistical test aims to test the significance of the effect of the independent variable on the dependent variable partially.

H1: Employment & Income Increase affect Sustainability on Social Enterprise

Based on the results of the output of Table 6 above, it is known that the first hypothesis that examines the effect of Employment & Income Increase on Sustainability on Social Enterprise with the results of the study obtained a t-statistic value of 2.517 greater than 1.96 or a P value of 0.012 less than 0.05. It means that H1 is accepted. The path coefficient value of 0.386 indicates that Employment & Income Increase(X1) positively and significantly affects Sustainability in Social Enterprise.

H2: Self-Development & Self-esteem have an effect on Sustainability in Social Enterprise The second hypothesis examines the effect of Self-Development & Self-esteem on Sustainability in Social Enterprise. It shows that the t-statistic value of 1.001 is smaller than 1.96, or the P value of 0.317 is more significant than 0.05. It means that H2 is rejected. The path coefficient value of 0.170 indicates that the effect between Self-Development & Self-esteem (X2) on Sustainability in Social Enterprise is not significant.

## H3: Community Contribution & Government Budget Reduction affect Sustainability on Social Enterprise

The third hypothesis examines the effect of Community Contribution & Government Budget Reduction on the Sustainability of Social Enterprises. It shows that the t-statistic value of 2.109 is more significant than 1.96, or the P value of 0.035 is smaller than 0.05. It means that H3 is accepted. The path coefficient value of 0.575 indicates that Community Contribution & Government Budget Reduction (X3) has a significant and positive effect on the Sustainability of Social Enterprises.

#### H4: Deep Ecology affects Sustainability on Social Enterprise

The fourth hypothesis examines the effect of Deep Ecology on Sustainability in Social Enterprise. It shows that the t-statistic value of 0.688 is smaller than 1.96, or the P value of 0.492 is more significant than 0.05. It means that H4 is rejected; that is, the effect is not significant. The path coefficient value of -0.187 indicates that deep ecology (X4) has a negative effect on the Sustainability of Social Enterprises.

#### 4.2 Discussion

Performance measurement is intended to increase the improvement or progress that the company gets. Performance measurement can be a benchmark for business entities to measure

whether the company's activities and results are developing towards the goals to be achieved or vice versa (Bourne et al., 2018; Coyle, 2018). Social Enterprise is no exception, which experiences multidimensional challenges because Social Enterprise combines innovation, resources, and opportunities to overcome social and environmental challenges or problems. In addition, Social Enterprise faces challenges in maintaining sustainability because it must balance social mission and profit. If studied more deeply, the creation of sustainable systems change is the key to social enterprise activities (Yunus, 2010; Felício, Martins Gonçalves and da Conceição Gonçalves, 2013; Nielsen and Lund, 2014; Schoneveld, 2020; Tykkyläinen and Ritala, 2020). Therefore, the activities carried out are usually in the form of innovations oriented to community needs and changes in the social system of society (Yunus, 2010; Felício, Martins Gonçalves and da Conceição Gonçalves, 2013; Nielsen and Lund, 2014; Schoneveld, 2020; Tykkyläinen and Ritala, 2020). Social enterprise business activities aim to serve society's basic needs (Douglas and Prentice, 2019; Lang and Fink, 2019; Barros et al., 2020; Halberstadt et al., 2020). Thus, social enterprise requires a more comprehensive dimension of performance measurement, unlike traditional-based performance measurement.

The dimensions of employment, income increase, as well as the dimensions of community contribution and government budget reduction, have a significant favorable influence on sustainability in social enterprise. This shows that the higher the value, the higher the potential for sustainability in social enterprise. It follows the research of Kim & Ji (2020), which explains that an increase in income for employees and settlement of job security positions for employees will provide employee performance, thereby potentially increasing the sustainability of social enterprises. It also shows that the stability of human resources and finances for them is the primary key to maintaining sustainability in social enterprise. Likewise, in the dimensions of community contribution and government budget reduction, Kim & Ji (2020) explained that good social services and guaranteeing security or health levels for employees and the surrounding environment would increase the potential for ensuring sustainability in social enterprises.

However, the dimensions of self-development and self-esteem do not significantly affect sustainability in social enterprise. It is different from research from Kim & Ji (2020), which explains that this dimension has a decisive factor for sustainability in social enterprise. It shows that the differences in conditions that cause self-development and self-esteem have not become one of the main priorities in the performance of social enterprises in Indonesia. The need for financial stability and human resources is still a significant urgency, thus causing the dimensions of self-development and self-esteem to have no significant impact.

While the Deep Ecology dimension has a negative but insignificant effect on social enterprise sustainability, this is not following the results of research from (Samkin & Schneider, 2010), Maroun & Atkins (2018), Akamani (2020) and Roberts et al.(2021). In previous studies, profound ecology studies were applied to entities that cover a broad scope, for example, in industrial areas and organizations that are indeed engaged in environmental protection, as well as the development of public policies directly related to government. With the difference in the scope of research, the deep ecology dimension is still not fully implemented and has a significant measurable impact on social enterprises.

#### 5. CONCLUSIONS

Developing the dimensions of performance measurement in Indonesian social enterprises, such as employment & income increase and community contribution & contribution budget reduction, influence the potential to support sustainability. These two factors are directly related to the conditions experienced by social enterprises. They are dominantly stabilizing finances and managing resources, especially in Indonesia. Meanwhile, self-development &

self-esteem, and deep ecology have no significant effect on the sustainability of the social enterprise. It is because these two factors have not become a priority and indirectly affect social enterprises in Indonesia. These factors have not significantly influenced founders and managers on the sustainability of their social enterprises. In addition, self-development & self-esteem, and deep ecology are abstract indicators, so it is not easy to measure them. Thus, there need to be further studies to explore broader factors in social enterprise to achieve sustainability. In addition, this is an opportunity for research on a balanced combination of performance measurement, given that those factors are abstract and not easy to measure but are closely related to the performance of social enterprises.

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