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**MEASURING SUSTAINABILITY PERFORMANCE  
IN UNIVERSITY: IS IT POSSIBLE TO IMPLEMENT  
SUSTAINABILITY ACCOUNTING  
IN PUBLIC SECTOR ORGANIZATION?**

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**ABSTRACT**

This study aims to identify the ability of non-business organizations to implement the concept of sustainability accounting and to measure the organization's sustainability performance. The object of this study is higher education institutions (public universities). This study used a qualitative paradigm with data collection techniques and using the document analysis method. The data used is the university's sustainability report and relevant documents. The methods used to analyze sustainability performance is the GASU method and the STARS System. The results of this study found that public university organizations can apply the concept of sustainability accounting and have a very high capability to implement the concept of sustainability accounting. This study also identified the challenges in the implementation process of sustainability accounting in public sector organizations, particularly in higher education institutions.

**KEYWORDS:**

The GASU method; sustainability performance; sustainability accounting; the STARS system

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## INTRODUCTION

Sustainability accounting has created a new paradigm in the development of accounting systems in the business organization. The sustainability accounting concept has changed the perspective of our business ecosystem and the entire accounting system. A report from Lamberton (2005) stated that the concept of sustainability accounting emerged in the early 1990s and the development of this concept increased continuously until the advent of Sustainability Reporting Guidelines in 2002. Conceptually, the concept of sustainability accounting can be interpreted as a tool or technique that can be used by the company's management to help the companies become more sustainable. The word "sustainable" here means that the transformation in the company's accounting system in which the companies move from "traditional accounting" into an accounting system that focuses on economic information, social information, and environmental information. This transformation process will impact the company's business activities, for example, the management's decisions will not only focus on the financial impact but also the business impact for the social community and the environmental concern. Through this concept, the private companies will release their financial information and non-financial information through the company's sustainability report.

Brown, DeJong, and Levy (2009) stated that to build a responsible business institution, the company's management should disclose their comprehensive information (financial information and non-financial information) to their stakeholders. Caldwell (1998) said that the sustainability concept should be human ethics and this concept is important to protect the earth from the massive exploitation. Based on Caldwell's (1998) perspective, the sustainability concept should be the ethics in the business system and the companies

have a big responsibility in the context of sustainability.

The concept of sustainability accounting has developed as an interesting issue that has been discussed by professional accountants. The problem with conventional accounting is the conventional accounting does not have enough capability to measure the company's activities that are not quantitative, although these activities can add value to the company. Examples of these activities are the impact of business activities on social communities and the environment, the company's relationships with customers, a strong commitment of employees, and a high motivation by the company's management. This information is important for the company's stakeholders. The concept of sustainability accounting will disclose this type of information properly to the company's stakeholders. The role of the organization's stakeholders will determine the quality of the implementation of the sustainability accounting concept in an organization. Research from Kaur and Lodhia (2018) showed that the company's stakeholders had an important role in the implementation of the sustainability reporting process, releasing the social and environmental information, the development of strategic plans and sustainability indicators, the process of sustainability performance assessment, and preparation for its sustainability report. Dragomir (2011) created the initial framework for accounting for the sustainability concepts and this research was important to support sustainability accounting.

Farneti and Guthrie (2009) explained that research about social and environmental accounting, also the sustainability concepts in the accounting system mostly focused on private companies or organizations rather than public sector organizations. The concept of sustainability accounting is now widely applied, especially in business organizations

with a strong commitment to implement the concept of sustainability. This is an opportunity for accounting research to examine the implementation of sustainability concepts in public sector organizations. Ball (2005) examined the environmental accounting practices in UK local government and the connection with sustainable development. Adams, Muir, and Hoque (2014) have created the measurement of sustainability performance in the public sector and suggested to examine the sustainability practice in the public sector. Kaur and Lodhia (2016) examined the factors that influence the stakeholder's engagement in sustainability accounting and sustainability reporting in the public sector and suggested to create further research in this context.

The public university is an example of an organization that can apply a sustainability accounting system. The process of sustainability performance assessment is the first process to determine the ability of an organization to implement the concept of sustainability accounting. Adams et al. (2014) stated that all organizations could implement the concept of sustainability accounting in business activity. Research from Alshuwaikhat, Adenle, and Saghir (2016) examined the development of sustainability reporting in public universities in Saudi Arabia. The result found that the public university needs more support to release its sustainability reporting and the university's management had a high commitment to release its comprehensive information. Lange and Kerr (2013) stated that several accounting processes in higher education environments created obstacles to the application of the concept of sustainability at the university.

SASB (Sustainability Accounting Standards Board) has released its standards or guidelines on the implementation of the concept of sustainability accounting for business organizations and non-business organizations.

The standards or guidelines show that more and more organizations committed to implementing the concept of sustainability accounting for their activities. These policies are not only prepared for the business organization but this policy also for non-business organizations. The perfect way to support the implementation process of the sustainability accounting concept is by establishing the appropriate guidelines for the organizations. The process of implementing the sustainability accounting concept does not mean replacing the accounting system that has been applied by the organization. The implementation process of sustainability accounting in an organization must consider the accounting system currently applied in the organization and the characteristics of the organization (Adams et al, 2014).

Adams (2013) provided a perspective on sustainability reporting and performance management in public universities. Based on the research, the process of sustainability reporting and performance management in public university can improve the information accountability from the university's management to their stakeholders. It also increases management performance. The sustainability concept can be integrated with the internal activities of the university so that it can promote the implementation of the sustainability concepts in the institution. Research from Farneti and Guthrie (2009) tried to explain the development of sustainability reporting and the reason why the public sector organizations should report their non-financial information. Through the semi-structured interviews, the research found that sustainability reporting in Australian public sector organizations was prepared using the latest Global Reporting Initiative (GRI) guidelines and the internal stakeholders were the groups that used the sustainability report mostly. The information on the sustainability report can be used by external stakeholders. The biggest challenge in the

implementation of the sustainability concept in public sector organizations is how to improve the support from the external stakeholders.

Too and Bajracharya (2015) examined the crucial factors to engage the university community in the sustainability concept. That research created the initial frameworks to help the university's management support their communities in sustainability. Research from Too and Bajracharya (2015) showed that organizational culture was the main factor to support the implementation of the sustainability concepts in public universities. To support the sustainability concept in public universities, it is important to integrate the university's curriculum with the sustainability concept. Research from Dmochowski, Garofalo, Fisher, Greene, and Gambogi (2016) said that nowadays the public university and the educational organization had a big mandate and motivation to integrate their curriculum with the sustainability concept. Integrating the university's curriculum with the sustainability concept is the perfect way to promote the sustainability concept to the students. In this way, the next generation will understand the sustainability concept and its purposes. Perspective from Adams, Martin, and Boom (2018) said that the university culture had a high correlation with the implementation of the sustainability concept. This research has created an important framework to support the university's sustainability culture. Based on the research result, the university's management should realize that the university's culture is an important factor to support the sustainability culture in the internal university. This is evidence that the organizational culture (the university culture) has a high connection with the implementation of the sustainability concept in the internal university.

Research from Dyball, Wang, and Wright (2015) using the staff in the business faculty

in Australia showed that staff engagement was an important factor to support the implementation of the sustainability concept in public universities. The result provides empirical insights into the reason why the staff does not support the sustainability concept in their university. The internal engagement (staff engagement) is an important factor to support the process of implementing the sustainability concept.

Based on the previous literature, this study aims to examine the possibility of implementing sustainability accounting in public sector organizations. This study is going to give the result from sustainability performance assessment in public sector organizations particularly in public universities in Indonesia and the opportunity to implement sustainability accounting. Research in sustainability accounting in public universities is still limited in Indonesia. This study is expected to contribute to the implementation of policies related to sustainability accounting in public sector organizations.

## RESEARCH METHOD

The study was based on the viewpoint of a qualitative paradigm. The qualitative perspective was used to receive a comprehensive understanding of the research object and research purposes. This study design refers to the design of the research conducted by Kaur and Lodhia (2018) which used the case study research design. The process of assessing sustainability performance is using the Graphical Assessment of Sustainability in Universities (GASU) method, developed by Lozano (2006). This study also using the Sustainability Tracking, Assessment, and Rating System (STARS) system developed by The Association for the Advancement of Sustainability in Higher Education (AASHE). The research framework in this study is formed through the understanding that the

concept of sustainability accounting can be applied to all organizations, both business organizations, and non-business organizations.

Data used in this study are the university's annual reports, guidelines, and regulations related to financial management, and guidelines and the rules relating to the university's policy on social and environmental fields. This study used two universities, namely Universitas Indonesia and Universitas Pendidikan Ganesha. This study used the Universitas Indonesia as the object because the Universitas Indonesia was the first public university in Indonesia that disclosed its sustainability report. Universitas Indonesia has published a sustainability report in 2018. The Universitas Pendidikan Ganesha has not published a sustainability report yet, but already has some documents and reports that show the university's concern for the application of the concept of sustainability. From the initial interview with the university's management, this university has a high effort to implement the sustainability concept and the university has a research program that focuses on the sustainability context.

This study used the GASU guideline because the method had become the main guideline that could be used to assess the sustainability performance of a university. The GASU method was a pioneer as a tool to measure the sustainability performance of the university. The results of measurements using the GASU model will be compared with the measurement results using the STARS system. The STARS system is also used in this study because (1) STARS system provides a clear framework for understanding sustainability performance, especially in the higher education organization, (2) performance measurement results can be compared with some of the sustainability performance of another educational organization, and (3) this model provides input and suggestions

for the development of its sustainability performance in the future.

## RESULT AND DISCUSSION

### **Identification the Sustainability Performance Using the GASU Method and STARS System**

The first step is to assess whether the sustainability performance of Universitas Indonesia and Universitas Pendidikan Ganesha is at a good level or not. The results of this step are important as a basis in the context of the disclosure of financial information and non-financial information in a university's sustainability report. If the organizations have a high sustainability performance, then the organization will motivate to further expand the disclosure of their financial information and non-financial information on its sustainability report and this process is important for the decision-making process by the university's stakeholders.

This study used the secondary data from the university's official website and the related reports or documents that had been published by the university (particularly the university's sustainability report) to perform the analysis using the GASU model. Lozano (2006) stated that the GASU indicators that had been developed would provide a systematic assessment process and the results could be used as a basis for the preparation of the university's sustainability report. In general, the GASU model has five indicators to measure sustainability performance, namely profile indicator, economic indicator, environmental indicator, social indicator, and educational indicator. Based on the GASU guideline, the performance indicators values are 43 for the profile indicators, 9 for the economics indicator, 30 for the environmental field, 40 for the social sector, 29 for education indicator, and 23 for the field of

interlinked issues and dimensions (Lozano, 2006).

Each of the indicators on the GASU guideline is analyzed using the following guidelines:

1. A value of 0 is given if the relevant information does not exist or no indicator found in the university' sustainability report or the relevant documents;
2. A value of 1 is given if the information reflects poor performance. The information is general and not detailed;
3. A value of 2 is given if the information stated regular/fair performance. The information is general perspective and still discussing half of the topic, and not detailed;
4. A value of 3 is given if the information stated good performance. The information already is detailed and includes the issues in the context of related indicators;
5. A value of 4 is given if the information stated excellent performance. The information presented is complete and detailed to one indicator.

The STARS system also used to analyze the university's sustainability report. Generally, there are five categories of performance measurement of sustainability based on the STARS system model, namely (1) academics (AC), (2) engagement (EN), (3) operations (OP), (4) planning and administration (PA), and (5) innovation and leadership (IN). The academics category is describing the indicators of sustainability in the context of the process of education and teaching at the university. The engagement category explains sustainability indicators in the context of a university with the university students and the relationship with the social community. Operations category is describing indicators of sustainability in the context of university operations and category planning and administration describes the indicators in the context of the planning and administration of the university. The innovation and leader-

ship category describe the sustainability indicators in the context of innovation and public leadership conducted by the university. Some of these categories will be divided into several subcategories which will demonstrate the university's sustainability performance indicators.

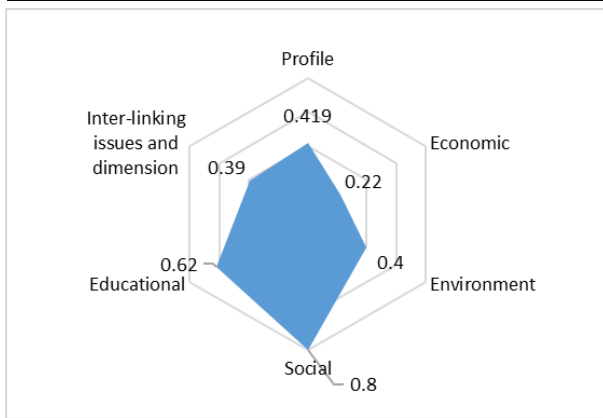
### The Result of the Sustainability Performance of Universitas Pendidikan Ganesha

The results of the sustainability performance from Universitas Pendidikan Ganesha based on the GASU guideline and assessment guidelines are presented in Table 1 and Figure 1.

**Table 1.** Sustainability Performance Analysis of Universitas Pendidikan Ganesha based on GASU Method

Sustainability Performance	Information Percentage	Information Ratio
Profile	41.9%	0.419
Economic	22.0%	0.220
Environmental	40.0%	0.400
Social	80.0%	0.800
Educational	62.0%	0.620
Inter-linking and dimensions	39.0%	0.390

Based on the general chart produced from the analysis, it can be concluded that the Universitas Pendidikan Ganesha already has a good sustainability performance. A good university sustainability performance is shown in the social field and the field of education, in particular, the creation of a healthy work environment practice, the recognition of human rights, curriculum development, and research related to the topic of sustainability. This is in line with the characteristics of the university's business which has more performance in the social field. Universities must focus on improving performance in the environmental field to improve the performance of sustainability in the future.



**Figure 1.** General Chart of The Sustainability Performance Analysis of Universitas Pendidikan Ganesha Using GASU Method

The next sustainability performance measurement used is the STARS system. The STARS system performance measurement focuses on measuring the performance of sustainability in higher education institutions. The performance measurement indicators at the STARS system are intended to assess the sustainability performance of organizations in the education sector. The content analysis method is used in this stage to examine the report and the university's document and analyze that information is contained in the checklist of sustainability performance indicators. The content analysis method is used by looking at a checklist of indicators and seeking the information on the reports and the university's documents. If the information contained in the report or the university's documents, it will be given a value following the STARS system guideline.

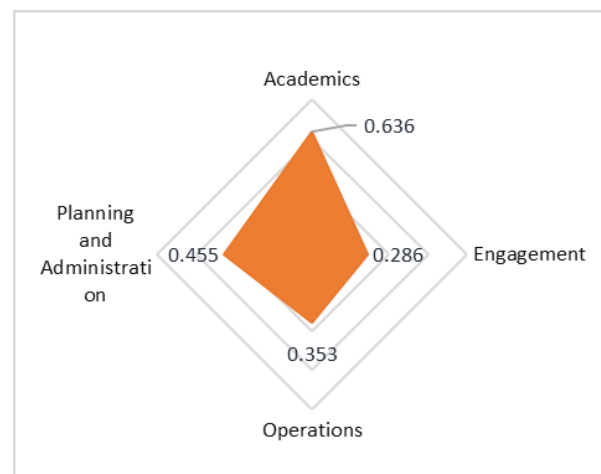
The results of the sustainability performance from Universitas Pendidikan Ganesha based on the STARS system are presented in Table 2 and Figure 2. Based on the STARS system analysis, the university has good performance in academics categories with the information ratio is 0,636. From the academic perspective, the university has developed enough curriculum to introduce the sustainability concept. The scientist from the university also published some research in the sustainability context. The university's ma-

agement should improve the university's performance, particularly in the context of an operation. The university should consider publishing internal guidelines related to the implementation of the sustainability concept. In the future, the university's management should improve its performance in the environmental and operations field.

**Table 2.** Sustainability performance analysis of Universitas Pendidikan Ganesha based on STARS system

Sustainability Performance	Information Percentage	Information Ratio
Academics	63.6%	0.636
Engagement	28.6%	0.286
Operations	35.3%	0.353
Planning and administration	45.5%	0.455

Research from Findler et al. (2019) examined the main impacts of higher education institutions in the sustainable development context. The university's management can focus on social performance and environmental performance to support sustainable development. The university's management should realize that the university organization has an important role to support the society to become a sustainable society.



**Figure 2.** General Chart of The Sustainability Performance of Universitas Pendidikan Ganesha Using the STARS System



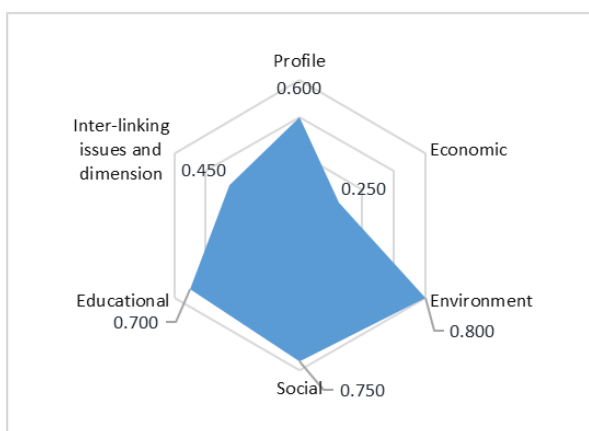
### The Result of the Sustainability Performance of Universitas Indonesia

The sustainability performance from the Universitas Indonesia was analyzed based on information submitted in the university’s sustainability report in 2018. The content analysis method is used for analysis and this analysis process also used the GASU method and the STARS System model. The results of the sustainability performance analysis from Universitas Indonesia based on the GASU method have been presented in Table 3 and Figure 3.

**Table 3.** Sustainability Performance Analysis of Universitas Indonesia based on GASU Method

Sustainability Performance	Information Percentage	Information Ratio
Profile	60.0%	0.600
Economic	25.0%	0.250
Environmental	80.0%	0.800
Social	75.0%	0.750
Educational	70.0%	0.700
Inter-linking and dimensions	45.0%	0.450

Based on the analysis of sustainability performance with the GASU method, this study showed that the sustainability performance of the Universitas Indonesia in the social sphere, education field, and the environmental field has a high value.



**Figure 3.** General Chart of The Sustainability Performance Analysis of Universitas Indonesia Using GASU Method

It can be seen from the comprehensive information presented in the university’s sustainability report where the most information presented is information on university performance on social and environmental fields. Information on environmental performance has the highest percentage. This indicates that the university’s management has had a strong commitment to environmental issues. On social and education performance, the university’s management has disclosed information about community service activities that have been performed, the university’s curriculum that has been integrated with the concept of sustainability, and the budget for sustainability research.

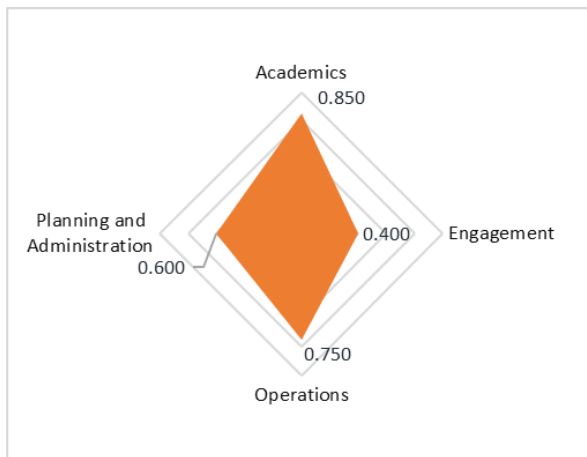
The sustainability performance analysis using the STARS system also reflects the same result. As shown in Table 4 and Figure 4 the Universitas Indonesia has a high performance in the academics and operations field.

**Table 4.** Sustainability performance analysis of Universitas Indonesia based on STARS system

Sustainability Performance	Information Percentage	Information Ratio
Academics	85.0%	0.850
Engagement	40.0%	0.400
Operations	75.0%	0.750
Planning and administration	60.0%	0.600

The university’s management has developed the perfect curriculum integrated with the sustainability concept. The purpose of this integrated curriculum is to build the initial awareness about the sustainability concept for the students and develop the sustainability concept in the social community. The university also has a high effort to build its internal operating system based on the sustainability concept. The university’s management has developed the waste management system and create the framework of using renewable energy for the university’s operation process. It means the university’s ma-





**Figure 4.** General Chart of The Sustainability Performance of Universitas Indonesia Using the STARS System

management has a high effort to implement a good environmental system. The level of the university's environmental system will connect with the university's environmental performance. If the university has a high university environmental system, therefore the university will have a high environmental performance in its internal activities.

### **Is It Possible to Implement the Sustainability Accounting Concept in Higher Education Institution (Public Sector Organization)?**

The sustainability performance analysis by using the GASU model and the STARS System described that Universitas Indonesia and Universitas Pendidikan Ganesha had a high sustainability performance. The results showed that both universities had a sufficient ability to implement the sustainability accounting concept in the organization activities. The assessment process of sustainability performance is important to assess the ability of an organization before implementing the concept of sustainability accounting to the internal organization. In general, the university's activities, including in the education field, do not produce negative externalities to the university's stakeholders.

The absence of adverse effects on the social community and environment caused by the university's activities is evidenced by the high performance on environmental performance indicators and social performance indicators. These results indicate that a university or higher education institution may implement the concept of sustainability accounting with a focus on environmental performance and social performance. To improve the performance quality in the field of the environment, the university's management can practice the measurement of environmental costs contained in the internal activities of the university. The recognition of the environmental costs will show a high commitment to the university's management to develop the university's sustainability performance.

Research from Vargas, Mac-Lean, and Huge (2019) has identified the four stages to implement the sustainability concept in the internal university. These stages are emergence, popularization, formalization, and maturity. Based on this research result, the implementation process of the sustainability concept in the research object is still in the popularization stage. It means the university's management should release their high effort to promote the sustainability concept in their university.

The university's management can develop the concept of corporate social responsibility. This concept can be the initial concept for university social responsibility. The concept of university social responsibility means that the university has a real contribution to the wider social community and the impact of this process is the university's management should prepare the budget for the university social responsibility in their budgeting process. This social budget reflects the commitment from the university's management to its social community. Hasan and Yun (2017) found that the organization's so-

cial responsibility had a positive correlation with the organization's reputation. It means if the university prepares a high amount of the social budget and use this budget for the real contribution to the social community, the reputation of that university will increase significantly.

The university's management can disclose their financial information and non-financial information through the university's sustainability report. The previous research showed that the university (as a non-business organization) had enough resources to create the sustainability report. Research from An, Davey and Harun (2017) found that the public university in New Zealand had disclosed its sustainability report, unfortunately, this process needed the support from the wider stakeholders to increase the process quality. Research from Gamage and Sciulli (2017) examined the development of sustainability reporting by Australian universities and found that the development process needed support from the social community. Based on this research result, the university's stakeholders have an important role to help the university's management to prepare and develop their sustainability report. The sustainability report has a high role in the context to maintain the relationship between the university's management and its stakeholders. The university's sustainability report is an "information bridge" to transfer the internal information from the university's management to its important stakeholders.

In the future, the university's management also prepares for its integrated reporting process. Integrated reporting is the "evolution" from the organization's reporting process which contains more comprehensive information about the organization's performance (including financial performance and non-financial performance). Previous research from McNally, Cerbone, and Maroun (2017) examined the challenges of preparing the

integrated report. The policy-maker can use this research result to develop the appropriate guideline for the integrated reporting process. Today, public universities can hold an important role to be a pioneer in the context of reporting. The public university is the role model for the other organization to disclose financial information and non-financial information. By disclosing the comprehensive information (financial information and non-financial information), the public university can improve the quality of their transparency and accountability. This process will improve the reputation of the organization and this process will promote sustainability reporting in the higher education ecosystem. The process of implementing sustainability accounting concepts needs support and commitment from the university's management. The commitment to implement a sustainability accounting concept can be written in the organization's vision and mission. Thus, all the university's internal stakeholders will know this commitment. It is important to promote the implementation process to all internal stakeholders and increase the participation from the internal stakeholders to support the implementation process.

The university's management should also improve the internal stakeholder engagement (staff engagement) to support the implementation process of the sustainability concept. Research from Dyball et al. (2015) suggested to the university's management to improve their staff participation in the implementation of the sustainability concepts in the university. The university's internal stakeholders have an important role in the implementation process and the university's management should give appreciation for the internal stakeholders if the implementation process is successful. The university's internal stakeholders can be divided into the lecturers, the students, and the department staff. Each group in the internal stakeholders

should have the same participation level to support the implementation of the sustainability concepts in their internal university. The internal stakeholders should commit to support the implementation of the sustainability concept in the university. This commitment can help the university's management to create an organizational culture that supports the implementation of the sustainability concept. For supporting this statement, this study has analyzed the sustainability report from Universitas Indonesia and found the statement said

*“There are 59 student organizations related to sustainability, with 198 events related to sustainability. More than 300 scholarly publications on sustainability are published.”*

and

*“About 160.920.652,793 rupiah (27% from total fund) is dedicated to sustainability research.”*

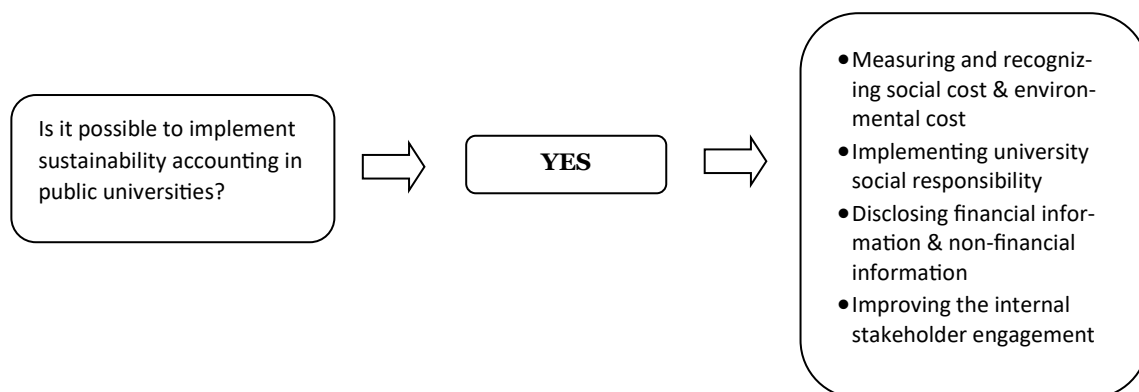
That statement shows that Universitas Indonesia gives a high participation level to its students to participate in a sustainability concept. The university's students will know about the sustainability concept and try to implement the concept in their activities. This is an example of how the university's internal stakeholders promote the sustainability concept in their academic community. The university's management also has a high concern in sustainability research. This university has allocated 27 percent of the research fund to support sustainability re-

search. It will improve the quality of sustainability research and can help to promote the concept to the outside academic community. Through research, the sustainability concept will be developed and the research result will have a real contribution to the social community and the environment condition.

The author conducted a semi-structured interview with the university's management from Universitas Pendidikan Ganesha to receive a comprehensive perspective about the implementation of sustainability accounting in public universities. The university's management said

*“We believe that sustainability accounting is an important tool for the future. We realize that the university has a big responsibility for the social community and the environment. We need to measure and recognize our social cost and, in the future, we have a high commitment to disclose our comprehensive information through the university's sustainability report.”*

Based on the statement, it can be concluded that the university's management realizes that sustainability accounting is an important element in the future. Using the sustainability accounting concept, the university's management can measure and recognize its social cost and environmental cost. The sustainability accounting concept could also help the university's management to disclose its comprehensive information (financial in-



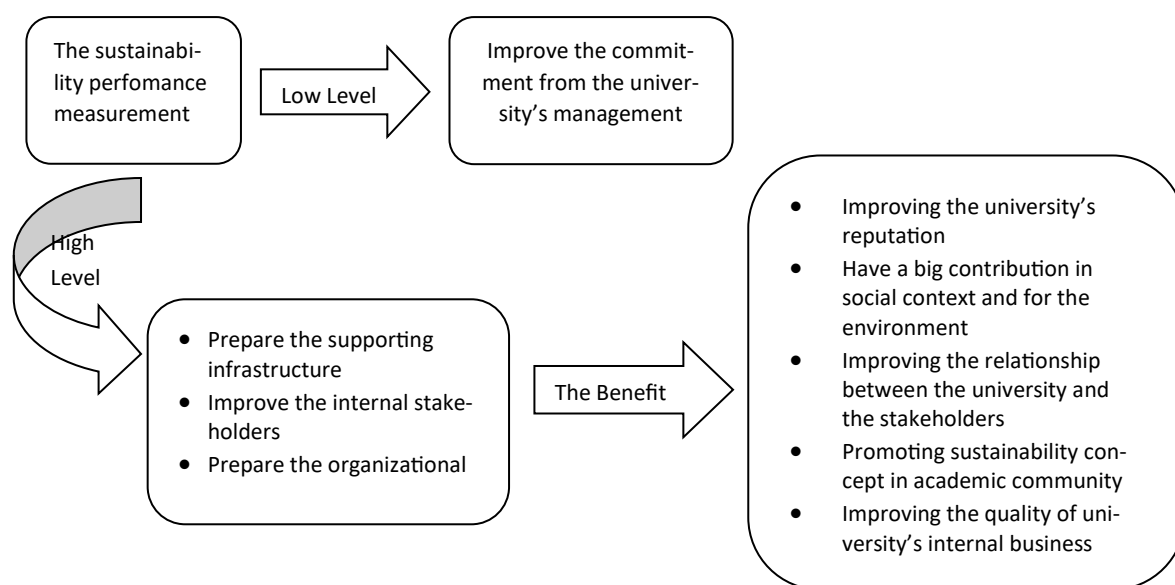
**Figure 5.** How to implement sustainability accounting concept in public university

formation and non-financial information). Universitas Pendidikan Ganesha has launched the green campus program which divided into several programs, for example, the commitment to reduce plastic waste and improving the participation from the university's stakeholders to protect the environment.

Figure 6 is the diagram to explain the connection between sustainability performance measurement and the implementation of sustainability accounting in the public university. The diagram begins with the first stage, namely the measurement of sustainability performance. In this stage, university management can use several methods to check their sustainability performance (generally university management will use the GASU method and the STARS System method). The university's sustainability performance consists of three dimensions, financial performance, social performance, and environmental performance. Measurement of sustainability performance will provide information to university management, whether the university has a low or high level of sustainability performance. If the measurement of sustainability performance

shows that universities have a low level of sustainability performance, that means university management must increase their commitment to applying the concept of sustainability. The commitment of university management is the starting point for applying the concept of sustainability. If the measurement of sustainability performance shows that the university has a high level of sustainability performance, this is good news for university management. For completing the high sustainability performance, the university's management should prepare the supporting infrastructure, improve the role of internal stakeholders in the context of sustainability, and prepare the organizational culture.

As for the supporting infrastructure, university management can create special sections or special departments to handle the university's sustainability performance. Some universities have specialized departments that are responsible for ensuring the implementation process of the concept of sustainability. University management can also release specific guidelines to support the implementation process. The role of the university's internal stakeholders is crucial for the imple-



**Figure 6.** the sustainability performance measurement and the implementation of sustainability accounting in the public university

mentation process. It is important because the engagement process of internal stakeholders can support the implementation process. The university's management also needs to prepare the organizational culture for the implementation of sustainability accounting. This means that every section in the organization understands with the sustainability concept and the university's management has a big responsibility to ensure it. After the implementation of sustainability accounting, the university will receive the benefits.

This study has identified some benefits for the university if the university's management has a high level of sustainability performance. The first benefit is improving the university's reputation in the academic community. It means that the university has a big contribution to the social community and the environment. Every university in Indonesia has created a specific budget for the community service program and this policy is important to improve the role of the public university in a social community. This study interviewed the accounting staff at Universitas Pendidikan Ganesha to receive another perspective about the university's community service program. The statement obtained is

*“Each year, the university has created a specific budget for the community service program. We do not understand the social cost (and also sustainability accounting). There are no guidelines about sustainability accounting for the public university. We realize that the budget for the university community service is a social investment from the university in the future to build our local community.”*

Based on this statement, it can be concluded that the university's management has a high effort to help the social community through its budget decision. That budget is the investment from the university (university's social investment) to build the quality of the local community. The next benefit for the universi-

ty is improving the relationship between the university's management with its important stakeholders. Disclosing the comprehensive information through the university's sustainability report will help this process. The university's stakeholders can use comprehensive information in the university's sustainability report in the context of the decision-making process. The comprehensive information will help the university's stakeholders produce their decision and will improve the decision's quality.

The next benefit is the university will help to promote the sustainability concept in the academic community. The members of the academic community will have enough knowledge about sustainability (also sustainability accounting) and the result is the other universities will implement the sustainability accounting concept. The last benefit is the implementation of sustainability accounting will improve the university's internal business. The university's management will concern with the university's social and environmental performance, recognize and measure the university's social cost and the environmental cost, and push each department in the university to disclose their comprehensive information. These benefits are important for the university and the university's stakeholders.

The study also identifies the obstacles and challenges in the implementation process of sustainability accounting in the higher education institution. First, there are no standards or guidelines in the application of the sustainability accounting concept for the university is a major challenge in the application of this concept. Some of the organizations concerned in the development of sustainability accounting concepts, for example, the SASB, have issued guidelines and standards for the implementation process of sustainability accounting at higher education institutions. Problems can arise when the guideline or guidance is not suitable for the characteristics of higher

education institutions in Indonesia. Different characteristics may cause special standards or guidelines can not be applied to universities in Indonesia. Based on this fact, it is important to build a specific standard for the public university in Indonesia. This is a small step to promote the implementation of the sustainability accounting process in a higher education institution. The policy-maker should realize and understand that promoting sustainability concept is important for the next generation. The university's management should take this crucial role and start to promote the sustainability concept in its internal organization.

Second, the university's stakeholder groups have not put serious attention to university to apply the concept of sustainability accounting. Previous research, for example, Amran and Keat Ooi (2014), Bradford, Earp, Showalter, and Williams (2017) also O'Dochartaigh (2017), found that the presence of pressure or request from the organization's stakeholders for their organizations to disclose information in a sustainability report to be one of the crucial factors that drove the management's organization to prepare a sustainability report. A stakeholder group is an important group that supports the implementation of the sustainability accounting concept. The stakeholder group can request comprehensive information (financial information and non-financial information) to the university's management for supporting this implementation process. This initial step will impact the university's internal activity. Each part and section in the internal organization will prepare the specific information and this information can collaborate into one report. The university's sustainability report will contain comprehensive information and the stakeholder's group can use this report in the context of the decision-making process. Another obstacle and challenge are there is no integration between the university's curriculum and the sustainability concept.

## CONCLUSION

The focus of this study is to examine the sustainability performance from the higher education institution. Using two different models (the GASU Method and The STARS System), this study found that the research object had a good performance in the context of sustainability performance. The study concluded that Universitas Indonesia and Universitas Pendidikan Ganesha can implement the concept of sustainability accounting in the organization's activities. The results of the sustainability performance measurement indicate that the Universitas Indonesia and Universitas Pendidikan Ganesha have an excellent sustainability performance (especially on social performance and environmental performance) and these results can be used as a basis or arguments for implementing the concept of sustainability accounting at a university (public sector organization). Based on the study result, the important factors that support the implementation of sustainability accounting in public universities are the commitment from the university's management and the support from the university's stakeholders. The policy-maker also supports this process by creating the perfect guidelines for the implementation process of sustainability accounting in the public university. If the appropriate guidelines are available, the university's management can practice and implement the sustainability accounting comprehensively in their internal organization.

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