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# Integration of Sustainability Reporting at an Academic Institution

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# Walden University

College of Management and Technology

This is to certify that the doctoral study by

James Shimko

has been found to be complete and satisfactory in all respects, and that any and all revisions required by the review committee have been made.

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Walden University 2016

## Abstract

Integration of Sustainability Reporting at an Academic Institution

by

James Shimko

MBA, Youngstown State University, 1988 BM, Youngstown State University, 1983

Doctoral Study Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Business Administration

Walden University

August 2016

#### Abstract

Leaders at nonprofit academic institutions are following the global business trend of embracing sustainability initiatives for positive social change; however, there has been slow growth in sustainability reporting among academic institutions. The purpose of this study was to explore the strategies and processes necessary for leaders and managers to integrate sustainability reporting into the reporting cycle for a nonprofit higher education institution. I conducted a single case study of a nonprofit academic institution that utilized sustainability reporting. The study sample consisted of 4 leaders and managers at a nonprofit academic institution located in the state of Michigan that published sustainability reports. The conceptual framework used for the study was corporate social responsibility (CSR), sustainability, and triple bottom line (TBL). The data collection process included interviews with leaders and managers involved in the sustainability reporting process and document reviews of the sustainability report and annual reports. I used a data-driven coding approach for data analysis. The codes were linked to create categories, and the categories led to the development of themes. The results revealed 5 themes regarding the sustainability reporting process, including the steps of the sustainability reporting process and the collaborative process in sustainability reporting. The implications for positive social change included the potential for greater transparency for students, faculty, staff, administration and community partners, and greater effectiveness of the implementation of environmental, economic, and social initiatives for higher education institutions and the community.

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# Dedication

I dedicate the study to my wife, Peggy, and to my children, Miyoko and Hiroshi, for their loving support.

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## Section 1: Foundation of the Study

Communities, businesses, governments, and investors throughout the world understand the need for conservation of resources and social equity in a constantly changing global environment (Mori, Best, & Cotter, 2013). Leaders need to be responsible not just for the financial aspects of the organization, but also responsible for the organization's effect on the environment and society, according to the theory of corporate social responsibility (CSR; Christofi, Christofi, & Sisaye, 2012). Although the concept of CSR refers to corporations, the concept of social responsibility and sustainability is applicable for all organizations, including nonprofit organizations and academic institutions (Othman & Othman, 2014). The purpose of this qualitative single case study was to explore the steps necessary for leaders and managers to integrate sustainability reporting into the reporting cycle for a nonprofit higher education institution.

#### **Background of the Problem**

CSR is a concept embraced by organizations throughout the global environment (Christofi et al., 2012). Leaders need to be responsible for the impact their organizations make on the environmental, economic, and social aspects in the community (Hack, Kenyon, & Wood, 2014). To assess progress and communicate with stakeholders, organizational leaders use sustainability reporting for CSR initiatives (Luke, Barraket, & Eversole, 2013). However, leaders of higher education institutions do not use sustainability reporting at the same rate as corporations (Lange & Kerr, 2013).

Higher education institutions are complex organizations with ties to communities through multiple stakeholders and partnerships (Krizek, Newport, White, & Townsend, 2012). Students, faculty, staff, administrators, and community partners of higher education institutions view sustainability as a significant goal; approximately two-thirds of prospective college freshman have claimed that the green initiatives of a university are a factor in college choice (Krizek et al., 2012). Accounting professionals have discussed the need for an accountability reporting system for nonprofit organizations, but have not addressed the steps needed to integrate sustainability reporting into the reporting cycle (Zainon et al., 2014). It is essential for academic leaders to understand the process of integrating sustainability reporting into the reporting cycle at nonprofit academic institutions and to encourage its use for greater transparency and benefit to students, faculty, staff, administration, and community partners.

#### **Problem Statement**

Leaders at nonprofit academic institutions have followed the global business trend of embracing sustainability initiatives for positive social change; however, there has been slow growth in sustainability reporting among academic institutions (Lange & Kerr, 2013). Even though sustainability reporting increased for private-sector organizations, academic institutions compose only 0.75% of reporting organizations globally (Lange & Kerr, 2013). The general business problem is that the lack of sustainability reporting for some nonprofit academic institutions may have led to inaccurate or incomplete information for stakeholders. The specific business problem is that some leaders and

managers of nonprofit educational institutions may lack the tacit knowledge regarding the strategies and processes necessary to integrate sustainability reporting into the reporting cycle of the organization.

#### **Purpose Statement**

The purpose of this qualitative single case study was to explore the strategies and processes necessary for leaders and managers to integrate sustainability reporting into the reporting cycle for a nonprofit higher education institution. Sustainability reporting is the implementation of accounting methods that record and report the triple bottom line (TBL) of environmental, economic, and social impacts (Milne & Gray, 2013). The target population consisted of leaders and managers at a nonprofit academic institution located in the state of Michigan that published sustainability reports. I conducted a case study of one nonprofit academic institution that utilized sustainability reporting. This population was appropriate for the study because the Sustainability, Tracking, Assessment and Rating System (STARS) reporting framework was used by higher education institutions located in the United States (Krizek et al., 2012). The implications for positive social change included the potential for greater transparency for stakeholders and greater effectiveness of the implementation of environmental, economic, and social initiatives for higher education institutions.

#### **Nature of the Study**

I used a qualitative method for the study to explore the process of integrating sustainability reporting into the reporting cycle of a nonprofit academic institution.

Researchers use a qualitative method when the focus is upon the subjective meaning, experiences, and motivating actions of a real-world situation (Delattre, Ocler, Moulette, & Rymeyko, 2009). A quantitative method is appropriate when the focus is upon observable and objective data and facts that can be quantified in order to demonstrate causality (Wahyuni, 2012). A quantitative method was not appropriate for this study because an exploration of a business process required qualitative information such as experiences and decision-making processes.

I used a single case study design for the study. A case study design was suitable because the focus was on a process within an organization with an in-depth and holistic approach (Zivkovic, 2012). I conducted interviews with leaders and managers involved in the sustainability reporting process of a nonprofit academic institution. In addition to the interview data, I collected data from document reviews of sustainability reports as well as financial reports and annual reports. I did not use a phenomenological design because a phenomenological study is a description of common experiences about a phenomenon (Petty, Thomson, & Stew, 2012). I explored a business process or system; therefore, a single case study design was appropriate.

# **Research Question**

Through the study, I addressed one central research question:

RQ 1. What strategies and processes do academic leaders and managers use to develop, deploy, and integrate sustainability reporting into the reporting cycle of a nonprofit academic organization?

## **Interview Questions**

The purpose of this qualitative single case study was to explore the strategies and processes necessary for leaders and managers to integrate sustainability reporting into the reporting cycle for a nonprofit higher education institution. The objectives for the interviews were to (a) understand the process of integration of sustainability reporting into the reporting cycle, (b) understand the overall strategy of the implementation of sustainability reporting, and (c) understand the decision-making process of leaders and managers regarding sustainability reporting. The interview questions for the study were

- 1. Why is your institution committed to sustainability reporting?
- 2. What types of reports are used by your institution for sustainability reporting and why?
- 3. What type of framework is used for sustainability reporting and why?
- 4. What is the process of planning and developing the sustainability reporting system?
- 5. What is the process of implementing and managing the sustainability reporting system?
- 6. What are the improvements needed, if any, for the sustainability reporting system at your organization and why?
- 7. Is there anything that you would like to add that is relevant to defining the strategies and processes needed to implement sustainability reporting at your institution?

## **Conceptual Framework**

The conceptual framework I used for the study was CSR. H. Bowen defined the concept of CSR in 1953. H. Bowen (1953) stated CSR is the responsibility that businesses should have to society. The current CSR paradigm incorporates three concepts of responsibility for corporations: (a) economic, (b) social, and (c) environmental (Christofi et al., 2012).

The goal for CSR is to ensure that corporate actions and decision making are beneficial for society and all stakeholders (Hack et al., 2014). The key components underlying the concept of CSR are (a) economic indicators such as revenues, operating costs, and community investments; (b) environmental indicators such as impact on living/non-living natural systems, waste, and environmental compliance; (c) social indicators such as impact on human rights and labor practices, benefits, and diversity; and (d) transparency (Christofi et al., 2012).

Montiel and Delgado-Ceballos (2014) explored corporate sustainability, which is considered an extension of the concept of CSR. The concept of corporate sustainability incorporates a guide for action that transforms the entire organizational structure (Montiel & Delgado-Ceballos, 2014). Montiel and Delgado-Ceballos concluded that leaders using corporate sustainability need to follow a systems approach and integrate sustainability into the processes and strategies of the organization.

Another conceptual framework element relevant to the study was the TBL framework developed by Elkington (1997). Elkington defined sustainability using three

measurements: social, environmental, and economic performance. The TBL framework reflects the three CSR concepts and provides a set of indicators for sustainability reporting (Lin, Chang, & Chang, 2014). Christofi et al. (2012) defined sustainability reporting as the implementation of accounting methods that record and report TBL results.

## **Operational Definitions**

Corporate social responsibility (CSR): Corporate social responsibility (CSR) is a concept that represents the responsibility of an organization to the environment, economy, and the community (Hack et al., 2014). The concept of CSR reflects the relationship of the organization with stakeholders and society (Christofi et al., 2012).

Integrated reporting: Integrated reporting is the combination of sustainability reporting with other traditional accounting reports (Rogers & Herz, 2013). Ioana and Adriana (2013) considered integrated reporting as an evolutionary development of standalone sustainability reporting and the future of reporting in the accounting field.

Sustainability: Sustainability is a concept that encompasses the ability of leaders of organizations to meet the needs of the firm and stakeholders while maintaining environmental, financial, and social performance (Searcy & Buslovich, 2014). The concept of sustainability includes the organization leaders' concerns with social and environmental issues in business activities and interactions with stakeholders (Van Der Ploeg & Vanclay, 2013).

Sustainability reporting: Sustainability reporting is a tool for managers to assess and communicate their CSR initiatives (Christofi et al., 2012). Sustainability reporting is a reporting system for communicating the TBL of organizational CSR practices to internal and external stakeholders (Ekwueme, Egbunike, & Onyali, 2013). Sustainability reporting is also known as TBL reporting; environmental, social and governance reporting; corporate responsibility reporting; and CSR reporting (Lusher, Way, & Rock, 2012).

Sustainability reporting framework: A sustainability reporting framework is a tool to use as a guide in reporting both financial and nonfinancial activity (Waite, 2013).

Managers can use a sustainability reporting framework to plan and develop sustainability reports (Yarime & Tanaka, 2012).

Triple bottom line (TBL): The concept of the TBL is the core concept that forms the foundation of sustainability reporting (Milne & Gray, 2013). The TBL model includes the triple measures of financial, social, and environmental performance for organizations (Ekwueme et al., 2013).

#### **Assumptions, Limitations, and Delimitations**

An assumption is a fact that is not verified within the study (Zivkovic, 2012). A limitation is a potential weakness that may affect the external validity of a study (Ruzzene, 2012). A delimitation is a boundary that outlines the scope of the study (Ruzzene, 2012).

## Assumptions

An underlying assumption was that leaders at some academic institutions recognized the benefits of sustainability reporting and strove to incorporate sustainability reporting into the reporting cycle. Another assumption was that leaders at those academic institutions embraced the concept of social responsibility and recognized the significance of the impact of an organization on the community and environment. I focused on an organization that practiced CSR to provide an in-depth study of an academic institution whose leaders recognized the benefits of sustainability programs and reporting. I assumed that the leaders who participated were knowledgeable about sustainability reporting and they were honest in answering research questions and thorough in providing required documentation to complete the study.

#### Limitations

A single case study is a limitation because it may hinder transferability to other organizations (Zivkovic, 2012). I mitigated the limitation by selecting an exemplary case of an academic institution that had fully integrated sustainability reporting into the reporting cycle. An exemplary case is typically used as a model of an under-researched phenomenon in a case study (Zivkovic, 2012).

Another potential limitation of the case study was the willingness of participation by leaders and the honesty in the responses of the leaders. I mitigated the limitation by thoroughly explaining the data collection process to leaders in order to have clear communication about the level of participation needed for the study (Wahyuni, 2012).

The results of the study are limited by the honesty and thoroughness of the participants' responses.

#### **Delimitations**

The study was delimited to one nonprofit academic institution in the United States. I included sustainability managers, contributors of the sustainability reports, and the highest ranking responsible officer, confirming accuracy of the sustainability reports as leaders of the organization. I collected and analyzed document data from the sustainability reports and financial statements of the organization, as well as budget reports, and auditor's reports. The scope of the study did not extend outside of the United States and did not include for-profit organizations. I conducted the interviews and document reviews of the study over the course of 2 months, so the scope of the study did not extend past a 2-month period.

# Significance of the Study

#### **Contribution to Business Practice**

CSR is a concept embraced by leaders of organizations throughout the global environment (Christofi et al., 2012). Leaders of organizations need to be responsible not just for financial aspects of business, but also responsible for their effect on the environment and society (Hack et al., 2014). In order to assess progress and communicate with stakeholders, leaders at organizations have been using sustainability reporting for CSR initiatives (Luke et al., 2013).

Nonprofit academic institutions have been part of the trend of sustainability; however, higher education institutions have not kept up with sustainability reporting, as compared to corporate organizations (Lange & Kerr, 2013). Through the study, I explored the strategies and processes academic leaders and managers employed for integrating sustainability reporting into the reporting cycle at a nonprofit academic institution. Leaders and managers at nonprofit academic institutions may use the findings of the study to incorporate sustainability reporting for their CSR initiatives.

Leaders and managers of nonprofit academic institutions who are considering using sustainability reporting for the CSR initiatives of their organization are one potential audience of the study. Another target audience is students, faculty, staff, administration, and community partners who are interested in understanding the sustainability reporting process. Accounting professionals may be interested in the study because sustainability reporting has links with financial reporting (Ngwakwe, 2012). Accounting professionals work with sustainability managers. Therefore, the findings, conclusions, and recommendations from the study may contribute to these individuals' knowledge of the internal organizational processes in sustainability reporting.

#### **Implications for Social Change**

People, communities, and societies throughout the world have realized that conservation of resources, social equity, and fiscal responsibility are necessary for positive growth of the global environment (Hack et al., 2014). Leaders at organizations are developing and implementing CSR initiatives in response to stakeholders' needs and

concerns (Lin et al., 2014). Sustainability reporting is an essential part of the process of CSR initiatives (Mori et al., 2013).

Through sustainability reporting, leaders of organizations become accountable to stakeholders (Lin et al., 2014). Organizational leaders will be able to (a) understand the needs of their communities, (b) demonstrate effectiveness of sustainability projects, and (c) improve CSR initiatives by using the findings of sustainability reports. By improving sustainability initiatives, organizational leaders at academic institutions can bring about positive social change, not only for students, faculty, staff, administration, and community partners, but also to the environment and society.

#### A Review of the Professional and Academic Literature

A review of the research provided background and assisted in framing the problem for a qualitative study. Sustainability reporting is defined as a means for managers to assess and communicate their CSR initiatives (Christofi et al., 2012). Sustainability reporting is also known as TBL reporting, environmental, social and governance reporting, corporate responsibility reporting, and CSR reporting (Lusher et al., 2012).

I used a variety of keywords for searching business research databases such as Business Source Complete and Sage Premier. Some of the keywords used were TBL, CSR, sustainability reporting, green accounting, nonprofit, and university. I searched for full-text, peer-reviewed articles starting from the year 2012 to 2015. The summary of the frequencies of peer-reviewed articles published from 2012 to 2015 is shown in Table 1.

After searching two business databases, there were a total of 3,735 potential articles using the keyword searches, as shown in Table 1.

The purpose of the qualitative case study was to explore how sustainability reporting is managed at a nonprofit higher education institution. Sustainability reporting is used to document, assess, and communicate the progress of CSR initiatives to stakeholders. A literature review of sustainability reporting included a historical review of the conceptual framework of CSR and TBL. The review of the literature included different aspects of sustainability reporting: (a) conceptual framework, (b) current sustainability reporting practices, (c) benefits and risks of sustainability reporting, (d) professional accountancy involvement, (e) stakeholders' roles in sustainability reporting integrated reporting, (f) managerial use of sustainability reporting, (g) sustainability reporting frameworks, and (h) integrated reporting and the future of sustainability reporting.

Table 1
Summary of Frequency of Peer Reviewed Articles Published from 2012 to 2015

Keyword	Business Source Complete	Sage Premier
Sustainability reporting	157	82
TBL	138	196
CSR	1596	1255
CSR, nonprofit	33	224
Green accounting	42	4
CSR, academic institution	1	7
Total	1967	1768

## **Conceptual Framework**

**Historical review of CSR.** The purpose of the study was to explore how sustainability reporting is managed at a nonprofit higher education institution. Managers use sustainability reporting to document, assess, and communicate the progress of CSR initiatives to stakeholders. H. Bowen initially defined the concept of CSR in 1953. Carroll expanded the CSR model in 1999.

The concept of CSR was used to explain the responsibility that organizations have to benefit society and the community (Hack et al., 2014). Corporate sustainability, an expansion of the concept of CSR, emphasizes the need for organizations to integrate economic, social, and environmental systems into the organizational process. As of 2014, the definition of CSR appeared to reflect the relationship of the organization with stakeholders and society (Hack et al., 2014).

Leaders who are committed to CSR develop and implement practices that promote corporate sustainability. Montiel and Delgado-Ceballos (2014) considered corporate sustainability an extension of the concept of CSR. Montiel and Delgado-Ceballos concluded that there was no singular definition of corporate sustainability, but it typically emphasizes the need for organizations to find ways to interconnect social, economic, and ecological systems.

Although the concept of CSR refers to social responsibility, the research indicated that there is a link between CSR and competitiveness at the business and national levels (Boulouta & Pitelis, 2014). Boulouta and Pitelis (2014) suggested that CSR can make a

positive contribution to national competitiveness, as measured by national living standards. Leaders of companies redefined the rules of CSR through managing of their roles within the business environment (Albareda, 2013). Business environments created a culture of cooperation and competition, which led to standards, practices, and processes in CSR reporting (Albareda, 2013).

T. Hahn, Figge, Aragon-Correa, and Sharma (2015) argued that the concept of corporate sustainability includes the contribution of an organization to goals regarding environmental issues, social equity issues, and economic development. T. Hahn et al. defined the concept of corporate sustainability as a demonstration of social and environmental issues in business operations of an organization. The concept of corporate sustainability also included interactions with stakeholders. The concept of corporate sustainability emphasized a long-term objective of how an organization can benefit society (T. Hahn et al., 2015).

T. Hahn et al. (2015) argued that many studies regarding corporate sustainability were based on an institutional theory or resource-based perspective. Institutional theory is the notion that leaders of organizations respond to sustainability issues due to demands of the organizational environment. Using institutional theory, T. Hahn et al. argued that a favorable organizational setting was a prerequisite for organization leaders to respond to sustainability issues. Another viewpoint is the resource-based perspective. Using a resource-based perspective, competitiveness becomes a driver for leaders of an

organization to respond to sustainability issues (T. Hahn et al., 2015). T. Hahn et al. pointed out that addressing sustainability concerns can result in a competitive advantage.

Historical review of TBL. Elkington first promoted TBL in 1997. TBL is a concept that identifies the social, environmental, and economic impacts of an organization (Milne & Gray, 2013). Sustainability reporting is defined as a means for managers to assess and communicate their CSR initiatives (Christofi et al., 2012). Sustainability reporting incorporates the economic, environmental, and social performance indicators of an organization into the reporting process (Christofi et al., 2012). The TBL model is used to promote the idea that leaders of an organization should measure not just the financial bottom line, but also the social and environmental performance (Ekwueme et al., 2013).

Transparency and accountability are essential components of a CSR strategy; organization leaders use sustainability reporting as a tool to provide transparency and accountability to stakeholders (Ekwueme et al., 2013). Stakeholders can assess the progress of CSR initiatives by viewing the TBL indicators of economic, environmental, and social performance in sustainability reporting. Sustainability reporting is necessary for assessment of CSR initiatives. Leaders need to focus on the actual progress of sustainability initiatives and use the TBL framework as a tool for measurement and assessment (Milne & Gray, 2013).

Leaders at organizations need to be aware of the benefits of integrating TBL into the business process. Benefits of integrating TBL include enhanced image and

differentiation for the organization in the marketplace (Alhaddi, 2014). The economic, social, and environmental concepts of TBL are demonstrated in the global growth of the organization, employee engagement, and strategic sustainability priorities. There is a business advantage of having an enhanced image for the organization by promoting a TBL image (Alhaddi, 2014).

# **Current Sustainability Reporting Practices**

Leaders of organizations throughout the world use sustainability reporting on their official websites (Mori et al., 2013). The percentage of organization leaders issuing a sustainability report increased from 2012 to 2013. However, the percentage of leaders of organizations assuring their sustainability reports was stagnant (Mori et al., 2013). Faisal, Tower, and Rusmin (2012) researched corporate sustainability disclosure practices in a global context. Their findings indicated that the average level of sustainability disclosure was 61.9% for public companies (Faisal et al., 2012). According to a KPMG International survey conducted in 2011, leaders of 62% of companies had a strategy for corporate sustainability, more than 33% of leaders issued at least one public report on sustainability, and another 19% planned to issue a sustainability report by 2013 (Faisal et al., 2012).

James (2013) noted that company leaders formally reported their sustainability efforts to stakeholders; however, reporting was voluntary, and the level and quality of the disclosures varied among companies. Sustainability reporting evolved in terms of standards, guidelines, and processes (Searcy & Buslovich, 2014). There are standards

used for sustainability reporting; however, there is no singular universal standard (Faisal et al., 2012).

The global business environment consists of a culture of cooperation and competition; leaders of organizations need to adapt to the changes occurring in the areas of sustainability and CSR (Albareda, 2013). An analytical framework to analyze CSR accountability standards should include the scope of the reports, the stakeholders involved, performance evaluations, and types of monitoring strategies (Albareda, 2013). Searcy and Buslovich (2014) identified key challenges in developing sustainability reports including timelines, data collection, selecting content, and balance in reporting.

Sustainability practices and reporting influenced performance measurement in terms of purpose, measurements, and ownership (Klovienė & Speziale, 2015).

Performance measurement and sustainability reporting became more important within organizations, expanding influence into decision making for leadership (Klovienė & Speziale, 2015). Klovienė and Speziale (2015) concluded that managers should expand the content of performance measurement systems in response to sustainability issues and to provide this information for sustainability reporting.

Managers at large companies tend to use sustainability and integrated reporting more than managers at small and midsized companies (James, 2013). James (2013) concluded that integrated reporting might provide benefits for small and midsized companies, enhancing the legitimacy of the company and its economic success.

Integrated reporting may enable leaders of small and midsized companies to obtain

funding for expansion projects, gain new investors, or allow for opportunities for acquisition by another company (James, 2013).

Although some leaders of organizations used sustainability reporting, some did not engage in sustainability reporting (Stubbs, Higgins, & Milne, 2013). Stubbs et al. (2013) found five reasons that explain why a firm did not produce a comprehensive and publicly available report of its sustainability performance: (a) lack of external stakeholder pressure; (b) no perceived benefits and little motivation; (c) sustainability reporting is optional and not mandatory; (d) a compliance approach toward sustainability; and (e) the culture of the organization does not promote reporting. Stubbs et al. concluded that stakeholders, including government, industry partners, and investors needed to exert pressure for better and more detailed disclosure from leaders of organizations to encourage sustainability reporting.

Shabana, Buchholtz, and Carroll (2014) argued that CSR reporting was prevalent to the extent that it was recognized as an expectation for stakeholders. Shabana et al. presented a three-stage process of sustainability reporting. The three stages were defensive reporting, proactive reporting, and imitative diffusion.

Leaders of organizations performed defensive reporting when they did not meet stakeholder expectations. The reporting was used by the organization to explain the gap between expectations and performance (Shabana et al., 2014). Shabana et al. (2014) called the second stage proactive reporting and presented the third stage of imitative diffusion as the point at which leaders of an organization perceived that the net benefits

of sustainability reporting exceeded the net costs. In the third stage, managers perceived CSR reporting was necessary to be consistent with other organizations.

Sustainability reporting at nonprofit organizations and academic institutions. There has not been as much research conducted regarding sustainability reporting at nonprofit organizations and academic institutions in comparison to corporations (Krizek et al., 2012). Sustainability indicators in a higher education institution included the TBL of economic, environmental, and social performance. For an academic institution, social performance included the promotion of well-being, knowhow, and ownership of students and staff as well as community involvement (Othman & Othman, 2014). The academic institution has unique challenges due to the complexity of the organizational structure and the pressures from numerous stakeholders (Krizek et al., 2012). The accounting and financial reporting requirements of nonprofit organizations were identified as different from the private sector because of different needs of the stakeholders of nonprofit organizations (Zainon et al., 2014).

Higher education institutions are oriented with goals of education, research, and service; these goals may compete with each other, making prioritizing a challenge.

Krizek et al. (2012) described four phases of campus sustainability; the fourth phase was a fully self-actualized and integrated sustainability approach. An integrated sustainability approach included sustainability reporting that was available to all stakeholders and fully integrated into the reporting cycle (Krizek et al., 2012).

Although sustainability reporting was a necessary component of CSR, sustainability reporting by academic institutions only constituted 0.75% of all global reporting output (Lange & Kerr, 2013). Lange and Kerr (2013) suggested that the budget of a university was one of the obstacles to implementing sustainability initiatives. Lange and Kerr concluded that leaders at academic institutions needed to rethink the budgeting and accounting procedures to accommodate reporting of economic, social, and environmental impacts.

Sustainability indicators in a higher education institution included the TBL of economic, environmental, and social performance. The academic institution was uniquely challenged due to the complexity of the organizational structure, numerous stakeholders, and community involvement (Godemann, Bebbington, Herzig, & Moon, 2014). Godemann et al. (2014) considered that one role served by academic institutions was as contributors to the values of society. Qian (2013) discussed that leaders of academic institutions were encouraged to prepare students to be socially responsible professionals, but university leaders were slow to incorporate sustainability into curricula and organizational processes.

Another role for the academic institution was to represent an organization that made impacts on the community. Godemann et al. (2014) observed that a relatively small number of academic institutions integrated sustainable development into teaching, research, knowledge exchange, and operations. Administrators should link the entire sustainability approach to the strategy and the academic culture of the university (Qian,

2013). Godemann et al. concluded that the study of academic institutions whose leaders integrated sustainability into their processes would be a useful focus for further research.

Trencher, Yarime, McCormick, Doll, and Kraines (2014) explored sustainability as a new mission for academic institutions. There was a global trend of academic institutions forming collaborative partnerships with government, industry, and community groups to develop sustainable initiatives (Trencher et al., 2014). There were three themes within sustainability at academic institutions: sustainability in the curriculum, sustainability in operations, and sustainability reporting (Vaughter, Wright, McKenzie, & Lidstone, 2013). Nonprofit organizations need to have better sustainability reporting for performance measurement because the needs of the stakeholders emphasize accountability and transparency (Zainon et al., 2014).

Vaughter et al. (2013) concluded that, in terms of sustainability reporting, the majority of studies examined operational outcomes but did not focus on the evaluation of other factors of sustainability, including education, research, governance, or community engagement. Leaders at academic institutions had the opportunity to encourage mutual learning and collaboration in education, research, and outreach activities in sustainability science (Yarime et al., 2012). Interdisciplinary and transdisciplinary multistakeholder collaborations between the academic institution and the community were necessary to develop innovation for sustainability (Yarime et al., 2012).

**Sustainability reporting best practices.** Sustainability reporting is typically voluntary, so guidelines and best practices for sustainability reporting and assurance are

necessary for organizations and stakeholders (Van Der Ploeg & Vanclay, 2013).

Sustainability reports should provide a complete and balanced picture of corporate sustainability performance, including negative aspects (R. Hahn & Lülfs, 2014). Van Der Ploeg and Vanclay (2013) argued the need for an assessment tool to guide a stakeholder on the important focus areas for an evaluation of sustainability reporting.

Luke et al. (2013) examined the factors in sustainability reporting that social enterprises value. Social enterprises are organizations that focus on social purpose and financial objectives. Luke et al. concluded that the best practice for sustainability reporting was to document the actual outcomes and impacts along with qualitative terms rather than taking a strictly financial approach. Luke et al. suggested that a better allocation of the limited resources of social enterprises would be toward documenting the actual outcomes and impacts as a first step in sustainability reporting.

Leaders can use a sustainability reporting assessment tool to assess the reports of their organizations. The focus areas covered in a reporting assessment checklist were accessibility, readability, the use of an established framework, sustainability in a long-term strategy, sustainability in operations, evidence to support information, stakeholder engagement, supply chain responsibility, impacts on stakeholders, and assurance assessment (Van Der Ploeg & Vanclay, 2013). Stakeholders may use a sustainability reporting assessment checklist to determine whether a sustainability report was credible (Van Der Ploeg & Vanclay, 2013).

It is vital for transparency that sustainability reporting reveals both positive and negative assessments of CSR initiatives. R. Hahn and Lülfs (2014) developed a framework for reporting negative aspects to improve the overall balance of sustainability reporting. The framework was based on the Global Reporting Initiative (GRI) guidelines that challenged companies to report both positive and negative features of sustainability initiatives (R. Hahn & Lülfs, 2014).

## Benefits and Risks of Sustainability Reporting

The use of sustainability reporting brings both benefits and risks to the organization (Eberle, Berens, & Li, 2013). If managers understood the impact of sustainability reporting to an organization, managers were able to make effective decisions regarding sustainability reporting in the context of the business environment (Glavas & Mish, 2014). Companies that used TBL were transparent in their business processes and tended to collaborate with others in the value chain (Glavas & Mish, 2014). Glavas and Mish (2014) concluded that due to collaboration, TBL companies created new markets that benefited other companies. Leaders in TBL companies focused on collaborative advantage rather than competitive advantage.

The benefits of sustainability reporting included greater financial performance, especially if the sustainability initiatives addressed new product or service development (Kurapatskie & Darnall, 2013). Kurapatskie and Darnall (2013) identified the two types of sustainability activities as higher order and lower order sustainability activities. The higher level sustainability activities were associated with the development of new

products and processes. The lower level sustainability activities were associated with the modification of existing products and processes.

Kurapatskie and Darnall (2013) found that both types of sustainability activities were correlated with financial performance in terms of direction and trends. Kurapatskie and Darnall noted that the average level of financial benefits related to higher order sustainability activities was greater than the average level of financial benefits related to lower order sustainability activities. Kurapatskie and Darnall concluded that the development of higher order sustainability activities might yield greater financial benefits for organizations.

The strategy of using green marketing by the promotion of sustainability initiatives was positively correlated with the return on assets of the organization (Leonidou, Katsikeas, & Morgan, 2013). Sustainability reporting was part of green marketing because managers used sustainability reports to communicate initiatives with stakeholders. Leonidou et al. (2013) concluded that green product and distribution programs positively affected product-market performance of organizations.

If stakeholders supported sustainability initiatives, then managers viewed sustainability programs as being less risky than failing to respond to stakeholder pressure (Leonidou et al., 2013). Leonidou et al. (2013) found that managers could promote sustainability initiatives to leaders by emphasizing stakeholder pressures if there were no slack resources. Conversely, Leonidou et al. concluded that managers could promote

sustainability programs by presenting the programs as a long-term investment if there were slack resources.

Successful companies with strong economic growth were likely to use sustainability reporting (Peršič & Markič, 2013). Peršič and Markič (2013) found that leaders of companies with high revenues, profits, and strong operational growth tended to use sustainability reporting to report on CSR activities. Because successful companies tended to use sustainability reporting, customers perceived companies that used sustainability reporting as more successful.

Another benefit of incorporating social responsibility into the value system of the company was that socially responsible companies were less likely to engage in tax avoidance (Lanis & Richardson, 2014). Lanis and Richardson (2014) found that the higher the level of CSR performance of a company, the lower the likelihood of tax avoidance. Lanis and Richardson concluded that CSR was a legitimate business activity and not just for enhancement of a business image.

The main reasons for sustainability initiatives, as cited by management, were reduced energy costs, stakeholder expectations and demands, risk to the brand, and increased competition (Cavazos-Garza & Krueger, 2014). Cavazos-Garza and Krueger (2014) listed five benefits of sustainability reporting: (a) improved reputation through transparency, (b) improved relationships with employees, (c) increased access to capital, (d) greater efficiency, and (e) waste reduction. Cavazos-Garza and Krueger analyzed financial performance of 13 public companies that hired a sustainability officer to

examine any financial benefits of hiring a sustainability officer. Cavazos-Garza and Krueger argued that the companies had significant financial improvement in the 2- and 4-year periods after hiring a sustainability officer. Cavazos-Garza and Krueger indicated that the financial improvement may demonstrate that investors were more interested in corporations that included sustainability initiatives in their strategic plan.

One risk of sustainability reporting is that increased interaction with stakeholders may result in negative assessments (Eberle et al., 2013). Negative assessments may have a detrimental impact on the credibility of a company. Eberle et al. (2013) found that an increase in perceived interactivity with stakeholders led to higher message credibility and stronger feelings of identification with the company. However, Eberle et al. concluded that the detrimental impact of negative evaluations was much higher than the favorable impact of positive evaluations. R. Hahn and Lülfs (2014) identified six strategies companies used to legitimize negative aspects in sustainability reporting: (a) marginalization, (b) abstraction, (c) indicating facts, (d) rationalization, (e) authorization, and (f) corrective action. To mitigate the damage, managers need to monitor online communications with stakeholders carefully (Eberle et al., 2013).

Managers are unlikely to disclose negative events such as pending litigation involving environmental or social issues in sustainability reports (Moore & Poznanski, 2015). Moore and Poznanski (2015) argued that current sustainability reporting practice focuses on past and current results, but has little value in predicting future periods.

Moore and Poznanski argued that to create useful sustainability reports, money spent on sustainability goals should have the same disclosure criteria as any other information.

## **Professional Accountancy Involvement in Sustainability Reporting**

Professional accountancy bodies increased their involvement in sustainability reporting, but there was still a lack of standards (Lusher et al., 2012). Ballou, Casey, Grenier, and Heitger (2012) conducted a survey of 178 corporate responsibility officers to explore how accountants can add value to sustainability initiatives. Ballou et al. concluded that accounting professionals were rarely involved in sustainability initiatives, but they were highly involved with strategic integration.

Reporting of accounting information evolved from a strictly financial statement model to a model that addressed issues of governance, social issues, environmental issues, and sustainability in CSR reports (Lusher et al., 2012). In the 1980s, professionals in the accounting field recognized the need to account for social and environmental matters when companies started including environmental issues in their annual reports (Lusher et al., 2012). As of 2012, a future integrated reporting model was under development by the International Integrated Reporting Committee. The integrated reporting model combined the various components of financial reporting with the reporting of social and environmental costs into one report (Lusher et al., 2012).

Ngwakwe (2012) reviewed the accounting stance on sustainability developments from global and national accounting bodies, including the International Federation of Accountants, the American Institute of Certified Public Accountants, the Association of

Chartered Certified Accountants, plus the Big Four audit companies. There were high levels of sustainability initiatives; however, there was also a lack of standards and uniform accounting guidelines (Ngwakwe, 2012). Ngwakwe concluded that, to support sustainable development, the accounting profession should create carbon accounting standards, regulate sustainability accounting, and develop engineering accounting to address challenges such as climate change and carbon trading.

Tschopp and Nastanski (2014) defined the concept of accounting harmonization as the process of increasing the comparability of reporting practices by reducing the degree of variation between users. Harmonization of sustainability reporting standards was vital to enhancing transparency and comparability (Tschopp & Nastanski, 2014). Tschopp and Nastanski recommended that accounting professionals adopt universal standard guidelines for sustainability reporting to increase harmonization.

Corporate sustainability focused on the accountability of the financial, economic, and social impact regarding organizational practices (Seay, 2015). Seay (2015) argued that accountants could function as gatekeepers for ethical standards because accounting standards were used for accountability. Because the concept of sustainability required managers to be held accountable to stakeholders, accountants were in the position to develop sustainability reports that had transparency and accountability (Seay, 2015).

# Stakeholders' Roles in Sustainability Reporting

A vital component in sustainability reporting and CSR practices was the relationship between the organization and stakeholders (Gawel, 2014). Stakeholders are

groups of people who have interrelationships with an organization (Fernandez-Feijoo, Romero, & Ruiz, 2014). The academic institution is a complex organization with competing priorities from numerous stakeholders (Krizek et al., 2012).

There are numerous stakeholders at academic institutions, including students, faculty, alumni, staff, administrators, local businesses, governmental agencies, and other colleges (Fernandez-Feijoo et al., 2014). One of the functions of sustainability reporting is the communication of sustainability practices to internal and external stakeholders (Brown-Liburd & Zamora, 2015). Transparency is the quality of communication between stakeholders and the organization (Fernandez-Feijoo et al., 2014).

Brown-Liburd and Zamora (2015) argued that CSR reports tended to be positive when the information was voluntarily disclosed. Stakeholders were skeptical of the veracity of the reports, especially when managers' bonuses were tied to the success of sustainability initiatives (Brown-Liburd & Zamora, 2015). Because the stakeholders were skeptical of the CSR reports, they wanted third-party assurance for the reports. Brown-Liburd and Zamora concluded that managers needed to examine CSR disclosure factors and encouraged the expansion of assurance and integrated reporting.

The relationship between stakeholders and organizations influences the quality of sustainability reporting (Fernandez-Feijoo et al., 2014). Fernandez-Feijoo et al. (2014) defined transparency as the availability of company-specific information to internal and external stakeholders. Fernandez-Feijoo et al. concluded that investors and employees

had the highest level of influence in CSR reporting transparency as stakeholders, while environment stakeholders had the lowest level of influence.

Greenwood and Kamoche (2013) developed a knowledge appropriation model consisting of three stages: (a) knowledge creation, (b) knowledge generation, and (c) outcome distribution. Social auditing was a process of auditing the CSR reports using an auditing framework that integrated stakeholder involvement. Greenwood and Kamoche argued that deficient stakeholder involvement in the creation and distribution stages of the model lessened the effectiveness of auditing of the strategic management system. The integration of stakeholders into the reporting and auditing process was necessary for effective social auditing (Greenwood & Kamoche, 2013).

Stakeholders had a role in integrated reporting (Van Zyl, 2013). Van Zyl (2013) defined integrated reporting as reporting that highlighted the relationship between financial and nonfinancial performance. Stakeholders needed to be part of the reporting process for integrated reporting to be successful (Van Zyl, 2013). The communication between the company and stakeholders should be interactive, honest, and continuous for maximum transparency (Van Zyl, 2013).

Gawel (2014) argued that developing relationships with stakeholders was not easy. The key factor in forming relationships between businesses and community stakeholders was mutual trust, and developing trust was a lengthy process (Gawel, 2014). Stakeholders drove the development of CSR philosophy and strategy for an organization (C. Mason & Simmons, 2014). Assessment and feedback from stakeholders led to

changes in the CSR strategy of the organization (C. Mason & Simmons, 2014). The CSR framework required reporting to stakeholders about sustainability outcomes with a system for dialog between the organization and stakeholders to develop relationships, trust, and feedback (C. Mason & Simmons, 2014).

Because there is a wide range of stakeholders at academic institutions, leaders of academic institutions had the opportunity to encourage mutual sustainability learning and collaboration in education, research, and community outreach activities (Yarime et al., 2012). Yarime et al. (2012) concluded that multistakeholder collaborations with the public sector were necessary to develop innovation for sustainability. Stakeholder collaboration strategies for academic institutions included student exchanges among different universities, coordination of academic programs with external organizations, and outreach programs for stakeholders (Yarime et al., 2012).

Stakeholders valued usefulness in sustainability reporting, including comprehensive reports, the inclusion of costs and benefits, and plans of future projects (Leszczynska, 2012). Leszczynska (2012) argued that sustainability reports needed to be neutral and objective; the reports should include failed projects along with the successful projects. Stakeholders at academic institutions valued assessments that demonstrated multiple dimensions of sustainability including education, research, governance, and community engagement (Vaughter et al., 2013).

Among users and preparers of sustainability reporting, both stakeholder groups valued the economic, environmental, and social indicators as necessary for sustainability

reporting (Lin et al., 2014). Lin et al. (2014) concluded that the perceptions between the user and preparer groups were not statistically significantly different. Both groups valued the three main GRI indicators as necessary for sustainability reporting. Lin et al. concluded that the similarities in the viewpoints of the two groups indicated that the characteristics can be used to create uniform standards for reporting and disclosure.

Although there were similarities between groups of stakeholders, it was vital to consider potential differences. For example, students composed one of the most influential groups of stakeholders at academic institutions (González-Rodríguez, Díaz-Fernández, Pawlak, & Simonetti, 2013). Cultural differences may have existed among university students that could affect the students' perceptions of sustainability (González-Rodríguez et al., 2013). Leaders at academic institutions needed to accommodate the differences among stakeholders to engage the widest range of stakeholders effectively.

## Managerial Use in Sustainability Reporting

Managerial accounting. Sustainability reports provided information not only to external stakeholders, but also to internal stakeholders such as managers and staff as well (Raghunandan, Ramgulam, Buckmire, & Raghunandan-Mohammed, 2012). Managers used sustainability reports in decision making regarding development and improvement of CSR initiatives (Smith, 2014). Smith (2014) argued that sustainability issues led to new opportunities for organizations to succeed in the long term. Managers required timely and relevant information to develop sustainability initiatives effectively. Smith (2014) concluded that managerial accounting functions, which already provided

production information, can be expanded to include information about sustainability initiatives. To integrate sustainability information into managerial accounting reports, accountants needed to develop standards, metrics, and assurance standards for an integrated reporting model (Smith, 2014).

Managers used managerial accounting systems to identify, measure, assess, and communicate information to managers (Nwagbara & Reid, 2013). Nwagbara and Reid (2013) concluded that commitment to CSR was needed for competitive positioning in the global business environment. Leaders of companies needed to demonstrate commitment by integrating sustainability into strategic planning and addressing criticism through sustainability reporting and stakeholder communication (Nwagbara & Reid, 2013).

As the global business environment changed, managers included sustainability reports as an additional source of information along with traditional managerial accounting reports (Raghunandan et al., 2012). Raghunandan et al. (2012) discussed that the fundamental purpose of accounting was to provide information that was useful for good business decisions. Sustainability reporting can assist in effective decision making regarding CSR initiatives.

Managers were reluctant to adapt best practices in sustainability reporting due to multiple concerns including public scrutiny, potential of criticism of reputation, and costs (Darus, Sawani, Zain, & Janggu, 2014). Darus et al. (2014) argued that these factors overrode the benefit of providing credible information to stakeholders. Pressure from stakeholders or regulatory bodies may be needed to convince company leaders to use

third-party assurance for sustainability reporting (Darus et al., 2014). Darus et al. concluded that independent assurance was necessary to ensure the credibility of sustainability reports.

Sustainability and governance. The concept of sustainability influenced corporate governance as business leaders realized the positions of their firms are part of a wider environment (Lawrence, Collins, & Roper, 2013). Business leaders increasingly accepted that the well-being of the organization was linked to the well-being of the environment (Lawrence et al., 2013). In a traditional business model, leaders' responsibility was to shareholders of the company (Lawrence et al., 2013). There was a changing perspective that the leaders' responsibilities were to a wider group of stakeholders (Klettner, Clarke, & Boersma, 2014).

In a sustainability model, senior management and the board were involved in sustainability strategy development (Klettner et al., 2014). The corporate governance structure monitors and ensured implementation of the sustainability strategy through financial rewards. Leaders of companies that integrated sustainability fully were willing to engage with stakeholders and communicate with detailed sustainability reports (Klettner et al., 2014).

The role of sustainability in governance has increased among organizations (Klettner et al., 2014). Lawrence et al. (2013) presented a timeline of business management from the 19th century to the 21st century. Lawrence et al. discussed that the 19th century was the century of the entrepreneur; that period was the start of the modern

corporate structure. Lawrence et al. argued that the 20th century was the century of management, demonstrated in the growth of management theories and management consulting. Lawrence et al. concluded that the 21st century will be the century of governance because the focus will be on the responsibility and effectiveness of the organization in the global community. Leaders in the 21st century will align organizations to a stakeholder approach, incorporating CSR into the corporate structure through governance that engages stakeholders (Klettner et al., 2014).

Decision making in sustainability reporting. Managers can use sustainability reporting for decision making on an organizational level (Palthe, 2013). Kiron, Kruschwitz, Reeves, and Goh (2013) concluded that integration of a sustainability agenda required organizational change. For an organization to fully utilize sustainability in decision making, leaders need to be fully committed to the sustainability agenda (Kiron et al., 2013).

Kiron et al. (2013) stated that there were four keys to the sustainability agenda of a company. One key was the commitment to sustainability by members at the highest executive level. For example, the chief sustainability officer should report directly to the chief executive officer and be considered a member of the executive strategy team (Kiron et al., 2013). Another key was the use of collaboration. Leaders of a company should collaborate with customers and other organizations regarding sustainability initiatives. The third key was business model innovation. Business model innovation occurred when leaders of an organization were willing to develop new business opportunities. The

fourth key was new internal organization structures. Leaders of a company should be willing to change internal organizational structures to accommodate the sustainability initiatives (Kiron et al., 2013).

Palthe (2013) argued that academic institutions should foster business leaders who incorporate sustainability into their decision making. Leaders of the future need to know how to integrate sustainability into business strategy, operations, and governance (Palthe, 2013). Future leaders also need to know how to make connections between sustainability issues and practices, as well as understand the importance of partnerships with stakeholders (Palthe, 2013).

Sustainability issues are complex and deal with demands from numerous stakeholders (T. Hahn, Pinkse, Preuss, & Figge, 2014). To understand managerial decision making regarding sustainability, T. Hahn et al. (2014) proposed two cognitive frames used by managers in decision making. In a sustainability approach, leaders of organizations needed to consider environmental and social impacts and not just financial outcomes. Because there were multiple outcomes that are interdependent, there may have been risks of consequences that were difficult to predict (T. Hahn et al., 2014). For example, a solution for a financial issue may have been detrimental to the environment.

The two cognitive frames represented two approaches to decision making regarding sustainability: a business case frame and a paradoxical frame (T. Hahn et al., 2014). Managers may have used either frame when dealing with sustainability issues and reconciling conflicting factors. A cognitive frame was a mental method that people used

to understand situations. T. Hahn et al. (2014) proposed that the business case frame be used when managers dealt with ambiguities by seeking alignment between factors and eliminating inconsistencies. The paradox frame was used when managers accepted the inconsistencies and attempted to accommodate conflicts between economic, environmental, and social issues. T. Hahn et al. concluded that managers rarely decided on radical change when faced with sustainability issues because both cognitive frames had limitations.

Kantabutra and Saratun (2013) proposed that leaders of academic institutions should adopt long-term principles of sustainable leadership to encourage success in sustainability initiatives. Kantabutra and Saratun found that to ensure sustainability, university administrators should perceive employees as stakeholders and prime assets. Leaders should nurture an organizational culture that allowed for self-governance and encourageed innovation among employees (Kantabutra & Saratun, 2013). Leaders at academic institutions should be willing to invest in sustainability initiatives, even if these initiatives had a negative impact on the budget in the short term. University administrators should reward employees through a performance evaluation system that encouraged CSR behaviors (Kantabutra & Saratun, 2013). Another long-term strategy was to integrate CSR into the curriculum to further integration of sustainability into the structure of the institution (Kantabutra & Saratun, 2013).

### **Sustainability Reporting Frameworks**

Sustainability reporting frameworks were developed in recent years that addressed the challenges of reporting both financial and nonfinancial activity (Waite, 2013). GRI was a comprehensive sustainability reporting framework that was used by organizations throughout the world for reporting on their economic, environmental, and social performance (Lusher et al., 2012). The majority of organizations that used the GRI reporting framework were publicly traded corporations (Mori et al., 2013). Leaders at the Big Four accounting firms developed CSR reporting frameworks that encompassed the TBL objectives of community, environment, and economic impacts to provide more comprehensive reports to stakeholders (Lusher et al., 2012).

Waite (2013) developed a practical framework called the supply chain, user, relations, and future (SURF) framework for approaching sustainable development. Waite concluded after analyzing the data that there was a lack of systems-level and future-oriented thinking for individual companies regarding sustainability development. Waite argued that the SURF framework differed from current frameworks because it had a systems approach addressing (a) sustainability throughout the supply chain, (b) what happens after the user consumes the product or service, (c) maintaining positive relations with stakeholders, and (d) the impact of current decisions on the future.

Sustainability reporting frameworks for academic institutions. Leaders of academic institutions needed a sustainability reporting framework to provide a guide for planning and developing sustainability reports (Yarime & Tanaka, 2012). These leaders

that used sustainability reporting frameworks tended to develop sustainability plans. The sustainability plans provided a basis for implementing the sustainability vision (Lidstone, Wright, & Sherren, 2015). Lidstone et al. (2015) defined sustainability plans as detailed documents that provided a basis for implementing the sustainability vision.

Sustainability plans included operations, academics, and administration aspects in an

integrated approach. The sustainability plan should include the environmental, social,

and economic aspects of sustainability (Lidstone et al., 2015).

suited for the organization (Yarime & Tanaka, 2012).

Yarime and Tanaka (2012) argued that integrating sustainability into all of the major activities of higher education institutions presented an opportunity to prepare students and the community to become more adept decision makers in a complex business environment. Yarime and Tanaka discussed that the slow pace of sustainability development in academic institutions was influenced by the conventional university evaluation systems that did not consider sustainability perspectives in their assessment frameworks. There were multiple sustainability reporting frameworks available for academic institutions, so leaders needed to review and find the framework that was best

Representatives of the Association for the Advancement of Sustainability in Higher Education (AASHE) developed the Sustainability Tracking, Assessment, and Rating System (STARS) as a sustainability reporting framework for higher education institutions (Krizek et al., 2012). The STARS framework was a self-reporting framework that allowed for access by the public and stakeholders (AASHE, 2015). As of 2015, 692

academic institutions had registered for the STARS reporting tool (AASHE, 2015). The STARS framework had a systems approach to sustainability and included sections for education and research, operations, planning, administration, engagement, and innovation (Lidstone et al., 2015).

Integrated Balanced Scorecard. Balanced scorecard was a tool used by management containing accounting information. The balanced scorecard model incorporated governance and performance evaluations in a systematic and comprehensive framework (Kasperskaya & Tayles, 2013). Sustainability reporting can be incorporated into an existing balanced scorecard model (Zavodna, 2013). Leaders of universities increasingly used the balanced scorecard model for strategic planning (Pineno, 2013).

The balanced scorecard was a causal performance measurement method (PMM; Kasperskaya & Tayles, 2013). The causal PMM became a trend in managerial accounting (Kasperskaya & Tayles, 2013). In the balanced scorecard, some indicators were lead indicators that drove a certain activity. Some indicators were lag indicators that were associated with the outcome of the activity. The theoretical framework of balanced scorecard relied on causal logic (Kasperskaya & Tayles, 2013). Causal logic indicated that there were causal relationships between certain activities and outcomes. These activities formed a strategic plan for the organization. The balanced scorecard can be used to manage and assess causal factors from four managerial perspectives: financial, learning and growth, internal business processes, and customers (Kasperskaya & Tayles, 2013).

Huang, Pepper, and Bowrey (2014) illustrated the use of a sustainability balanced scorecard as a contributing factor in reporting and assurance. Leaders of organizations may use the sustainability balanced scorecard to provide an overview of the focal areas of reporting practice. Huang et al. identified that the main organizational strategy to manage legitimacy-related sensitive issues was the stakeholder dialog mechanism. Huang et al. also discussed that a system for stakeholder dialog was a vital strategy in sustainability reporting.

The balanced scorecard model was increasingly adopted by academic institutions because the balanced scorecard emphasized management of performance (Schobel, 2012). Leaders of academic institutions also followed the trend of sustainability reporting (Pineno, 2013). Schobel (2012) noted that two universities, Leeds University and the University of California, were in the balanced scorecard Hall of Fame.

Zavodna (2013) proposed that environmental and social indicators can be added to the balanced scorecard model. The addition of sustainability indicators may be the most direct approach for companies that already used the balanced scorecard. Managers can provide an integrated approach to sustainability reporting if the sustainability indicators were added to an existing balanced scorecard framework.

Schobel (2012) argued that as the use of balanced scorecard grew, organizations needed to link nonfinancial indicators of performance with cash flow consequences. The integrated balanced scorecard model can be used for academic institutions to assist in decision making and strategic planning because it is an evaluation of multiple

perspectives, including sustainability (Schobel, 2012). The effective use of sustainability reporting can improve employee satisfaction, productivity, image, and stakeholder relationships (Zavodna, 2013).

## **Integrated Reporting and Future of Sustainability Reporting**

Churet and Eccles (2014) defined integrated reporting as the merging of the sustainability report and the financial report into a single report. The integrated report was intended for stakeholders to communicate the progress of sustainability initiatives, and how the initiatives contributed to the long-term strategy of the organization (Churet & Eccles, 2014). Ioana and Adriana (2013) considered integrated reporting as an evolutionary development of standalone sustainability reporting. Furthermore, Ioana and Adriana indicated that integrated reporting was the future for annual reports and suggested further research.

Accounting professionals developed standards that integrated sustainability reports with financial reporting (Ioana & Adriana, 2013). The combination of sustainability reporting with other accounting reports was known as integrated reporting (Rogers & Herz, 2013). Churet and Eccles (2014) argued that the integrated reporting process was important because stakeholders needed a comprehensive understanding of the relationships between the business and the business environment.

The Sustainability Accounting Standards Board (SASB) was created to provide standards for sustainability reporting and integrated reporting (Rogers & Herz, 2013). The SASB standards were a cost-effective guideline for companies to (a) communicate

with investors and other stakeholders, (b) ensure completeness of information, and (c) provide assessments for investors and other stakeholders (Rogers & Herz, 2013). Frias-Aceituno, Rodríguez-Ariza, and Garcia-Sánchez (2014) recommended that the integrated international standards report should be based on GRI guidelines because this simplified the development of reporting guidelines.

Certain factors such as company size and profitability may increase the likelihood of the use of integrated reporting by an organization (Frias-Aceituno et al., 2014).

Country-level factors such as economic status, investor, and employment protection laws may also increase the likelihood of integrated reporting (Jensen & Berg, 2012).

Countries that had higher investor protection laws, higher expenditures for college education, more trade unions, and higher economic development status tended to use integrated reporting (Jensen & Berg, 2012). Frias-Aceituno et al. (2014) concluded that companies in monopolistic situations were less likely to publish integrated reports.

Company size and profitability had a positive impact on the likelihood of integrated reports because companies that had higher profits and greater size were more likely to use integrated reports (Frias-Aceituno et al., 2014).

#### Conclusion

The findings of the literature review indicated that sustainability reporting was growing but still lagging for higher education institutions (Lange & Kerr, 2013). Another trend occurring was the accounting profession becoming increasingly involved in the development and standardization of sustainability reporting (Lusher et al., 2012).

Sustainability reporting was still evolving as more organizations engage in CSR initiatives, and as demand for sustainability reporting increased from stakeholders (Searcy & Buslovich, 2014).

The concept of sustainability was an extension of the concept of CSR (Montiel & Delgado-Ceballos, 2014). The concept of TBL was the foundation of sustainability reporting that incorporated environmental, economic, and social factors in sustainability reports. Transparency and accountability to stakeholders were essential in CSR and in sustainability reporting (Ekwueme et al., 2013).

Academic institutions are complex organizations with a wide variety of stakeholders. The nonprofit academic institution may have a greater need for transparency than corporations due to the close ties with stakeholders and the community (Krizek et al., 2012). Stakeholders wanted more transparency and information from organizations, and they were one of the driving forces behind sustainability reporting (Lin et al., 2014). Academic institutions were in a position to promote sustainability through education, research, operational processes, and community activities (Othman & Othman, 2014).

The use of sustainability reporting can provide multiple benefits for organizations (Eberle et al., 2013). Some of the benefits included increased collaboration with business partners (Glavas & Mish, 2014), long-term financial benefits (Kurapatskie & Darnall, 2013), and opportunities for green marketing (Leonidou et al., 2013). Academic institutions would benefit from the use of sustainability reporting by providing greater

transparency to stakeholders and mutual collaboration with multiple stakeholders (Yarime et al., 2012).

Sustainability reporting frameworks were used to meet the challenges of reporting both financial and nonfinancial activity in a comprehensive report (Waite, 2013). The most widely used sustainability reporting framework was the GRI (Lusher et al., 2012). There were sustainability reporting frameworks available for organizations including reporting frameworks that were specifically designed for academic institutions (Krizek et al., 2012). An alternative for universities was to use an existing framework such as balanced scorecard and integrate sustainability indicators into the balanced scorecard (Zavodna, 2013).

The future of sustainability reporting was trending toward integrated reporting that incorporated sustainability measures into the traditional financial reports (Churet & Eccles, 2014). Stakeholders can use integrated reports for comprehensive information about the TBL of environmental, economic, and social factors for an organization.

Professional accounting groups such as SASB were developing guidelines and standards for integrated reporting (Rogers & Herz, 2013).

#### **Transition**

Leaders at academic institutions understood the importance of sustainability; however, there was slow growth in sustainability reporting at academic institutions (Lange & Kerr, 2013). Leaders and managers used sustainability reporting to assess and communicate sustainability initiatives to stakeholders (Christofi et al., 2012). The

specific business problem was that some leaders and managers of nonprofit educational institutions may have lacked the tacit knowledge regarding the strategies and processes necessary to integrate sustainability reporting into the reporting cycle of the organization. The purpose of this qualitative single case study was to explore the strategies and processes necessary for leaders and managers to integrate sustainability reporting into the reporting cycle for a nonprofit higher education institution.

The second section of the study outlines the doctoral study project. I describe the research method and design for the doctoral study. I describe the population and sampling, ethical research guidelines, and the role of the researcher in a qualitative study. I outline the data collection instruments, data collection technique, data organization, and data analysis. I also address reliability and validity issues in a qualitative research study.

## Section 2: The Project

I present the structure of the doctoral study in this section of the study. The structure of the doctoral study includes the methodology and design as well as ethical research considerations. Section 2 includes detailed outlines of (a) the data collection instruments, (b) the data collection techniques, and (c) the data organization techniques. I describe the data analysis of the generated data from the data collection instruments. The data collection and analysis process were supported by techniques that ensured reliability and validity. In this section, I address reliability and validity of qualitative research that includes credibility, transferability, dependability, and confirmability concerns.

## **Purpose Statement**

The purpose of this qualitative single case study was to explore the strategies and processes necessary for leaders and managers to integrate sustainability reporting into the reporting cycle for a nonprofit higher education institution. Sustainability reporting is the implementation of accounting methods that record and report the TBL of environmental, economic, and social impacts (Milne & Gray, 2013). The target population of this study consisted of leaders and managers at a nonprofit academic institution located in the state of Michigan that published sustainability reports. I conducted a case study of one nonprofit academic institution that utilized sustainability reporting. This population was appropriate for the study because the STARS sustainability reporting framework was used by higher education institutions located in the United States (Krizek et al., 2012). The implications for positive social change included the potential for greater transparency

for stakeholders and greater effectiveness of the implementation of environmental, economic, and social initiatives for higher education institutions.

#### **Role of the Researcher**

In qualitative research, the researcher is the instrument of data collection (Koch, Niesz, & McCarthy, 2013). Qualitative researchers collect, analyze, and interpret the data themselves. Quantitative researchers use instruments for data collection such as surveys, tests, or scales. Qualitative researchers need to be aware of their influence on all aspects of the research because of the amount of interaction with research participants. The influence of the researcher includes relationships with participants, life experiences, and attitudes that may have influenced the view and interpretation of the qualitative data (Koch et al., 2013).

Prior to the start of the academic research process, I had an active interest in the concepts of corporate sustainability responsibility, sustainability, and accounting for sustainability. My professional perspective was supportive of the concept of CSR for organizations and the importance of sustainability for organizations and communities. My profession was in the accounting field, and I held the designation of certified public accountant in the state of Ohio. I was an active participant in the accounting field and supported the involvement of the accounting profession in the sustainability process. I was not professionally involved in the sustainability reporting process prior to the study.

While I was a faculty member at a nonprofit university in the state of Michigan, I was not a faculty member of the nonprofit academic institution in the study. I did not have any relationship with the participants of the single case study prior to the study.

The Belmont Report is a statement of basic ethical standards and guidelines addressing the conduct of research with human participants. The Belmont Report initiated the institutional review board (IRB) system. The role of the IRB is to protect the rights and welfare of research participants. The IRB reviews research studies to ensure that the ethical requirements were met before approval of the study (Aggarwal & Gurnani, 2014).

The Belmont Report outlined three ethical principles to protect the rights and welfare of research participants. The first ethical principle was that participants are autonomous agents. Participants must have had sufficient information to decide whether to participate in the study. The second principle was that researchers should maximize benefit and minimize harm to research participants. The third principle was the fairness principle. Researchers should equitably have distributed the risks and benefits associated with the research across society according to the fairness principle (Mikesell, Bromley, & Khodyakov, 2013).

I practiced reflexivity to mitigate bias and increase the awareness of my influence on the data and the data collection. Koch et al. (2013) defined reflexivity as a self-reflection of a person's biases, theoretical predispositions, and orientations to the research

subject. Koch et al. explained that researchers must consider possible biases at every stage of the research.

Roulston and Shelton (2015) recommended including written information of actions and rationales for decision making throughout a study. Roulston and Shelton also discussed the need for the researcher to reflect deeply on any assumptions, actions, and interactions. The researcher needs to be aware of the implications of interactions with those involved in the study (Roulston & Shelton, 2015).

I practiced reflexivity throughout the entire research process, including in the development of the interview questions, before analysis of interview transcripts, and throughout the data analysis process. I reported biases and assumptions regarding the topic of sustainability reporting. The practice of reflexivity ensured that the resulting themes emerged from the responses and not from the researcher's biases (Koch et al., 2013).

# **Participants**

The purpose of this qualitative single case study was to explore the strategies and processes necessary for leaders to integrate sustainability reporting into the reporting cycle for a nonprofit higher education institution. The eligibility criteria included leaders from a nonprofit academic institution that integrated sustainability reporting into the reporting cycle of the organization. For the purpose of the single case study, leaders were internal stakeholders of the sustainability process, including the sustainability manager,

administrators who contributed to the reporting cycle, members of the sustainability committee, and administrators who oversaw the sustainability reporting.

Gaining access to participants may be a challenging task for the doctoral study, so strategies were required (Wahyuni, 2012). Hysong et al. (2013) developed a framework for the recruitment process: (a) gaining entry into the organizations, (b) obtaining accurate eligibility and contact information, (c) reaching busy professionals, (d) assessing willingness to participate, and (e) scheduling participants for data collection. I followed this framework to gain access to participants. I contacted the sustainability manager and the sustainability director via e-mail and then followed up through both e-mails and phone conversations. I contacted other administrators as per the conversations with the sustainability manager and the director. After gaining entry into the organization, I obtained accurate eligibility and contact information from each potential participant. Obtaining accurate information was a time-consuming step in the recruitment process, so I allowed for time and ensured that there was careful recording of the information (Hysong et al., 2013).

Curry (2012) defined reciprocity in qualitative research as interaction between researchers and participants. It was crucial to have reciprocity with participants so that the research project was mutually beneficial (Curry, 2012). The working relationship with participants needed to be transparent and respectful with clear communication. I informed the participants of the purpose of the study and outlined the data collection methods. I discussed the interview data with the participants after data collection and

allowed for the participants to clarify any information. I shared with the participants the findings of the study and discussed how I reached the conclusions. I kept the participants informed through e-mail, phone conversations, and face-to-face conversations.

Through the study, I addressed one central research question:

RQ 1. What strategies and processes do academic leaders and managers use to develop, deploy, and integrate sustainability reporting into the reporting cycle of a nonprofit academic organization?

The participants included the sustainability manager, administrators who oversaw the sustainability reporting process, and managers who contributed to sustainability reporting. The participants included staff and members of the sustainability committee. The participants aligned with the overarching research question because the participants were leaders and managers who actively participated in the sustainability reporting process.

### **Research Method and Design**

Leaders at academic institutions have followed the global business trend of embracing sustainability initiatives for positive social change; however, there has been slow growth in sustainability reporting among academic institutions (Lange & Kerr, 2013). The specific business problem addressed in the study was that some leaders and managers of nonprofit educational institutions may lack the tacit knowledge regarding the strategies and processes necessary to integrate sustainability reporting into the reporting cycle of the organization. The purpose of this qualitative single case study was to explore

the strategies and processes necessary for some leaders and managers of nonprofit educational institutions to integrate sustainability reporting into the reporting cycle of the organization.

#### **Research Method**

I used a qualitative methodology for the study. Researchers use a qualitative method when the focus is upon the subjective meaning, experiences, and motivating actions of a real-world situation (Delattre et al., 2009). For this qualitative research, there were two core principles of quality: transparency and systematic structure (Meyrick, 2006). High quality qualitative research should include details about every step in the methodology to establish a transparent process (Meyrick, 2006). Transparency allows the reader to decide if the methods used and decisions made during data collection were reasonable (Moravcsik, 2013).

A quantitative methodology would be appropriate if the focus was upon observable and objective data and facts that could be quantified to demonstrate relationships and differences (Wahyuni, 2012). A traditional quantitative approach demonstrates a significant relationship between two variables so that a change in the independent variable results in a change in the dependent variable (Maxwell, 2012). A quantitative methodology would not have been appropriate for the study because an exploration of a business process required qualitative information such as experiences and understanding of the decision-making processes (Delattre et al., 2009). Delattre et al.

(2009) argued that one of the main characteristics of qualitative research was the ability to understand and explain the complexity of the organization and the business processes.

A mixed method approach combines elements of both quantitative methodology and qualitative methodology (Venkatesh, Brown, & Bala, 2013). Venkatesh et al. (2013) discussed that a researcher selects a mixed methods approach based on the research questions and objectives. Venkatesh et al. argued that a mixed methods approach was appropriate when one research method would yield incomplete information and not answer the research questions. Because the focus of the study was on the business process of sustainability reporting, a qualitative method was more appropriate than a quantitative method or mixed method approach.

### Research Design

I used a single case study design for the study. A typical case study research is a qualitative approach in which the researcher examines a bounded system or case over time through detailed data collection involving multiple sources of information (Yin, 2013). In a case study, the context of the setting of the case is significant and should be described sufficiently in the study (Yin, 2013).

Case study research is an exploration of a case with the intention to study the complexity of the object or process (Hyett, Kenny, & Dickson-Swift, 2014). Zivkovic (2012) argued that single case studies were strongest for exemplary situations where the object has been under-researched. A business process or implementation of a business model was appropriate for this case study (Zivkovic, 2012).

Qualitative approaches that differ from case study include narrative study, grounded theory, and phenomenological study. Each approach differs in purpose and in the final product. A narrative study is a collection of individuals' stories. A phenomenological study is a description of experiences surrounding a phenomenon. Grounded theory study typically focuses on a theory and uses a visual model (Petty et al., 2012). The purpose of the study was to explore the strategies and processes necessary for leaders to integrate sustainability reporting into the reporting cycle for a nonprofit higher education institution. The purpose was appropriate for a case study design, but did not fit with the other qualitative approaches.

Wahyuni (2012) presented three ideal conditions for conducting a case study. The research question should be focused on a process rather than a singular incidence for the first condition. The second condition was that there was no control required over the events being studied (Wahyuni, 2012). The third condition was that the focus of the study should be on a contemporary event rather than a historical event (Wahyuni, 2012). The study fulfilled all three conditions for conducting a case study.

O'Reilly and Parker (2012) defined data saturation as the concept of collecting data until nothing new was generated. Data saturation was the point where there were no more emergent patterns in the data (O'Reilly & Parker, 2012). G. Bowen (2008) argued that the focus was more on sample adequacy to demonstrate that saturation was reached rather than on sample size. The depth of data rather than frequencies ensured data saturation (O'Reilly & Parker, 2012).

I ensured data saturation by interviewing participants who best represented the topic of integration of sustainability reporting. M. Mason (2010) argued that the sample size should be large enough to represent a range of experiences. The adequacy of sampling indicated that both depth and breadth of information was achieved (G. Bowen, 2008). I ensured data saturation by interviewing at least four participants who were knowledgeable about the sustainability reporting process at their nonprofit academic institution. If there were no new or conflicting information in the fourth interview, I concluded that data saturation had been reached (O'Reilly & Parker, 2012). If there was new or conflicting information in the fourth interview, I would have added interviews until there was no new or conflicting data collected. The participants included leaders and managers who were involved in different aspects of sustainability reporting to represent a range of experiences. The interviewees had depth of knowledge about the integration of sustainability reporting in the reporting cycle of a nonprofit academic institution because they actively participated in the sustainability reporting process. I conducted member checking with participants to ensure that the information was in depth.

G. Bowen (2008) concluded that using data collection methods such as in-depth interviews and document reviews produced enough data to achieve data saturation on the research topic. The objective of data saturation was on quality rather than quantity to become saturated with information (G. Bowen, 2008). In addition to in-depth interviews, I reviewed documents from multiple sources including sustainability reports, annual

reports, and financial reports to ensure data saturation. The sustainability report was available on the STARS website. The financial reports and annual reports were available on the website of the academic institution.

### **Population and Sampling**

The researcher should use the research question to drive the selection process for the participants (Wahyuni, 2012). The research question provided the characteristics of the unit to be studied. The method of choosing a unit according to predetermined criteria was known as purposive sampling (Wahyuni, 2012). A purposive sampling was used to select units based on their matched criteria to criteria required to answer the research question (Wahyuni, 2012).

I selected a small number of participants because the interview process was indepth and time-consuming. An adequate sample size was one that would sufficiently answer the research question (G. Bowen, 2008). The focus was on sample adequacy rather than on sample size (G. Bowen, 2008). The number of participants depended on the number of people who were involved in the sustainability reporting process at the academic institution. There should be at least three to five interviewees per case study (Marshall, Cardon, Poddar, & Fontenot, 2013). I interviewed four participants in the single case study.

M. Mason (2010) argued that the sample size should be large enough to represent a range of experiences with data saturation in mind. If the sample size was too large, it risked being repetitious (M. Mason, 2010). The adequacy of sampling indicated that both

depth and breadth of information was achieved (G. Bowen, 2008). In addition to indepth interviews, I conducted document reviews of sustainability reports, annual reports, and financial reports to produce enough data to achieve data saturation on the research topic (G. Bowen, 2008).

The target population consisted of leaders at a nonprofit academic institution that used and integrated sustainability reporting into the reporting cycle of the organization. To select an academic institution that effectively used sustainability reporting, I used the criteria of a widely used sustainability framework for academic institutions.

Representatives of AASHE developed the STARS reporting framework specifically for the needs of academic institutions (Krizek et al., 2012). The STARS framework had a systems approach of sustainability and included sections for education and research, operations, planning, administration, engagement, and innovation, which were criteria unique for higher education institutions (Lidstone et al., 2015).

Leaders and managers at a nonprofit academic institution that had at a high level of the STARS reporting framework composed the target population. The STARS framework had four categories: academics, engagement, operations, and planning and administration (AASHE, 2015). The high level of sustainability reporting was the gold level of the STARS reporting framework, which was a minimum score of 65 across the four categories (AASHE, 2015). The final selection of the participants was from an organization that demonstrated the gold level of integration of sustainability reporting in the STARS reporting framework. I interviewed the participants at their academic

institution. The setting was at the participants' organization for the convenience of the participants and allowed the participants to be in a familiar setting. It was appropriate to interview the participants in a natural, real-life setting because a case study had a focus on a real-life, contemporary bounded system (Hyett et al., 2014).

The criteria for selecting participants were based on the research question (Wahyuni, 2012). Through the study, I addressed one central research question:

RQ 1. What strategies and processes do academic leaders and managers use to develop, deploy, and integrate sustainability reporting into the reporting cycle of a nonprofit academic organization?

The participants were academic leaders and managers who were involved in the development and implementation of sustainability reporting into the reporting cycle of the organization. The participants included the sustainability executive director, members of the sustainability committee, and other administrators involved in sustainability reporting. The criteria for selection of participants matched the criteria required to answer the research question that was appropriate for a qualitative case study (Wahyuni, 2012).

#### **Ethical Research**

I followed the guidelines set by Walden University IRB for ethical research (Walden University, 2015). The Belmont Report initiated the IRB system (Aggarwal & Gurnani, 2014). The role of the IRB is to protect the rights and welfare of research

participants. The IRB reviewed the research study to ensure that the ethical requirements were met before approval of the study (Aggarwal & Gurnani, 2014).

The IRB required an informed consent form for the participants (Walden University, 2015). The informed consent form disclosed the nature and purpose of the study and details regarding participation (Qu & Dumay, 2011). The IRB approval number for the study was 03-03-16-0438608.

Participants were informed about the interview process, the role of the researcher, and how the interview data would be used (Qu & Dumay, 2011). The participants were informed that they could discontinue participation in the study at their own discretion and at any time without negative impact. I informed the participants of the details of participation, including an estimate of time commitment, data collection procedures, and possible risks and benefits (Qu & Dumay, 2011).

All the participants in the study were low-risk adults over the age of 18. None of the participants were in a subordinate position to me. I did not engage in any form of coercion to secure participants. None of the participants received compensation, gifts, or reimbursement for participation. All participants were informed about the lack of compensation (Qu & Dumay, 2011).

I omitted any identifying information for both the participants and the case organization, according to confidentiality standards (Wahyuni, 2012). I protected the names of individuals and organization by coding identification data and keeping all records anonymous (Qu & Dumay, 2011). All data from the study, including consent

forms, will be maintained in a locked container for 5 years after the completion of the research, in accord with ethical standards (Wahyuni, 2012).

#### **Data Collection Instruments**

Because I conducted a qualitative single case study, I functioned as the primary data collection instrument (Qu & Dumay, 2011). The data collection process was face-to-face semistructured interviews with leaders and managers in charge of sustainability reporting. The use of a semistructured qualitative interview technique was considered an appropriate format for case study research because open-ended questions were a flexible approach that accommodated a wide range of experiences (Qu & Dumay, 2011). Open-ended questions accommodated the need for the researcher to ask for more explanation on the answer to gain a deeper understanding of the issues (Wahyuni, 2012).

All participants received a list of broad questions in advance of the interview to give them time to reflect on their views on sustainability reporting within their organizations. I focused the interviews on the process and strategy of integration of sustainability reporting in an academic institution. I used interviews with open-ended questions to collect in-depth responses about people's experiences, perceptions, and knowledge regarding sustainability reporting in an academic institution (Dabić & Stojanov, 2014). There was an interview guide for the interviews to ensure that the interview data were consistent for all participants (Wahyuni, 2012). The interviews were recorded, and written transcriptions of the interviews were made (Wahyuni, 2012). The participants had a follow-up meeting for member checking after I completed analysis of

the interview data. The participants received an outline of the findings of the interview. The participants had the opportunity to check the findings, ask questions, and give feedback (Shenton, 2004).

I reviewed organizational documents to establish information about the organization such as size, financial budgets, sustainability initiatives, and profitability. I used the concept of TBL to assess the environmental, economic, and social condition of the academic institution (Christofi et al., 2012). The documents used were public documents from multiple sources, including published annual reports and sustainability reports. The documents were available on the websites of the organizations and the sustainability reporting website (AASHE, 2015).

A mock interview with colleagues was held prior to conducting the formal interview to test and refine the interview instrument (Wahyuni, 2012). A colleague mock interview did not result in a change of questions or interview structure to clarify the objectives of the interview. The structure of the interview did not change to improve the flow of the discussion during the interviews (Wahyuni, 2012). The use of the colleague mock interview enhanced the reliability and validity of the data collection technique of semistructured interviews (Shenton, 2004).

I enhanced the reliability and validity of the data collection instrument by using member checking (Shenton, 2004). Member checks are when participants check the research findings to make sure that they are true to and represent their experiences (Elo et al., 2014). The participants had a follow-up meeting after I completed review of the

interview data. The participants received an outline of the findings of the interview. Participants had the opportunity to give feedback about the findings and clarify their inputs (Shenton, 2004).

The interview guide with the interview questions is located in Appendix A of the study. The interview protocol is located in Appendix B of the study. The document review protocol is located in Appendix C of the study. The Table of Contents of the study lists the appendices.

#### **Data Collection Technique**

In qualitative research, there are three main types of data collection methods: indepth interviews, direct observations, and written document review (Dabić & Stojanov, 2014). The data collection method of interviews is widely used in qualitative case studies (Dabić & Stojanov, 2014). Direct observation is a technique used to collect data in the natural environment. Written documents included organizational records, correspondence, and reports such as financial reports and sustainability reports (Dabić & Stojanov, 2014). I used interviews and written document reviews as the data collection techniques for the single case study.

I chose the face-to-face semistructured interview technique because it produced the most detailed information about what strategies and processes leaders used in sustainability reporting. Semistructured interviews were effective and convenient in gathering information (Qu & Dumay, 2011). The interview method also allowed for member checking the data with the participants.

The interview questions were structured to include open-ended main questions, follow-up questions, probing questions, and specifying and direct questions (Qu & Dumay, 2011). I developed the questions based on the research problem. Follow-up and probing questions helped extend the participants' answers after the structured interview question. Specifying and direct questions were used to develop precise descriptions (Qu & Dumay, 2011).

With the participants' permission, each interview was recorded to ensure accuracy (Wahyuni, 2012). I took notes during each interview to record additional information. Wahyuni (2012) outlined three types of notes that can be recorded for an interview: observational, methodological, and theoretical. Observational memos are also known as field notes. Observational memos were used to describe the situation during the interview. Methodological memos were the records of any issues regarding the methods used. Theoretical memos focused on themes that emerged from the interview process (Wahyuni, 2012).

Wahyuni (2012) suggested that each interview should last no more than 1 1/2 hours. After each interview, I conducted a debriefing so participants could ask questions, make comments, or add additional information (Wahyuni, 2012). I also conducted follow-up interviews so participants could review the interview information and preliminary findings.

I chose data collection from documentation in addition to interviews to provide background information about the organizations and its sustainability reporting. The data

from the documentation also provided a way to corroborate the information from the participants (Dabić & Stojanov, 2014). The documentation review came from two different sources: sustainability reports and annual reports (Wahyuni, 2012). The sustainability reports were available on the sustainability reporting website. The annual report was available on the website of the academic institution.

The semistructured interview was flexible, accessible, and capable of disclosing participants' experiences and perspectives (Qu & Dumay, 2011). Qu and Dumay (2011) argued that semistructured interviews were often the most effective and convenient means of gathering information. A semistructured interview technique was based on human conversation, so the interviewer could modify the pace and ordering of the openended questions to engage the participant (Qu & Dumay, 2011). Another advantage of a semistructured interview technique was that it could be used to help understand the perceptions of the participants and their social environment (Qu & Dumay, 2011).

The advantage of using documentation review was the ability to triangulate the data with the interview data (Dabić & Stojanov, 2014). Data triangulation required multiple sources of data, such as interviews and documentation. The role of triangulation in a case study was to analyze all the interrelated parts of an organization (Zivkovic, 2012). I used the data from the interviews and document reviews of sustainability reports, financial reports, and annual reports to compare and corroborate to ensure reliability (Dabić & Stojanov, 2014).

One of the disadvantages of the semistructured interview technique was the assumption that the participants understood the open-ended questions. Another assumption was that the interviewer was aware of the differences in the way the participants experienced the business process such as sustainability reporting (Qu & Dumay, 2011). The interview process was not a neutral and completely objective tool because it was affected by the perspectives of both the interviewer and the participants. To mitigate the disadvantages, I used a reflexive process before, during, and after the interviews regarding how the questions were asked and interpreted (Koch et al., 2013).

Member checks were a process when participants checked the research findings to ensure that the findings were true to their experiences (Elo et al., 2014). I conducted a follow-up meeting with the participants after the interview data had been analyzed. I revealed the findings of the research to the participants at the meeting. The participants gave feedback about the findings, asked questions, and clarified their input (Shenton, 2004).

#### **Data Organization Technique**

I transcribed the interview data from the audio recording into text. I checked the transcription against the voice recording to ensure accuracy (Wahyuni, 2012). The transcription was maintained in electronic format and hard copy text. I stored the observational, methodological, and theoretical notes in both electronic and hard copy text. Roulston and Shelton (2015) recommended maintaining a reflective journal that indicated the researcher's perspective and rationales for decision making throughout the

study. I maintained the reflective journal in electronic format. The document reviews of the annual report, financial reports, and sustainability reports of the academic institution were maintained in electronic format and hard copy text.

I used a coding process for data analysis and organized the results into the form of a codebook. Codes were defined as labels for assigning meaning to textual data such as interview data (DeCuir-Gunby, Marshall, & McCulloch, 2011). I assigned codes to chunks of textual data that were connected to a specific context. For example, when a participant mentioned how students were interested in sustainability reporting I assigned the code of internal stakeholder to the chunk of the interview data. I organized the coding into a codebook. The codebook was a set of codes with definitions that were used as a guide to help analyze interview data (DeCuir-Gunby et al., 2011). I organized the data to be consistent and detailed. DeCuir-Gunby et al. (2011) recommended that the data organization for the codebook have three components: code label, definition, and an example. The codebook was maintained in both hard copy and electronic format.

The right to privacy and confidentiality was vital for participants (Qu & Dumay, 2011). I concealed identities of people and places in data and results. For example, one of the participants was the executive director of sustainability and I identified the participant as EDOS in all data and results. The raw data will be maintained in a locked container for 5 years (Qu & Dumay, 2011). After 5 years, the raw data will be destroyed.

#### **Data Analysis**

I utilized qualitative content analysis for the data analysis of the case study. Qualitative content analysis was a thematic analysis used to identify patterns and themes within the data (Wahyuni, 2012). I utilized a coding method for the qualitative content analysis. Coding is defined as labeling of the data into meaningful groups (DeCuir-Gunby et al., 2011). Coding was a method used to assign a code representing a topic or category for data (DeCuir-Gunby et al., 2011).

I also used data source triangulation for the data analysis process. The triangulation approach included data triangulation, method triangulation, and evaluator triangulation to enhance the credibility of research findings (Wahyuni, 2012). Zivkovic (2012) described the role of triangulation in a case study as analysis of all the interrelated parts of an organization. I used the data triangulation approach to explore the organization vertically from multiple levels and perspectives (Zivkovic, 2012).

Zivkovic (2012) argued that the use of multiple sources of evidence, including interviews and external reports, was a way of creating construct validity. Triangulation was one method of addressing validity issues in case study methodology (Zivkovic, 2012). Yin (2013) indicated that data source triangulation was likely to strengthen the validity of a case study evaluation. Triangulation of data could be used from multiple sources of data, including interviews and documentation (Dabić & Stojanov, 2014). I used the data from the interviews and document reviews of sustainability reports, financial reports, and annual reports for the data source triangulation process.

Data triangulation did not indicate causal meanings between data (Kaczynski, Salmona, & Smith, 2014). I used data triangulation to explore deeper understanding by providing different ways of viewing the business process. I compared the different multiple sources of data to corroborate the participants' statements in the interviews with the information from the sustainability, financial, and annual reports. I used the data from the documents to further understand the integration of sustainability reporting into the reporting cycle by comparing the data between the multiple reports.

Analysis of interview data began with data preparation (Wahyuni, 2012). Data preparation in qualitative research included data storage, transcribing audio interviews, and cleaning data (Wahyuni, 2012). The raw interview data were in the form of audio recordings of the interviews. I transcribed the audio recordings into text transcripts.

After transcription, I checked the transcript with the audio recording for accuracy.

Transcript *cleaning* consisted of removing all identifying information of the participants and the organization. The identifying information was replaced with unique codes to ensure confidentiality (Wahyuni, 2012). When the identifying information was replaced, then a peer could read the transcripts or coding while maintaining confidentiality (Wahyuni, 2012).

The interviews were transcribed and organized through coding. After reading and reviewing all transcripts, I divided the information into topics. The topics were given codes, and the transcripts were coded (DeCuir-Gunby et al., 2011).

There were four key steps in data analysis of qualitative data: (a) immersion in the data, (b) coding, (c) creating categories, and (d) identification of themes (Green et al., 2007). The first step was immersion in the data, which meant that the researcher reviewed the transcripts repeatedly as well as listened to the recordings (Green et al., 2007). I became immersed in the data by manually transcribing the interviews and reviewing both the recordings and transcripts.

The second step was coding the data; this was a process of examining and sorting the information into codes (Green et al., 2007). I used a data-driven coding approach for the project. Data-driven codes were codes derived from the raw data (DeCuir-Gunby et al., 2011). There were three levels of coding: open coding, axial coding, and selective coding (Wahyuni, 2012). Open coding was conducted by analyzing transcripts and distinguishing different themes and concepts found in the data (Wahyuni, 2012). Axial coding was used when grouping the data into relevant categories (Wahyuni, 2012). Some of the codes were directly from the data, such as the exact words used by an interviewee. Some of the codes were drawn from the topic of the study (Hsieh & Shannon, 2005).

The third step of data analysis was creating categories (Green et al., 2007). The codes were linked to create categories and form relationships (Green et al., 2007). I used selective coding to make logical connections between the core categories and themes to explore what was happening within the business processes (Wahyuni, 2012).

The fourth step of data analysis was the identification of themes (Green et al., 2007). The theme was more than a category; it shifted the analysis from description to

explanation (Green et al., 2007). As the researcher, I developed themes by linking the categories with why the information was important (Green et al., 2007). After reviewing the data from the interview, I looked for meaning related to the topic of sustainability reporting. I coded each transcript using color coding of the categories with notes in the margin.

I developed a codebook to organize the codes and help analyze interview data. The process of creating and organizing the codes was an iterative process that might have been revised during the process of data analysis (DeCuir-Gunby et al., 2011). After the transcripts were coded, then the topics were grouped into categories. Throughout the coding process, different codes and categories were added or modified. A summary matrix was prepared for each transcript that highlighted the categories and their location within the transcript (DeCuir-Gunby et al., 2011). There was a comparison of categories using the summary matrices across participants.

I conducted document reviews of the sustainability reports, financial reports, and annual reports. The sustainability reports were available on the STARS sustainability framework website (AASHE, 2015). The financial reports and the annual reports were available on the website of the nonprofit academic institution.

I reviewed the sustainability reports using guidelines set by STARS for sustainability reporting. The STARS sustainability reporting guidelines were adapted to assess the quality of the sustainability reporting of the organization (AASHE, 2015). Van Der Ploeg and Vanclay (2013) developed a sustainability reporting assessment.

According to Van Der Ploeg and Vanclay, researchers used a checklist of 10 questions to evaluate the quality of sustainability reporting. I used a checklist incorporating both the STARS guidelines and the sustainability reporting assessment tool to assess the content and quality of the sustainability reporting of the organization.

I reviewed the financial reports and annual reports of the nonprofit academic institution using a checklist of financial and nonfinancial indicators. The financial reports included the income statement, balance sheet, and statement of cash flows. The annual reports typically included financial reports, budgets, and nonfinancial information such as reports on projects. The financial and annual reports also provided demographic information such as organizational size, enrollment, faculty and staff, and governance.

For the coding, I used MAXQDA software for coding and identifying themes. I transcribed the interviews into MAXQDA. The transcripts were coded in MAXQDA using color coding that corresponded to the topics. I used MAXQDA to create the summary matrix for each transcript.

Thematic analysis was part of qualitative content analysis (Wahyuni, 2012). Researchers used thematic analysis to identify patterns and themes within data (Wahyuni, 2012). After the coding process was completed, the researcher looked for themes formed by the categories of information (Hsieh & Shannon, 2005). The researcher developed the categories from the data in the conventional content analysis technique rather than having preconceived categories (Hsieh & Shannon, 2005). The codes came directly from the data and then were sorted into categories. The categories were organized into meaningful

clusters (Hsieh & Shannon, 2005). The themes were developed from the clusters of categories (Green et al., 2007).

The theme was more than a category; it shifted the analysis from description to explanation (Green et al., 2007). The researcher developed themes by linking the categories with why the information was important (Green et al., 2007). I used the process of examining the transcript, drawing on knowledge of sustainability reporting, and referring to the research question to create categories and develop themes. I thought in terms of (a) the conceptual framework of CSR, (b) TBL reporting, and (c) corporate sustainability to correlate key themes.

# **Reliability and Validity**

In a qualitative case study, reliability and validity issues corresponded to credibility, transferability, dependability, and confirmability (Wahyuni, 2012). To ensure validity and reliability of the data, I had a detail-oriented approach (Shenton, 2004). The transcripts were checked to ensure that there are no mistakes. The coding was checked for consistency and modified if necessary. The interviews from the participants were reviewed to see if there were any inconsistencies in the findings. To verify the information, I used member checks as part of the interview process (Shenton, 2004). Each participant was given a summary of the findings of the interview at a follow-up meeting to ensure that what was said was what the participant intended (Shenton, 2004). The participants were presented with the findings and asked if they thought that the findings were accurate.

I used data triangulation from multiple sources of data to address validity (Wahyuni, 2012). The multiple sources of data included interviews and document reviews of sustainability reports, financial reports, and annual reports. When writing the research findings, I described my background and experience to clarify bias. The background description provided context for the research (Shenton, 2004). I presented negative information in addition to the findings that might have contradicted the themes. I used rich, thick description for the narrative of the study to ensure that information was clarified and detailed (Shenton, 2004).

# Reliability

Wahyuni (2012) defined dependability as corresponding to the reliability of the information. Dependability required taking into account all the changes that occurred in a research process and how these processes affected the way research was being conducted (Wahyuni, 2012). If there was a detailed description of the research design and process, then dependability is enhanced when future researchers follow a similar research framework (Shenton, 2004). I presented a detailed explanation of the research methodology so the study might be repeated (Shenton, 2004). The detailed explanation included the data collection technique, data organization, and data analysis. Each step of the research process described the methods and how the methods relate to each other (Shenton, 2004).

I enhanced the reliability and validity of the data collection instrument by using member checking (Shenton, 2004). Member checks were when participants checked the

research findings to make sure that they were true to their experiences (Elo et al., 2014). The participants had a follow-up meeting after the interview data had been analyzed. The participants were given an outline of the findings of the interview. Participants had the opportunity to give feedback about the findings and clarify their input (Shenton, 2004).

### Validity

Credibility was correlated with the accuracy of data to reflect the intended process or focus (Wahyuni, 2012). To ensure credibility, the research methods were appropriate for the research question (Shenton, 2004). I carefully selected the organization for the case study and ensured that the organization fulfilled the criteria. Triangulation, member checking, thorough literature reviews, and detailed description of the role of the researcher were some of the methods used to ensure credibility (Shenton, 2004).

I used data source triangulation to ensure credibility. The triangulation approach includes data triangulation, method triangulation, and evaluator triangulation to enhance the credibility of research findings (Wahyuni, 2012). I used data triangulation to corroborate the information by comparing the data from multiple sources (Zivkovic, 2012). Triangulation of data can be used from multiple sources of data, including interviews and documentation (Dabić & Stojanov, 2014). The multiple sources of data came from the interviews and the reviews of the annual reports, financial reports, and the sustainability reports of the case institution.

I used member checking to ensure credibility (Shenton, 2004). Member checking was defined as a process when participants checked the research findings to ensure that

the information was accurate to their experiences (Elo et al., 2014). I conducted a follow-up meeting with participants and presented the findings of the interviews to the participants. Participants were able to address any concerns about the findings and point out any inaccuracies (Shenton, 2004).

Transferability was defined as the level the research could be applied to other situations or settings (Wahyuni, 2012). To enhance transferability, the research study included a detailed description of the background of the case study to provide context (Shenton, 2004). The research findings might be applied to other situations if the context was fully understood (Wahyuni, 2012). I provided rich descriptions of the settings and current state of the sustainability processes in the case study to enhance the possibility of the findings being applied to a different case within the nonprofit higher education industry.

Confirmability was defined as whether the findings reflected the understandings and experiences of the participant and not the researcher's bias (Wahyuni, 2012). To ensure confirmability, I used triangulation, an audit trail, and transparency methods in the case study (Shenton, 2004). An audit trail was developed by careful documentation of data collection and data analysis processes, including research memos (Wahyuni, 2012). The audit trail could be used to provide a step-by-step explanation of the research process to allow scrutiny of the findings (Shenton, 2004). I used transparency methods including the disclosure of researcher's beliefs, assumptions, and limitations of the research to enhance confirmability (Shenton, 2004).

O'Reilly and Parker (2012) defined data saturation as the concept of collecting data until no more new information was generated. Data saturation was the point where there were no new or emerging patterns in the data (O'Reilly & Parker, 2012). The depth of data rather than frequencies ensured data saturation (O'Reilly & Parker, 2012).

I ensured data saturation by interviewing a range of participants to cover the experiences regarding the integration of sustainability reporting (M. Mason, 2010). I conducted member checking with participants to ensure that the information will be indepth. I continued to collect information from the participants through additional interviews until there was no new data collected.

I reviewed documents from multiple sources including sustainability reports, annual reports, and financial reports to ensure data saturation. The objective of data saturation was on the quality of information (G. Bowen, 2008). Using diverse data collection instruments such as interviews and documents reviews produced enough data to achieve data saturation (G. Bowen, 2008).

#### **Transition and Summary**

I presented the structure of the doctoral study in this section of the study. The purpose of this qualitative single case study was to explore the strategies and processes necessary for leaders and managers to integrate sustainability reporting into the reporting cycle for a nonprofit higher education institution. For the purpose of the study, leaders were internal stakeholders of the sustainability process including the sustainability manager, administrators who contribute to the reporting cycle, members of the

sustainability committee, and administrators that oversee the sustainability reporting. I followed the guidelines set by the Walden University IRB for ethical research (Walden University, 2015).

Because I conducted a qualitative single case study, I functioned as the primary data collection instrument (Qu & Dumay, 2011). The data collection process was a face-to-face semistructured interview technique with leaders and managers in charge of sustainability reporting. I also reviewed organizational documents as an additional source of data. The documents used were public documents from multiple sources, including published annual reports, financial reports, and sustainability reports.

I utilized qualitative content analysis for the data analysis of the case study.

Qualitative content analysis was a thematic analysis used to identify patterns and themes within the data (Wahyuni, 2012). I used a coding method for the qualitative content analysis.

I also used data source triangulation for the data analysis process. The triangulation approach included data triangulation, method triangulation, and evaluator triangulation to enhance the credibility of research findings (Wahyuni, 2012). I used the data triangulation approach to explore the organization vertically from multiple levels and perspectives (Zivkovic, 2012).

In a qualitative case study, reliability and validity issues corresponded to credibility, transferability, dependability and confirmability (Wahyuni, 2012). I used member checks as part of the interview process to ensure reliability and validity

(Shenton, 2004). I used data triangulation from multiple sources of data to address validity (Wahyuni, 2012). The multiple sources of data included interviews and document reviews of sustainability reports, financial reports, and annual reports.

I present the findings of the doctoral study in the next section of the study. The presentation of the findings includes identification of each theme and discussion of the relationship of the findings to the themes. I relate the findings to the conceptual framework. I describe the ways that the findings may confirm, disconfirm, or extend knowledge in the field of sustainability reporting.

Section 3 of the study includes detailed descriptions of (a) the applications to professional practices, (b) implications for social change, (c) recommendations for action, and (d) recommendations for further research. I reflect on my experience within the DBA doctoral study process. I discuss possible biases, preconceived ideas, and their possible influence on the participants or the process.

# Section 3: Application to Professional Practice and Implications for Change

#### Introduction

The purpose of this qualitative single case study was to explore the strategies and processes necessary for leaders and managers to integrate sustainability reporting into the reporting cycle for a nonprofit higher education institution. I present the findings of the doctoral study in this section of the study. Section 3 of the study also includes detailed descriptions of (a) the applications to professional practices, (b) implications for social change, (c) recommendations for action, (d) recommendations for further research, (e) reflections, and (f) summary.

The case organization was a large nonprofit university located in the state of Michigan with a total student enrollment of over 15,000 students. The case nonprofit university was financially stable and its annual reports indicated healthy financial growth. The leaders of the case nonprofit university published their sustainability reports on the AASHE STARS website (AASHE, 2015).

#### **Presentation of the Findings**

Throughout the study, I addressed one central research question:

RQ 1. What strategies and processes do academic leaders and managers use to develop, deploy, and integrate sustainability reporting into the reporting cycle of a nonprofit academic organization?

The participants of the interviews were leaders, managers, and employees of the case nonprofit academic institution in the state of Michigan. The participants were the

campus sustainability coordinator (CSC), the executive director of the office of sustainability (EDOS), an associate professor at the university (PROF), and an assistant vice president (AVP). All participants were actively involved with the sustainability reporting process at the case nonprofit academic institution. The participants represented different levels within the organization including administration, faculty, managers, and top leadership.

The main responsibility of the EDOS was to integrate sustainability and its best practices across the campus and community. The main responsibility of the CSC was to focus on student, faculty, and staff sustainability activities as well as to oversee the sustainability reporting process. The main responsibility of the PROF was to serve as the chair of the working group on educational sustainable development. The PROF was in charge of tracking courses throughout the university, including sustainability concepts. The AVP was responsible for overseeing assessment and accreditation for the nonprofit university. In terms of sustainability reporting, the AVP was a cochair of the campus sustainability advisory committee (CSAC) overseeing strategic planning, assessment, and accreditation.

I utilized qualitative content analysis for the data analysis of the case study. The interviews were transcribed and organized through coding. I used MAXQDA software for coding and organizing the qualitative data. After reading and reviewing all transcripts, I divided the information into topics. The topics were given codes, and the transcripts were coded (DeCuir-Gunby et al., 2011).

The codes were linked to create categories and form relationships (Green et al., 2007). I used the core categories and themes to explore the research question of the study (Wahyuni, 2012). Themes were developed by analyzing how the information was important in the sustainability reporting process (Green et al., 2007).

Document reviews were conducted for the published annual reports and sustainability reports of the case nonprofit university. I used the different sources of data to explore the sustainability reporting process through multiple views (Zivkovic, 2012). I compared the different multiple sources of data to synthesize information from the interviews with the information from the sustainability and annual reports.

#### **Summary of Themes**

The results revealed five themes regarding the sustainability reporting process developed from the analysis of the data. The themes were: (a) sustainability reporting framework reflecting TBL; (b) sustainability reporting process as a long-term process; (c) stakeholder engagement with leadership support; (d) collaborative process in sustainability reporting; and (e) sustainability as an organizational value. I developed the themes from coding the interview data, document reviews, and support from the literature review.

The keywords count (see Table 2) revealed that the keyword of *sustainability* was by far the most frequently used term (f = 148). This result supported the conclusion that sustainability was a significant concept that was used throughout the interview data. Other keywords included *impact* (f = 26), *people* (f = 24), *system* (f = 22), *students* (f = 24).

20), business (f = 17), and community (f = 21). These keywords indicated an emphasis on stakeholders such as students and the community. The keywords of process (f = 32), strategic (f = 23), system (f = 22), and information (f = 21) revealed that there was a process or system involving people and information. The keywords of years (f = 26), progress (f = 18), assessment (f = 18), and journey (f = 16) indicated a long-term process involving years of assessment and progress similar to a journey.

Table 2

Keyword Frequency: Top 20 Keywords

Keyword	Frequency	Percentage (%)
sustainability	148	4.79
reporting	84	2.72
STARS	55	1.78
university	51	1.65
process	32	1.04
impact	26	0.84
years	26	0.84
people	24	0.78
strategic	23	0.74
system	22	0.71
community	21	0.68
information	21	0.68
students	20	0.65
AASHE	18	0.58
assessment	18	0.58
progress	18	0.58
business	17	0.55
committee	17	0.55
economic	16	0.52
journey	16	0.52

The codes (see Table 3) were (a) STARS, (b) collaboration, (c) journey, (d) external stakeholders, (e) value, (f) development, (g) TBL, (h) leadership, (i) CSAC, (j)

internal stakeholders, (k) framework, (l) implementation, (m) awareness, and (n) baseline. I grouped the codes into categories and then into the five themes (see Table 4). The code frequency was the number of segments of interview data that had the designated code. The percentage of the summary of themes was the percentage of the coded segments of interview data within each theme.

Table 3

Code Frequency

Code	Frequency	Percentage (%)
STARS	21	18%
Collaboration	14	12%
Journey	10	8%
External stakeholders	9	8%
Value	8	7%
Development	8	7%
TBL	7	6%
Leadership	7	6%
CSAC	7	6%
Internal stakeholders	6	5%
Framework	6	5%
Implementation	5	4%
Awareness	5	4%
Baseline	5	4%

Table 4
Summary of Themes for the Sustainability Reporting Process

Theme	Percentage (%)
Theme 1: Sustainability reporting framework reflecting TBL	29%
Theme 2: Sustainability reporting as a long-term process	28%
Theme 3: Stakeholder engagement with leadership support	19%
Theme 4: Collaborative process in sustainability reporting	18%
Theme 5: Sustainability as an organizational value	7%

I grouped the codes of STARS, TBL, and framework into the category of sustainability reporting framework because the codes were related by referring to the sustainability reporting framework used at the case nonprofit university. The first theme of sustainability reporting framework reflecting TBL emerged when the relationship between the framework used and the reasons why it was used in the context of TBL was studied. The sustainability reporting framework had TBL as a foundation for the categories and subcategories of the framework.

The codes of journey, awareness, and baseline were grouped together under the category of preliminary stage because the codes referred to steps taken before sustainability reporting begins. The preliminary stage was the first step in the sustainability reporting process. I grouped the codes of implementation and development into the category of sustainability reporting cycle because the codes referred to the planning and implementation of the sustainability reporting process. The second theme of sustainability reporting as a long-term process emerged when the categories of the preliminary stage and the sustainability reporting cycle were brought together. The sustainability reporting process had a long-term journey approach because there was a preliminary stage before sustainability reporting was undertaken and then a sustainability reporting cycle process that occurred after the preliminary stage.

I grouped the codes of internal stakeholders, external stakeholders, and leadership into the category of engagement and support because the codes were related to the support of the sustainability reporting process. The third theme of stakeholder

engagement with leadership support emerged when the relationship between the stakeholders and leaders in the context of the sustainability reporting process was explored. The sustainability reporting process was supported by both stakeholders and top leaders, which ensured the success of the process.

I grouped the codes of collaboration, framework, and CSAC into the category of the collaborative process because the codes were related to their interactions among groups of people and departments. The fourth theme of the collaborative process in sustainability reporting emerged when I explored the relationship between the coded segments with the sustainability reporting process. Collaboration between people and departments throughout the university was required in the sustainability reporting process.

I coded interview segments with the code of value every time that a participant said the word value. I noted that participants mentioned sustainability as the value in every interview segment regarding the code of value. The category of sustainability as value resulted from the code of value and the frequency of the word sustainability. The fifth theme of sustainability as an organizational value emerged when the concept of sustainability and its value to the organization was explored. The case nonprofit university had sustainability as one of its key values, which meant that the leaders and managers fully integrated the concept of sustainability throughout the university.

#### Theme 1: Sustainability Reporting Framework Reflecting TBL

TBL is a concept that identifies and measures the social, environmental, and economic impacts of an organization (Milne & Gray, 2013). I identified TBL as part of the conceptual framework for the study. The leaders and managers of the case nonprofit academic institution indicated that they selected a specific sustainability reporting framework that incorporated TBL to produce a comprehensive and high-quality report. The participants thought it was necessary that the sustainability reporting framework accurately reflected the concept of the TBL and its environmental, economic, and social characteristics.

The participants selected the AASHE STARS sustainability reporting framework as the framework for the sustainability report because the STARS report incorporated the TBL concept. The EDOS emphasized the need to be dedicated to the TBL and show all three aspects. The EDOS stated,

And we focused on the triple bottom line. So we used a full triple bottom line. So we defined sustainability and we understood what it meant, we did not choose green, we did not choose environmental only—we went for economic, social, and environmental impact. It was a great thing to do because we knew all three legs were important. (EDOS)

Stakeholders indicated that they were interested in the TBL as well. The PROF stated, "Internally, there is a large interest among students, faculty, and staff that want to see the economic, social, and environmental dimensions of education be valued."

Even though the STARS framework was challenging to complete because of its multitude of categories and subcategories, the participants thought the framework was worth the work because it was comprehensive and demonstrated TBL. The EDOS thought that not all academic institutions could use STARS because STARS was complex and likely too complex for a smaller school. The EDOS stated regarding the STARS reporting framework,

It is a 250-page report—250. Who is going to take the time to go through the data? That is a huge internal discussion. I get colleges in here all the time. Some of them I would recommend that they should seriously look at it, others I don't. And the reason being is that they are just not ready for it. So we could go through assessment first, then progress, and then decide as a college are you ready to look at STARS? (EDOS)

The PROF agreed with the EDOS and stated regarding the STARS reporting framework, "I guess that—that system is really complicated. It has a large number of reporting metrics. Hundreds, or maybe over a thousand. So it is a lot of work to track down all the information."

However, the EDOS thought that whatever sustainability reporting framework that an academic institution used, it was necessary that the framework incorporated the TBL. The EDOS emphasized the importance of using TBL in the sustainability reporting framework by stating, "So now we can express social, environmental, and economic capital in the same context." The EDOS stated, "But I appreciate that there is at least a

standard with STARS. Just start a journey, take a look at STARS. That is what I told a community college. Always go to the best practice of what works." The AVP stated that the information used in the STARS report was used in other reports as well:

We are reporting through the sustainability office, but that also gets folded into other aspects on campus because we have what we call an accountability report. We have an accountability report that the president's office puts out annually. And there are definitely aspects of the sustainability report in the accountability report. (AVP)

The STARS 2.0 framework had a TBL approach of sustainability and had main sections that reflected the environmental, economic, and social aspects of the organization. The main sections were academics, engagement, operations, planning and administration, and innovation (AASHE, 2015). Each section of the STARS 2.0 framework had subcategories (see Table 5). The academics sections had curriculum and research subcategories. Engagement had campus and public engagements. Operations had air and climate, buildings, dining services, energy, grounds, purchasing, transportation, waste, and water subcategories. Planning and administrative section had coordination, planning, and governance; diversity and affordability; health, wellbeing, and work; and investment subcategories. Innovation section had specific innovation projects as a subcategory.

The numerous categories and subcategories covered the environmental, economic, and social components of TBL. For example, the operations category contained many

environmental components. The planning and administrative section contained many social aspects such as diversity and health. The investment subcategory was an economic component. The numerous categories and subcategories corroborated with the assessment by the participants that the STARS framework might be too much for a smaller academic institution to handle.

For each subcategory, points were awarded on the STARS framework, depending on whether the organization addressed the subcategory topic in the sustainability report. The total points of the sustainability report determined the level of sustainability reporting quality. The sustainability report of the case organization had a gold level rating on the STARS guidelines. A gold level rating was considered a high-quality rating (AASHE, 2015).

Table 5

The Categories and Subcategories of the STARS Report

Category	Subcategories
Academics	Curriculum, Research
Engagement	Campus Engagement, Public Engagement
Operations	Air and Climate, Buildings, Dining Services,
	Energy, Grounds, Purchasing, Transportation,
	Waste, Water
Planning and Administration	Governance, Diversity, Health and Wellbeing,
	Investment
Innovation	Innovation projects

### Theme 2: Sustainability Reporting as a Long-Term Process

The sustainability reporting process at the case nonprofit academic institution followed a series of steps that ensured an accurate, comprehensive, and ongoing

sustainability report. The specific business problem addressed in the study was that some leaders and managers of nonprofit educational institutions may lack the tacit knowledge regarding the strategies and processes necessary to integrate sustainability reporting into the organization's reporting cycle. The findings revealed a sustainability reporting process at a nonprofit academic institution that was successful in preparing, developing, and maintaining a quality sustainability reporting cycle.

The participants described the sustainability reporting process as a journey. The use of journey as a metaphor for the sustainability reporting process indicated that there were certain steps that were essential for successful implementation. The concept of a journey indicated that the process was lengthy with a long-term timeframe. The sustainability reporting process cannot be implemented without a preliminary stage. The EDOS stated,

And then you have to go through an understanding of what sustainability means and where do you apply it. I don't know if anyone gave you this information but just to get to the report is the last thing, it's the journey to how you got there. So there are ten major areas that we focused on from the outset. So we went from how to create awareness, then what does it mean for a faculty member or a student or someone in administration, is it a fad, is it going away or is it a best practice? Where do we apply it?

How much progress? Now you are getting into the reporting part.

(EDOS)

There were steps in the process that needed to be taken before the sustainability reporting cycle could begin. The essential steps before sustainability reporting could begin were awareness, assessment, and progress. This preliminary stage (see Figure 1) established a baseline, which became the foundation for the sustainability reporting.

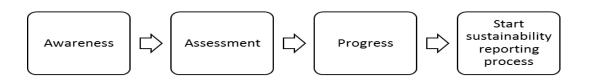


Figure 1. Preliminary stage establishing a baseline.

**Awareness.** Awareness was the step where leaders and stakeholders became aware of what sustainability was and its importance in the community and the university. The EDOS said,

So back at that juncture, the first step was creating awareness. Back then the president of the university, he helped form in 2005 the city's sustainability partnership. He signed on, and so did the mayor. There were five original founding members. They were our university, city, public schools, another local college, and a local community college. Today there are 270 organizations across all sectors. So just look at the capacity that created awareness. (EDOS)

The EDOS added that awareness might be repeated, "So reporting has been a big journey in itself but we never got to the reporting until we had awareness and then it cycles back. So we still with new freshmen have to create awareness and understanding."

Assessment. After awareness, the leaders and managers of the case nonprofit university conducted an assessment report of the current state of sustainability initiatives. The president of the university hired a sustainability consultant, who identified different areas of sustainability at the university. The sustainability consultant interviewed employees to assess the state of sustainability issues, including environmental areas such as waste and energy management and social areas such as health and wellness and stakeholder engagement. The sustainability consultant then developed an assessment report that was reviewed by the leaders and managers of the nonprofit university. The EDOS said, "So, for our first effort, we issued our first report. But it was what I would call is an assessment report. So you have to have a baseline." The EDOS described the assessment report process:

The university looked at this committee and it was very high level, finance, and administration level with a number of stakeholders. And they gave me ten different colleges that they wanted me to benchmark. And go out and benchmark what indicators they were using. Then they selected the indicators. So I compared say nine out of 10 were tracking this and eight out of 10 are tracking this. So that very first report was all assessment to get our baseline. So you can, we probably called it an

indicator report. But it was really an assessment. And that was the first one done. (EDOS)

**Progress.** After a year, the sustainability consultant tracked the progress of the sustainability issues identified in the assessment report. The progress report was a baseline for the sustainability reports to follow. Only after a baseline was established could managers start developing sustainability reports. The EDOS stated, "So the next step is progress, and nobody wants progress—they want impact, long-term change and everybody thinks that you can leap over those steps. You can't, you cannot do that. You have to go through that journey." The EDOS further explained, "But you don't get to this high-end reporting until you do some sort of assessment, then some sort of progress reporting, and then maybe look at STARS."

Sustainability reporting cycle. After the preliminary stage, then the sustainability reporting cycle can be established (see Figure 2). The sustainability reporting cycle started with preparing to gather data using the sustainability reporting framework as a guideline. The managers determined who had the data that were used in the sustainability report. The managers then collaborated with other departments and gather data. The PROF stated, "We need a core group of people who understand the process, and they are proactive and keeping track and when the time comes, at the end of the year they have the information to report."

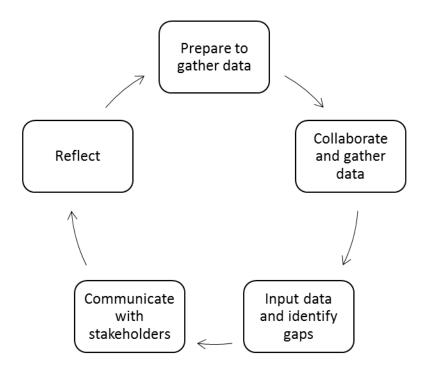


Figure 2. Sustainability reporting cycle.

After gathering the data, they entered the data into the framework. The EDOS stated when describing the importance of a framework,

But in preparation, we have 15 different report areas. But how do they all integrate? So you have assessment reports, financial reports, progress reports, compliance reports- how does all that flow into the sustainability reports? So is there an integrating architecture for all the reporting and planning we do? (EDOS)

The participants used the STARS reporting framework as the framework for the sustainability information. The EDOS stated, regarding the reporting process,

To us, the process of the reporting is embedded. So all these workgroups know that we track data inside STARS, they all know that. And so we will go out and request that data. Some of them know it so well since they are department heads they go into the database themselves and fill it in. (EDOS)

The participants identified gaps in the sustainability reporting framework information. The participants fixed the gaps by going to the appropriate workgroup, collaborating, and gathering more data. The CSC addressed the issue of gap analysis:

But when we first started out they did a study to see where they were at with everything, so it was a really comprehensive review of what we are doing for sustainability. So the first step was what are we doing for sustainability? And that was how we were able to say well, these are what we are strong but here are some areas that we are very weak so we could put more effort in those areas. So the process has really been gap analysis. (CSC)

The PROF gave an example of identifying gaps as part of the sustainability reporting process: "So we maintain a database of courses that focus on sustainability. . . . So we track them two different ways: a set of courses that are entirely focused on sustainability and ones that include some aspect of sustainability." Then the PROF elaborated regarding identification of gaps in the information:

Then we identify gaps. So we noticed that one of the health majors—from the outside we feel that healthcare is a really important aspect of sustainability. But at least superficially we don't have any nursing courses in our sustainability database. So this is an opportunity to reach out to the nursing staff and what we are trying to do and how we envision sustainability and how what they are doing is probably already incorporating many aspects of sustainability at various level. Primary care or organizational management within a hospital. So how can we frame what you are already doing in the context of sustainability? (PROF)

The PROF concluded, "We have members of those departments on our working group, so they are actively working with the faculty just to frame . . . what they are already doing in the context of sustainability."

After the sustainability report information was complete, then the report was shared and communicated with stakeholders. The AVP emphasized that the systematic approach to sustainability reporting was important for planning and communication:

That sustainability reporting not only brings everybody together under a common focus is going to be helpful under its own right, but it's the ability then to report it on a systematic way that will allow others including administration to be able to see that plan and systematic review approach that will bring more attention to it. (AVP)

The STARS sustainability report of the case organization was available online to the public on the AASHE STARS website (AASHE, 2015). An integrated sustainability approach included sustainability reporting that was available to all stakeholders and fully integrated into the reporting cycle (Krizek et al., 2012). After receiving feedback from stakeholders, managers reflected on the reporting information to improve sustainability performance.

### Theme 3: Stakeholder Engagement with Leadership Support

The leaders and managers of the case nonprofit academic institution emphasized the need for stakeholder engagement with strong leadership support of the sustainability reporting process. The EDOS stated regarding two presidents of the nonprofit university who started the sustainability movement:

He wanted to have a discussion about what sustainability means and how it could be an important activity on campus. That was in 2004, then when the next president came, he had a background. So his question was-how are we applying it? How many grants do we have? So he went immediately to the apply side. So the first one created the awareness and the conversation and then the second one went to the apply side. So then the second president signed a number of sustainability commitments on behalf of the university and so our journey is one of leadership and excellence in our case. And how do you report it? (EDOS)

The CSC stated, "We are very fortunate that we have administrative support."

The CSC continued, "For example, one of these opportunities to do reporting is called the President's climate commitment and our president signed on right away and we were one of the first schools to sign off on this." The AVP agreed, "It is important for us to know from top administration down in terms of us being sustainable- it is part of who we are as part of the culture of the institution."

The EDOS, CSC, and AVP described the visionary campus leader that Krizek et al. (2012) argued was necessary for a full sustainability implementation at a university. A visionary campus leader was a high-level executive who encouraged a vision of sustainability. Krizek et al. claimed that a visionary campus leader supported stakeholder engagement, transparency in the sustainability process, and a comprehensive sustainability reporting process. The AVP described the earlier leaders of the nonprofit university, "They brought in a person to head up the sustainability initiative. It was a leading, bleeding edge of when this sort of work was starting on campuses." The STARS reporting framework indicated the importance of top leadership in sustainability reporting (AASHE, 2015). The STARS reporting framework required that each submitted report must be accompanied by a letter from the president, chancellor, or highest ranking executive of the institution who confirmed that the report had been checked for accuracy (AASHE, 2015).

The participants thought that both stakeholders and top leaders needed to support sustainability reporting for the process to be successful. Both internal and external

stakeholders wanted sustainability initiatives and reporting while the leaders supported the process. The PROF described it as "a top-down, bottom-up approach." The CSC stated the benefits of the stakeholders and leaders supporting sustainability:

But also if you just walk through our campus you can tell that sustainability is important. In terms of allocating resources we are able to have these beautiful new buildings and do some other great things renewable energy wise and stuff like that because we do have that extra support. We are fortunate not to have to fight sustainability battles. (CSC)

The PROF talked about the external stakeholders, including the local businesses: "The external factors there is a whole group of businesses and foundations that are really interested in sustainability. Our university's value of sustainability fits into that ecosystem around us and that extends to the mayor's office and the county." The PROF further stated, "So it is a really good fit and I think that we are a good model for other institutions and regions in the country." The PROF also discussed other universities and local government support of sustainability:

And in terms of sustainability there is a lot of spillover between not only with industry but with a lot of nonprofits and the university and government. And I think it is working as kind of a holistic ecosystem of ideas. I think that our university is doing a really good job, but we are

doing a good job because there is so much other stuff going on in the community related to sustainability. (PROF)

The PROF concluded that the nonprofit university had a lot of support regarding sustainability reporting, "Yes, a lot of support. We are all reinforcing one another." The support of the environment was corroborated by T. Hahn et al. (2015). T. Hahn et al. noted that a favorable organizational setting was a prerequisite for organizations to respond to sustainability issues. Fernandez-Feijoo et al. (2014) described the numerous stakeholders at academic institutions, including students, faculty, alumni, staff, administrators, local businesses, governmental agencies, and other colleges in the same way as the PROF of the case nonprofit university. Multistakeholder collaboration encouraged mutual learning of sustainability (Yarime et al., 2012).

In the STARS reporting framework, there was a category for engagement (AASHE, 2015). This category consisted of two subcategories: campus engagement and public engagement. The case nonprofit academic institution had a high percentage of over 85% for engagement activity, indicating a high degree of stakeholder engagement.

# Theme 4: Collaborative Process in Sustainability Reporting

The participants emphasized the collaborative process of the sustainability reporting cycle at their nonprofit university. The sustainability practices of the nonprofit academic institution affected multiple levels and departments, requiring a collaborative effort throughout the organization. The case university handled the collaborative process by creating CSAC, which was the campus sustainability action committee. Avota,

Mcfadzean, and Peiseniece (2015) noted that teamwork was a common method of collaboration in a sustainable organization.

The participants stated that the sustainability report was an external report that used internal data. The internal data were gathered from a wide range of different departments throughout the university through internal reports. The CSC stated, "We do some internal reports such as our strategic plan, different committee work. There is a campus sustainability advisory committee; this is our big one, so we do reports for that committee." The CSC further stated,

There is a lot of internal reporting that happens through committee. But separately there is a lot of external reporting that we do, and those sort of reports that other institutions do so there can be comparisons between other institutions. (CSC)

To complete the sustainability report, it was necessary to collaborate with numerous people, which was a time-consuming process. It was also difficult to know who had the data or where and when the data were available. The CSC stated, regarding CSAC, "It brings everyone to the table, so that has been really helpful." The CSC continued, "Before we did that I had to reach out to all the different groups individually and kind of get everyone up to speed individually, so it was not efficient basically."

I conducted a document review of the AASHE STARS sustainability reporting framework that the case nonprofit university used for its sustainability report. The STARS 2.0 framework had a systems approach to sustainability, and the main sections

were academics, engagement, operations, planning and administration, and innovation (AASHE, 2015). Each section of the STARS 2.0 framework had subcategories. The STARS reporting framework indicated that the participants were accurate that the sustainability report required a wide range of information from departments across the entire university.

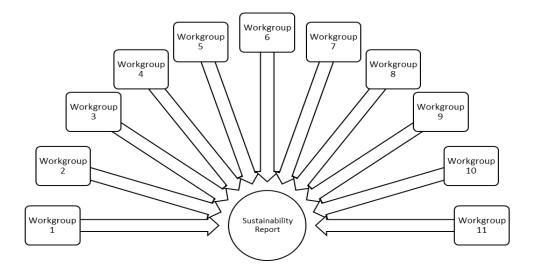
To resolve the challenges of gathering, tracking, and sharing information necessary in sustainability reporting, the leaders at the nonprofit university established the CSAC. CSAC was organized into 11 workgroups. Each workgroup represented an area of sustainability such as waste management, transportation, curriculum, and operations. Each workgroup had a leader with people from different departments within the workgroup. The CSC stated, "There are 11 workgroups in different areas. And they work with other workgroups. Even if we have 20 people at a meeting, there are really like 60 people working with the reporting since they are working with different networks." The AVP agreed,

From that standpoint, what we are doing now is that we have groups and subgroups that work on various aspects of our sustainability practices on campus. Like our food services, our academic programs, our student engagement, our facilities, energy usage, and so on. (AVP)

People worked together within the workgroup, and the workgroups collaborated with other workgroups to share and communicate information about sustainability practices. The PROF stated when referring to the workgroups,

And then internally we developed the campus sustainability advisory committee that helps with the data collection that goes into the collection. But also within the working groups, we can identify specific sustainability targets and goals that we want to implement those through a process of continuous improvements. Include more sustainability into our educational curricula, or in our operations, in our investments and then that circles back and we are able to report on that. (PROF)

The CSC stated, "One thing that has been great is that we can have constant feedback in conversations so they can see areas that could be improved and have better results. That has been a really good thing to keep things going." The collaborative process was described by T. Hahn et al. (2014) to allow for information exchange and open dialogue across different levels of the organization, which encouraged organizational learning and creative problem solving. The collaborative process was essential to contribute internal information of 11 workgroups to the external sustainability report (see Figure 3).



*Figure 3*. Collaborative process from internal information contributing to external sustainability report.

The participants indicated that CSAC had improved the efficiency of the collaborative process. CSAC also addressed the university-wide strategic plan and not just the sustainability report. The EDOS stated, regarding CSAC,

So today, our campus sustainability advisory committee is developing a sustainability plan that fits into the strategic plan. We never had one across the university. We always had one in our office, but our office is of service to everyone. So this was a major step forward last year in setting

up a sustainability advisory council that would actually integrate the goals in 11 different areas. (EDOS)

The participants believed that CSAC was essential to the success of the sustainability initiatives and different reporting cycles throughout the nonprofit university. The CSC stated,

So we are having them looking at our university's strategic planning like the big overarching document and see how they fit into that. So we are right in the middle of that process. That has been a neat process for us. We can see how sustainability specifically ties into the mission and goals and outcomes for the university. (CSC)

The CSC concluded regarding the collaborative effort of CSAC, "It has been a huge improvement though to have everyone together." The AVP added that the members of the sustainability committee are developing an online information distribution system:

We might do them on a spreadsheet in my office or somewhere else in their area has their own tracking, but we are putting together now an internal web-based systems where you can get on and it makes the information much more disbursed and available to those around campus. (AVP)

## Theme 5: Sustainability as an Organizational Value

The leaders and managers of the case nonprofit academic institution indicated that sustainability had to be a key value of the organization to support sustainability reporting. Sustainability was a concept that encompassed the ability of organizations to meet the

needs of stakeholders while maintaining high environmental, financial, and social performance (Searcy & Buslovich, 2014). I identified sustainability as a part of the conceptual framework of the study. The CSC stated, regarding sustainability as an organizational value,

We are very lucky at our university that sustainability is one of our formal values. The institution has seven formal values in effective teaching and inclusion. So we are very fortunate that sustainability was named one of them. I think that this is kind of unique, we are fortunate to have administrative support. So sustainability is very important to our university as a whole. (CSC)

The EDOS defined sustainability in this way: "And use a marketplace term—a set of tools and best practices that allow you to make a better decision both for today and tomorrow, but gives you positive social, economic, and environmental impact. That is the best definition." The AVP stated the long-term commitment to sustainability started years ago and grew:

It seems as though sustainability has always been at least an interest all the way back when early on we were doing LEED [Leadership in Energy and Environmental Design] certified buildings on campus. Kind of well in advance of other public buildings. From that perspective, it kind of grew from where I saw it. (AVP)

The viewpoints of the participants aligned with T. Hahn et al. (2015) who argued that a favorable organizational setting was a prerequisite for organizations to respond to sustainability issues.

Because sustainability reporting was voluntary, the participants thought that the nonprofit university had to value sustainability to invest in the lengthy journey of sustainability reporting. The EDOS stated, regarding the voluntary aspect of sustainability reporting,

The best way to look at it is—it's required. None of this was really required. That's different, right? There are assessment reports for accreditation, but sustainability is not the same way. There is no requirement to do it but, we self-imposed, there is your difference. So we self-imposed, we did not have to do an assessment. But the university wanted to find out where we are. But they picked the indicators, and that started the journey. (EDOS)

At the case nonprofit academic institution, sustainability was now considered a key value that was to be integrated across the entire organization. Although most universities do not have the same level of commitment to sustainability as the case university, the participants thought it was important for a university to value sustainability and be dedicated to the concept of sustainability for continued success. The EDOS stated about the importance of sustainability as an organizational value:

In 2010 the difference was that it is no longer an activity it is now one of the university's seven values. That is a huge difference because once it is a value you have to integrate sustainability across all departments and all our colleges and it has to do with leadership and excellence, it is not an activity. It's not about just saving energy. So today it's about how to live a sustainable lifestyle. (EDOS)

The PROF stated, "Sustainability is valued and implemented and acted upon in the curriculum and in the way we do work." The PROF continued, "We are also doing it internally for the university because sustainability is a university value now. So we have to have metrics and show how we are integrating that value into everything we do in our operations."

The EDOS stated the benefits of having sustainability as an organizational value in the context of commitment:

Plus you have to get to the point where the university has a commitment to it. And there are still are many universities that are doing great work ten years ago that have still not been able to get to the total commitment. So we are very fortunate. And more or less, I don't know any that has it as a university value. We only have seven values at our university, and that is a major difference. To be a good global citizen which is what we are trying to do here. They believe that sustainability helps prepare a student to become one of those - a good global citizen. (EDOS)

The use of sustainability as an organizational value corroborated with the conclusion by Krizek et al. (2012) that the principles of sustainability needed to become part of the mission, vision, and values of the academic institution to be fully integrated into the organization.

### **Applications to Professional Practice**

The findings, conclusions, and recommendations from the study contributed to the field of knowledge of the internal organizational processes in sustainability reporting. The findings of the study fulfilled the need for an exploration of a sustainability reporting cycle for a nonprofit academic institution. The five themes of the study that emerged from the findings were: (a) sustainability reporting framework reflecting TBL; (b) sustainability reporting as a long-term process; (c) stakeholder engagement with leadership support; (d) collaborative process in sustainability reporting; and (e) sustainability as an organizational value.

Leaders and managers at nonprofit academic institutions could select a sustainability reporting framework that reflected the TBL concept to ensure that the sustainability report was high quality and measured important sustainability characteristics. TBL was a concept that assessed sustainability practices through environmental, economic, and social factors (Milne & Gray, 2013). The findings of the study indicated that it was essential that the sustainability reporting framework incorporated TBL to provide a comprehensive assessment.

Leaders and managers at nonprofit academic institutions might be hesitant to implement sustainability reporting because they did not know how to start. Managers identified lack of knowledge in developing sustainability reports as the main reason for not using sustainability reports (Habek & Wolniak, 2015). The findings of the study indicated the steps of establishing a sustainability reporting process consisted of completing a preliminary stage before the reporting cycle, and then the reporting cycle could be established. The preliminary stage of awareness, assessment, and progress established a baseline before starting the sustainability reporting cycle. The sustainability reporting cycle of preparation, collaboration, input and gap analysis, communication with stakeholders, and reflection was perpetuated on an annual basis. Managers at nonprofit academic institutions could use the sustainability reporting process described in the study as a model to assist them in developing their own sustainability reports.

Leaders and stakeholders of a nonprofit academic institution could consider if there was stakeholder engagement with leadership support for sustainability reporting. At the case nonprofit university, both internal and external stakeholders supported sustainability initiatives and sustainability reporting. Stakeholders wanted to see progress and assessment of sustainability initiatives and were engaged in the sustainability reporting process. Along with the stakeholders, the top leaders at the university strongly supported sustainability practices and sustainability reporting.

A comprehensive sustainability reporting framework required a diverse range of information from multiple sources. In the case study, the sources of information came

from internal reports of different departments throughout the university. The case nonprofit university formed a collaborative committee that united all the departments throughout the university with sustainability as the goal. Leaders and managers could use the same strategy to support collaboration in the sustainability reporting process.

Leaders and managers can assess their organizations and determine if their organizational environment had the values for sustainability reporting support.

Sustainability as an organizational value may be necessary to support the lengthy process of sustainability reporting. Sustainability reporting could provide leaders and managers an assessment tool for improvement of sustainability initiatives. The nonprofit academic institution can also benefit from the recognition of commitment to the community through transparency of the sustainability reporting process.

# **Implications for Social Change**

If leaders and managers had the knowledge of preparing, developing, and maintaining a sustainability reporting cycle, then the leaders and managers were more likely to consider using sustainability reporting (Habek & Wolniak, 2015). If nonprofit academic institutions had sustainability reports, then stakeholders would be able to assess the progress of sustainability practices that will increase the transparency of the sustainability process. Leaders and managers at nonprofit academic institutions could use the findings from the study to implement the process of sustainability reporting.

Community engagement was a characteristic of an organization that incorporated sustainability as a value. One way to connect and communicate with community

stakeholders and partners was through sustainability reporting. A network of community partners could use the sustainability reports to understand the impact of sustainable practices as well as compare progress. The engagement with other nonprofit academic institutions could be enhanced if the institutions used the same sustainability reporting framework such as STARS to assess the sustainability initiatives across organizations.

Being a good global citizen means understanding that the conservation of environmental resources, economic responsibility, and social awareness are important for the positive growth of the global environment (Hack et al., 2014). As leaders in businesses and organizations embrace sustainability practices, sustainability reporting becomes part of the sustainability movement (Mori et al., 2013). Leaders and managers of nonprofit academic institutions can use the findings of the study to start the sustainability reporting process by completing the preliminary stage of awareness, assessment, and progress. The findings indicated the necessary conditions for starting and implementing the sustainability reporting process.

Stakeholder engagement with leadership support was a vital factor in supporting the sustainability reporting process. At a nonprofit academic institution, engaging students, faculty, staff, administration, and community partners such as local businesses brought positive social change to the community and environment. Stakeholder engagement and collaboration established an environment of participation and information exchange that encouraged organizational learning and innovation benefiting the entire community.

#### **Recommendations for Action**

The data analysis revealed five themes: (a) sustainability reporting framework reflecting TBL; (b) sustainability reporting as a long-term process; (c) stakeholder engagement with leadership support; (d) collaborative process in sustainability reporting; and (e) sustainability as an organizational value. Leaders and managers at nonprofit academic institutions can use the themes as steps and strategies for implementing a sustainability reporting process. The strategy of completing the preliminary stage of awareness, assessment, and progress before starting sustainability reporting can function as a guideline for starting a sustainability reporting process. The sustainability reporting cycle of preparation, collaboration, identification of gaps, stakeholder communication, and reflection is a strategy for implementation of a sustainability reporting process.

The use of a sustainability reporting framework that was based on TBL can be a standard for managers who are considering different sustainability reporting frameworks. The collaborative effort was an essential factor in the sustainability reporting process that leaders and managers can encourage through teamwork and committee formation. Stakeholder engagement with leadership support can indicate if a nonprofit academic institution had the support needed to implement a sustainability reporting process. Finally, sustainability as an organizational value was a vital factor for a nonprofit academic institution to have to integrate sustainability reporting throughout the organization.

Leaders and managers of nonprofit academic institutions who were considering using sustainability reporting for sustainability initiatives at their organizations is a target audience of the study. Another target audience is internal and external stakeholders including students, faculty, staff, administration, and community partners who are interested in understanding the sustainability reporting process. Leaders at nonprofit academic institutions have the responsibility of encouraging sustainability reporting and understanding the benefits to the community and stakeholders.

Accounting professionals can be attentive to the findings since sustainability reporting incorporates aspects of financial reporting. Accounting professionals may work with sustainability managers to provide the economic component of the TBL. Because the concept of sustainability requires managers to be held accountable to stakeholders, then accountants are in the position of applying the ethical standards of transparency to sustainability reports (Seay, 2015).

The results of the study can add to the information sharing at conferences with accounting professionals. Because the study focused on a nonprofit academic institution, I can present my findings at academic conferences. The findings of the study can contribute to training for managers who are interested in sustainability reporting or starting the sustainability reporting process at their nonprofit academic institutions. I can disseminate the findings of the study by publishing in academic journals targeted for leaders at academic institutions. I can also share the results of the study through online journals and professional online blogs.

#### **Recommendations for Further Research**

The purpose of this qualitative single case study was to explore the strategies and processes necessary for leaders and managers to integrate sustainability reporting into the reporting cycle for a nonprofit higher education institution. I identified in Section 1 that a single case study was a limitation because it might hinder transferability to other organizations (Zivkovic, 2012). I mitigated the limitation by selecting an exemplary case of an academic institution that had fully integrated sustainability reporting into the reporting cycle. In future research, multiple case studies of academic institutions can extend the research.

Another limitation of the case study was the willingness of participation by leaders and the honesty in the responses of the leaders. I was able to mitigate the limitation by thoroughly explaining the data collection process to the participants. I addressed the honesty and thoroughness of the participants' responses by asking follow-up questions if the answers were not clear. Additional questions to the list of interview questions can extend future research.

The scope of the study did not extend outside of the state of Michigan and outside of the United States. The scope of the study did not include for-profit academic institutions. For further research, the inclusion of for-profit academic institutions could extend the body of knowledge. For-profit academic institutions share many of the same challenges of nonprofit academic institutions, such as a complicated network of

stakeholders and community involvement. Research can also include academic institutions in different states or regions of the United States.

I conducted the interviews and document reviews of the study over the course of 2 months, so the scope of the study did not extend past a 2-month period. For future research, the scope of the study could be more long-term. Researchers can interview participants at one stage of the sustainability reporting process and then interview again at a different stage to explore what participants think about the sustainability reporting process over an extended period.

Cavazos-Garza and Krueger (2014) suggested that future research could focus on the inclusion of sustainability in an organization's strategy. I focused on the process of developing and implementing sustainability reporting in the single case study. Future research can focus on how to include sustainability into an organization's strategic planning.

Moore and Poznanski (2015) pointed out that many sustainability reports lacked information that would be valuable to stakeholders. I did not include external stakeholders in the interview process for the single case study. Future research could include surveying external stakeholders to examine what stakeholders were looking for in sustainability reports.

#### **Reflections**

In qualitative research, the researcher was the instrument of data collection (Koch et al., 2013). I collected, analyzed, and interpreted the data in the qualitative single case

study. I was aware of possible influence on all aspects of the research because of the amount of interaction with research participants. The influence of the researcher included relationships with participants, personal biases, and attitudes that might have influenced the view and interpretation of the qualitative data (Koch et al., 2013).

Prior to the start of the academic research process, I had an active interest in the concepts of CSR, sustainability, and accounting for sustainability. My professional perspective was supportive of the concept of CSR for organizations and the importance of sustainability for organizations and communities. I was an active participant in the accounting field and supported the involvement of the accounting profession in the sustainability reporting process. I taught accounting at the college level and I supported teaching sustainability concepts in the context of accounting education.

I was not a faculty member of the nonprofit academic institution in the study, so I did not have any relationship with the participants of the single case study prior to the study. The only contact I had with the participants of the case academic institution was through the interview process. I practiced reflexivity to mitigate bias and increase the awareness of my influence on the data and the data collection.

I practiced reflexivity throughout the entire research process, including development of interview questions, analysis of interview transcripts, and the development of themes. The practice of reflexivity ensured that the resulting themes emerged from the responses and not from the researcher's biases (Koch et al., 2013). I reflected on my support of the concept of sustainability and ensured that all information

from the participants' responses were directly from the participants and did not reflect my biases.

After completing the study, I understood the importance of leaders, managers, and employees in embracing the concept of sustainability when developing sustainability reporting. If the leaders, managers, and employees are committed to sustainability and the benefits to the community, then they will take the time and effort in developing sustainability reports for their stakeholders. I have a better understanding of the need for a collaborative effort in developing sustainability reports. Communication needs to be open across different levels and areas in the organization for the sustainability reporting process to succeed. I have a greater understanding of the unique position that nonprofit academic institutions have in the community and their potential for the promotion of sustainability and responsible sustainability reporting.

## **Summary and Study Conclusions**

The findings from the study contributed to the body of knowledge regarding the planning, development, and monitoring of sustainability reports. The five themes from the study were: (a) sustainability reporting framework reflecting TBL; (b) sustainability reporting as a long-term process; (c) stakeholder engagement with leadership support; (d) collaborative process in sustainability reporting; and (e) sustainability as an organizational value. The sustainability reporting process was a lengthy and complicated process that could span years and involved stakeholders throughout the nonprofit academic institution and community. Leaders and managers of nonprofit academic

institutions can use the results of the study as guidance for the development and implementation of their sustainability reporting process.

The nonprofit academic institution is a learning organization, and the leaders have the ability to educate the community through traditional means and through example. If a nonprofit academic institution published sustainability reports, then all stakeholders would be able to assess the commitment to sustainability of the organization. The nonprofit academic institution can serve the community on multiple levels, including education, community networking, and as a role model for best practices in sustainability. The nonprofit academic institution can fulfill a leadership role in an increasingly global and community-oriented world perspective in the academic field through information and knowledge sharing of the sustainability reporting process.

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## Appendix A: Interview Questions

The purpose of this qualitative case study was to explore the strategies and processes necessary for leaders to integrate sustainability reporting into the reporting cycle for a nonprofit higher education institution. The objectives for the interviews were to: (a) understand the process of integration of sustainability reporting into the reporting cycle, (b) understand the overall strategy of the implementation of sustainability reporting, and (c) understand the decision-making process of leaders regarding sustainability reporting.

- 1. Why is your institution committed to sustainability reporting?
- 2. What types of reports are used by your institution for sustainability reporting and why?
- 3. What type of framework is used for sustainability reporting and why?
- 4. What is the process of planning and developing the sustainability reporting system?
- 5. What is the process of implementing and managing the sustainability reporting system?
- 6. What are the improvements needed, if any, for the sustainability reporting system at your organization and why?
- 7. Is there anything that you would like to add that is relevant to defining the strategies and processes needed to implement sustainability reporting at your institution?

## Appendix B: Interview Protocol

I conducted face-to-face semistructured interviews with active participants who were experienced in the sustainability reporting process at a nonprofit academic institution. I conducted the following interview protocol for each participant:

A research information package was sent to participants before the interview in an e-mail.

At the interview, I briefed the participant about the purpose of the study and the interview process. I asked the participant if there were any questions about the study and the interview process.

I emphasized the confidentiality and the voluntary nature of the study.

I collected the signed consent and confidentiality forms from the participants.

With the participant's permission, each interview was recorded.

I took notes during and soon after each interview to record additional information.

The interview lasted no more than 1 hour.

After the interview, I conducted a debriefing so participants could ask questions, make comments, or add additional information.

I conducted follow-up interviews so participants could review the interview information and preliminary findings.

## Appendix C: Document Review Protocol

The documentation review came from three different sources: sustainability reports, financial, and annual reports. The sustainability reports were available on the STARS sustainability framework website (AASHE, 2015). The financial reports and the annual reports were available on the website of the nonprofit academic institution.

I reviewed the sustainability reports using guidelines set by STARS for sustainability reporting. The STARS sustainability reporting guidelines were adapted to assess the quality of the sustainability reporting of the organization (AASHE, 2015). I used a checklist incorporating both the STARS guidelines and the sustainability reporting assessment tool (Van Der Ploeg & Vanclay, 2013) to assess the content and quality of the sustainability reporting of the organization.

I reviewed the financial reports and annual reports of the nonprofit academic institution using a checklist of financial and non-financial indicators. The financial reports included the income statement, balance sheet, and statement of cash flows. The annual reports included financial reports, budgets, and non-financial information such as reports on projects. The financial and annual reports provided demographic information such as organizational size, enrollment, faculty and staff, and governance.