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Construction Industry: Profitable Corporate Sustainability Strategies and Processes Achieve Competitive Advantage

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This is to certify that the doctoral study by

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Abstract

Construction Industry: Profitable Corporate Sustainability Strategies and Processes

Achieve Competitive Advantage

by

Chad Justin Czelusniak-Serviss

MBA, Antioch University New England, 2016

BS, Capella University, 2014

Doctoral Study Submitted in Partial Fulfillment

of the Requirements for the Degree of

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Abstract

Some construction industry managers lack strategies to integrate corporate sustainability strategies and processes for competitive advantage, which causes limited profitability. Grounded in the general systems theory, the purpose of this multiple case study was to explore corporate sustainability strategies and processes senior and mid-level construction industry managers use to achieve competitive advantage in the United States. The participants were eight senior/mid-level construction industry managers from eight different construction industry organizations with at least five years of experience in the construction industry who utilized corporate sustainability strategies and processes. Data were collected using semistructured interviews. Three themes emerged using thematic analysis: systems thinking leading to competitive advantage; motivating and nurturing buy-in through learning and engagement activities, with expressions of thankfulness; and gaining profitability through corporate sustainability measurement systems. The key recommendation for construction industry managers is to incorporate bike infrastructure with helmets for everybody and guaranteed rides home to reduce greenhouse gas emissions. The implications for positive social change include the potential to enhance sustainable housing opportunities for a new generation of consumers.

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Section 1: Foundation of the Study

Background of the Problem

Corporate sustainability (CS) practices have become a popular field of research in the last few decades (Buyukazkan & Karabulut, 2018). The concepts of sustainability evolved and discussed in various international platforms at International Union for the Conservation of Nature in 1969, United Nations Conference on the Human Environment in 1972, World Conservation Strategy in 1980, and United Nations Conference on Environment and Development in Rio in 1992 (Kusakci, 2018). Buyukazkan and Karabulut (2018) stated that CS is a key topic among academics, regulators, and business managers through the emergence of recent technological and social change events and has led to the realization of environmental deterioration and the need for continuous economic development. Although, the strategic knowledge of creating a competitive advantage (CA) through CS strategies and processes was still unidentified.

CS strategy and process development are among the most difficult and important challenges in the development of organizational processes (Stock & Seliger, 2016). The concept of CS links to the compatibility between the development of economic activities, the related social phenomena, and the protection of the environment (Blundo et al., 2018). From the organizational point of view, the key element for the analysis of CS strategies and processes of an industrial process is a comprehensive approach to system analysis that considers the object of the study as part of a complex system (Urbaniec, 2018). The introduction of strategies and processes for monitoring company activities is important for companies that are striving to produce high-quality products (Blundo et al.,

2018). Construction industry (CI) managers need to formulate CS strategies and processes, which require the incorporation of sustainability into their business model, to create CA (Giannoni et al., 2017). The current situation of CI managers must be known before following the path to CS strategies and processes (Giannoni et al., 2017). The aim of this research therefore was to identify profitable CS strategies and processes, and their level of implementation.

Finding a solution to how to create a CA through CS strategies and processes requires assessment at many levels within an organization, which include the measurement of the organization's operational performance, through the collection of data (Buyukazkan & Karabulut, 2018). Managers are aware of the need for profitable CS strategy and process approaches to access complex systems. However, little attention is dedicated to how or what to exactly measure (Buyukazkan & Karabulut, 2018). Managers often seek third-party certifications for their organizations that signal to external audiences their commitment to given social or environmental causes (Parker et al., 2019). Third-party certifications, like B-Lab provide a context for disentangling the processes associated with membership claims and subsequent category promotion (Gehman & Grimes, 2017). When awarded certification from B-Lab, the organization receives the B Corp certification, provided after completing a successful voluntary social and environmental audit (Parker et al., 2019). However, little or no information was available on standard creation without assistance, nor how managers can modify or guide business practices to become sustainable and create CA.

Problem Statement

A new generation of consumers is concerned with CS issues and requires CI managers to produce sustainable building materials (Simion et al., 2019) to stay competitive (Liu et al., 2020). Only 20% of companies report integrating CS strategies and processes, while 60% of managers believe that CS strategies and processes affect decisions that lead to CA (Aragon-Correa et al., 2017). The general business problem was that some CI companies were not integrating CS strategies and processes as a priority for CA. The specific business problem was that some managers in the CI lacked profitable CS strategies and processes to achieve CA.

Purpose Statement

The purpose of this qualitative multiple case study was to explore the strategies and processes CI managers use to achieve CA through profitable CS practices. The target population was eight senior/mid-level managers of the CI located in the United States who had gained CA through developing and implementing strategies and processes to achieve profitable CS goals. The study findings may contribute to positive social change as people in the CI become knowledgeable about profitable CS strategies and processes that they can, in-turn, systemically implement. The implementation of these profitable CS strategies and processes may ensure that those within the CI treat each other well, care for the planet, and obtain profit for their organizations ethically.

Nature of the Study

Qualitative, quantitative, and mixed method research techniques are three typical methods used by researchers (Saunders et al., 2015). Qualitative researchers record data,

such as opinions, feelings, and experiences, to gain access to the participants' natural environment (Clark & Veale, 2018). In contrast, quantitative researchers examine relationships among variables, which measure the information numerically, then analyze using a range of statistical and graphical techniques and may include testing hypotheses (Saunders et al., 2015). Further, some researchers choose to combine the benefits of both quantitative and qualitative data collection techniques and analytical procedures by using the mixed method research technique (Saunders et al., 2015). The goal of the study was not to test hypotheses, which is part of the quantitative methodology or the quantitative portion of a mixed methods study, so qualitative methodology was used to explore profitable CS strategies and processes,

Three research designs that one could use for a qualitative study on profitable CS strategies and processes are (a) phenomenological, (b) narrative, and (c) case study. Phenomenology is the study of participants' recollections and interpretations of the experience of a phenomenon (Saunders et al., 2015). The phenomenology approach was not appropriate for this study because the purpose was not to gain insight into the lived experiences of participants personal lived experience regarding the phenomenon under study. Inquiries yield narrative data including interviews that solicit participants' stories or written autobiographies and biographies (Butina, 2015). For this doctoral study, the objective was not to explore the history of an event. The narrative approach was inappropriate because the goal was to seek information to identify the strategies and processes for profitable and sustainable development rather than an autobiography. Finally, a case study involves an empirical inquiry for the investigation of a

contemporary phenomenon in depth and within its real-world context (Yin, 2014). The case study approach was appropriate for this study because the aim was to explore the management strategies and processes for profitable CS practices.

<div align="center">**Research Question**</div>

What profitable CS strategies and processes do CI managers use to achieve CA?

<div align="center">**Interview Questions**</div>

1. How do you define CS and sustainable business practices?

2. How has your CI experience influenced the use, development, and implementation of CS practices?

3. Why have you made CS strategies and processes a priority?

4. How did you develop CS strategies and processes?

5. What technique(s) do you use to implement the CS strategies and processes?

6. What technique(s) do you use to motivate employee buy-in to the CS strategies and processes?

7. How do you determine the profitability of CS strategies and processes?

8. How do the CS strategies and processes achieve CA?

9. What is important to understand your organization's success in developing and implementing CS strategies and processes?

10. What other information do you see pertinent that has not been discussed in this interview?

Conceptual Framework

CS is a complex concept including environmental, financial, and social

dimensions, which in turn involve several aspects that interrelate in a complex way

(Palmberg et al., 2017). The theory utilized for the case study conceptual framework was

the general systems theory. Von Bertalanffy introduced the general systems theory

through a series of lectures that began in 1937, published articles in 1946, and then the

book *General System Theory, Foundations, Development, Applications* in 1968 (von

Bertalanffy, 1968). Von Bertalanffy (1968) found that living organisms are essentially

open systems, i.e., systems interacting with their environment. These open systems have

structural elements such as models, principles, and laws that apply to generalized

systems. It does not matter what kind of system, or the nature of the structural elements

(von Bertalanffy, 1968).

Sustainability in relation to systems thinking, which provides a researcher the

ability to focus on a system's interrelated parts, could help people understand the

complexity of sustainability (Palmberg et al., 2017). Conceptions appear in contemporary

science concerned with what is termed *wholeness*, i.e., dynamic interactions manifest in

the difference of behavior of parts when isolated or in a higher configuration (von

Bertalanffy, 1968). A consequence of the existence of general system properties is the

appearance of structural similarities in different fields (von Bertalanffy, 1968). *Systems* of

various orders are not understood by evaluating their respective parts in isolation (von

Bertalanffy, 1968). Therefore, von Bertalanffy's (1968) general systems theory approach

could provide a lens to understand the findings through identifying and exploring the profitable CS strategies and processes that managers use to achieve CA.

Operational Definitions

The definition of terms provided below helped with understanding as these related and pertained to this study.

Competitive advantage (CA): The ability of an organization to sustainably create more economic value than the marginal competitor in its product market (Jones et al., 2018).

Corporate sustainability (CS): A process of management in which achievement aims to safeguard the wellbeing of the human population, protect the natural environment, and promote the sustainable development of the economy systemically (Zhang et al., 2020).

Sustainable processes: The process of identifying the success/failure factors to hierarchize and quantify them through a set of technical and economical specifications (Merticaru et al., 2017).

Sustainable strategies: The strategies in which the exploitation of resources, the course of investments, the direction of technological development, and institutional change harmonize to improve current and future potential so that human needs and aspirations meet (Giannoni et al., 2017).

Assumptions, Limitations, and Delimitations

Assumptions are facts considered to be accurate but that cannot be verified. Limitations refer to potential weaknesses of the study, which are out of the researcher's

control. Delimitations are characteristics of the study that are within control that limit the scope and define the boundaries of the study. The assumptions, limitations, and delimitations have risks, and the intention was to treat them as such.

Assumptions

Assumptions are ideas or concepts expected to be accurate, without proof (Yang et al., 2018). There are three basic assumptions. The first assumption was that a qualitative method was an appropriate research approach for this study. The second assumption was the participants selected would participate and provide accurate and honest responses. The third assumption was that the participants would know, and be able to describe, the accurate processes and strategies of profitable CS practices that lead to CA.

Limitations

Limitations are the potential weaknesses of this study (Marshall & Rossman, 2016). The first limitation was that the available literature provided few examples of an actual existing organization's processes and strategies of profitable CS practices. The second limitation was that only senior and middle managers provided their feedback on the interview questions. Finally, the third limitation was the lack of available organizations, within the geographic area of the study, who are known for having profitable CS practices.

Delimitations

Delimitations are the bounds of a study (Marshall & Rossman, 2016). Some delimitations of this study are the research question, interview questions, and conceptual framework (Baxter & Jack, 2008). In addition, the geographic location of the United

States was a delimitation. Another delimitation was the recruitment inclusion of the senior and middle CI managers.

Significance of the Study

The study findings were of significance to CI managers who identified the key beneficiaries and stakeholders from the knowledge of this research and who wanted to develop reasonable management practices and policies to build an organizational culture toward profitable CS practices. Individuals adopt CS behaviors coherently with values that emerge in developing the relationship between employees and managers and, furthermore between stakeholders and the organization's staff (Romanelli, 2018). The concept of sustainability, when applied to organizational business models and practices, enables managers to achieve CA. These results emerge from the values and rewards implemented through the human dimensions of business activity and further catalyze, design, and implement organizational renewal (Romanelli, 2018).

Contribution to Business Practice

Business executives reported that sustainability benefits accrue not only to the environment and society but also to the companies themselves (Dyllick & Muff, 2016). Business executives, the staff, and the organization achieve benefits from sustainability practices through reducing costs and the risks of doing business (Dyllick & Muff, 2016). The intangible benefits of sustainable business strategies and processes come in the form of increased brand reputation, increased organizational attractiveness to available talent, and increased competitiveness (Dyllick & Muff, 2016). Organizational leaders could train managers in profitable CS strategies and processes. With managers trained in similar

profitable and sustainable business strategies and process improvement techniques, they

could in-turn train their employees in profitable CS strategies and processes to achieve

competitive and sustained advantages.

Implications for Social Change

Sustainability is a process that must develop over time, as strategies and processes

are necessary to achieve sustainability benefits (Nastase et al., 2016). Social support is

vital to devising social norms toward more sustainable patterns (Too & Bajracharya,

2015). People want the change to occur slowly, with efficacious results, because they

need to know whether their selected and implemented initiatives are making a tangible

difference to the sustainability of their communities (Nastase et al., 2016; Too et al.,

2015). Social change may occur as communities gain knowledge and implement change

related to profitable CS strategies and processes. Implementing these profitable CS

practices may ensure that people treat each other well, care for the planet, and obtain

profit for their organizations ethically.

A Review of the Professional and Academic Literature

A discussion of related literature builds a logical framework for a reader and can

help develop more insightful questions about a topic (Marshall & Rossman, 2016; Yin,

2014). A literature review demonstrates the underlying assumptions behind the general

research question, displays the research paradigm that undergirds the study and describes

the assumptions and values, and shows that the researcher is knowledgeable about the

topic and has identified some gaps in previous works (Marshall & Rossman, 2016). The

main topics provided in this literature review reflected on concepts from the general

systems theory, profitable CS practices and models, and the CI.

The Organization of the Review

The content organization throughout this literature review addressed the concepts

from the research question and the interview questions. This review of related literature

presented information relevant to the purpose of this multiple case qualitative study,

which was to explore the profitable CS practices that lead to CA in the CI. The outline

format of this literature review started with the conceptual framework, then CS strategies

and processes, CS strategies and processes of business model archetypes, and CS

measurement systems and indicators (CSMSI). The literature review closed with a review

of the CS performance measurement systems and indicators (CSPMSI) and CA, CSPMSI

and environmental stewardship, CSPMSI and societal shared vision, and finally, a

conclusion.

Strategy in Searching the Literature

The effort to source literature relevant to the topic included searching online

libraries for peer-reviewed articles using the terms: sustainability, CS practices, and CA.

The search parameters included author, year, keyword, and peer-reviewed journals. The

literature organized and categorized through major themes to fulfill the purpose of the

study and to explore the research question. The search included the following databases:

Academic Search Complete, Business Source Complete, ABI/Inform Complete,

ProQuest Dissertations and Walden University Theses. The key terms of this study were

sustainability, CS, CA, CI, triple bottom line, and general systems theory. The searches

focused on these key terms because this approach allows for searches that inform

research outcomes in CS strategies and processes.

Summary of Peer-Reviewed Literature

Peer-reviewed articles within these five-years totaled 67 and represented 85% of

all articles. The literature review began with the conceptual framework, which provided

an overview of the general systems theory. An overview of the concepts of CS practices

followed. The literature review represented articles from both qualitative and quantitative

research disciplines. The current information concerned strategies and processes that

achieve CA through profitable CS practices in the CI.

The Purpose of the Study

Although thousands of articles are published every year that deal with

sustainability in one way or another, most publications are extensively environment-

focused, inter-changing sustainability with low ecological impacts and ignoring its

economic and social dimensions (Buyukozkan & Karabulut, 2018). Moreover,

Buyukozkan and Karabulut (2018) stated that the literature needs to pay more attention to

what to exactly measure and how to interpret them to identify the sustainability

performance. Leaders are aware that there is a need for profitable CS practices. The

overarching research question: What profitable CS strategies and processes do CI

managers use to achieve CA?

<div align="center">

Conceptual Framework

</div>

A conceptual framework is an interconnected set of ideas or theories about how a

phenomenon functions or is related to its parts (Svinicki, 2010). The framework serves as

the basis for understanding the causal or correlational patterns of interconnections across events, ideas, observations, concepts, knowledge, interpretations, and other components of a lived experience (Svinicki, 2010). Through the conceptual framework examination, this study linked to a more significant phenomenon, and hence the specific research questions to larger theoretical constructs and therefore held significance to the field of sustainability within business strategies and processes (Marshall & Rossman, 2016). The theory for this case study conceptual framework was the general systems theory by von Bertalanffy.

Von Bertalanffy (1968) introduced the general systems theory through a series of lectures that began in 1937, published articles in 1946, and then the book *General System Theory, Foundations, Development, Applications* in 1968. Living organisms are essentially open systems, i.e., systems which interact with their environment (von Bertalanffy, 1968). The main elements of a system are the inputs, processes, outputs, feedback and subsystems (Iwa et al., 2016). An organism, such as the managers of an organization, measures the effectiveness of the inputs, processes, outputs, feedback and subsystems through structured models, principles, and laws, which then apply to all their usable generalized systems (von Bertalanffy, 1968). The claims by von Bertalanffy of systems interacting with their environment are applied to generalized systems such as business organizations.

Von Bertalanffy (1968) discovered that a consequence of general system properties is the appearance of structural similarities in different fields. The analysis showed that s*ystems* of various orders are not understandable by investigating their

respective parts in isolation (von Bertalanffy, 1968). Systems can be open or closed. A

closed system is independent of other systems. An open system takes inputs from the

environment, processes the inputs, and then returns the waste into the system. An open

system can be open in various ways and closed by the selective admission of adjacent

elements (Caws, 2015). The selective admission is the managerial responsibility for the

organization, so becomes a matter of choice (Caws, 2015). This is all consistent with the

definition of *system* itself, deriving as it does from its Greek origin as nothing more

specific than 'a whole compounded of several parts or members (Caws, 2015). Von

Bertalanffy (1968) claimed that conceptions appear in contemporary science that is

concerned with what is termed *wholeness*, i.e., dynamic interactions manifest in the

difference of behavior of parts when isolated or in a higher configuration. These claims

of general system properties and structural similarities concerned with wholeness apply

to the systemic concept of business management and CS practices.

Organizations still need to integrate CS in their management strategy (Rodrigues

et al., 2019). However, managers should construct sustainable strategies and processes

that highlight the formulation and implementation of management processes and systems

that include sustainable business practices (Rodrigues et al., 2019). Traditional

management strategies and practices are commonly rejected as incompatible with large

systemic change (Waddell et al., 2015). The economic-solutions driven approach of

traditional management is at fundamental odds with the sustainability emphasis that

includes systemic awareness of all people, the entire planet's ecosystems, and of course,

economic profit for the organization (Waddell et al., 2015). The concepts of general

systems theory have been set forth by many researchers and used by many organization

managers. So, it was not the sole purpose of this researcher to elaborate on general

systems theory in detail but point out the conceptual framework and link it to the

systemic concept of sustainability and hence sustainable business practices. Von

Bertalanffy's general systems theory approach provided a lens to understand the findings

from identifying and exploring the strategies and processes that managers use to achieve

CA through profitable and sustainable business strategies and processes.

Corporate Sustainability Strategies and Processes

CS strategies and processes are complex concepts that include environmental,

financial, and social dimensions, which in turn involve several aspects that interrelate in a

complex way (Hofman-Bergholm et al., 2017). Within the business environment, the

concept of *sustainability* is the current economic development that meets the needs of the

present generation without compromising the ability of future generations to meet their

own economic needs (Epstein & Rejc, 2014). Along with economic benefits, managers

develop strategies and processes that devote resources to the social and natural

environments (Schuler et al., 2017). Claims of sustainability strategies and processes

included environmental, financial, and social dimensions that managers utilized,

therefore, applied to the research question that asked about the sustainability strategies

and processes.

Profitable CS strategies and processes demand urgent attention. Government

regulations require that managers address sustainability increasingly, and noncompliance

is costly (Epstein & Rejc, 2014). There are four reasons why sustainability demands

urgent attention: (1) regulations, (2) community relations, (3) cost and revenue imperatives, and (4) societal and moral obligations (Epstein & Rejc, 2014). For sustainable community relations, managers need to secure the trust and goodwill of the people in the communities with candid and continual dialogue, as they show residents how the company staff manages resources (Epstein & Rejc, 2014). Sustainable cost and revenue imperatives include increased sales due to improved corporate reputation, lowered costs through more efficient resource use, and improvement to products and processes (Epstein & Rejc, 2014). Finally, Epstein and Rejc (2014) found that the development of personal concern for social, environmental, and economic impacts and their social and moral obligations has led some managers to include sustainability in their corporate strategies. These four reasons were significant as they represented the paradigm of the concept of sustainability, provided a framework for inquiry into the CI, and guided the rest of the literature review section. Before exploring the present or future concepts regarding CS practices and models, a review completed of sustainability concepts in the past.

Sustainability strategies and processes have been a part of business operations throughout human history. Human orientation to nature has been one of profitable use: if natural resources are available that can be profitable, humans will utilize that resource (Schuler et al., 2017). The most successful forays of applied archaeological research into sustainable strategies and processes encompass three significant realms: (1) the social foundations and local histories of any human community, (2) the environmental and geological couplings that exist therein, and (3) the economic resources and practices to

support that community (Chesson et al., 2019). Investment in emerging technologies in a globalizing commercial endeavor over the last 200 years simultaneously helped and harmed the economic and social viability of the commercial enterprise and the human community that labored for it (Chesson et al., 2019). Historically increased investment in new technologies, like mechanized presses, held greater production potential (Chesson et al., 2019). However, Chesson et al. (2019) argued that commercial endeavors increasingly suffered from a greater vulnerability in reliability, machine breakage, repair, and the knowledge of how to use and maintain the machines. Chesson's (2019) argument of sustainable strategies and processes demonstrated that the concepts had been part of the human experience throughout history.

Beyond archeological research, historic documents align with CS strategies and processes with the concept of justice. For example, Kutadgu Bilig is an advice text written in 1070 by Hajib of Balasagun, where, according to Hajib, the key to sustainable management is *justice* (Kusakci, 2018). The key to sustainability in management within the context of Kutadgu Bilig grasps reality *from the inside out*. Namely, it attempts to explore some facts within a specific context with inductive reasoning through qualitative research methods (Kusakci, 2018). The Kutadgu Bilig provides seven concrete justice-based principles which target sustainable management (Kusakci, 2018). The first principle of sustainable management success is to maintain justice (Kusakci, 2018) unconditionally. The second principle is that oppression at any level of the organization causes management to fail (Kusakci, 2018). The third principle is the uncontroversial fact that for an entirely just organization, employees at all levels should embrace the same

principles (Kusakci, 2018). The fourth principle is that leaders should serve as role

models by setting a high value on justice (Kusakci, 2018). The fifth principle is that the

conscious leader aims to satisfy *humanity,* which includes not only employees of the

organization but also customers and stakeholders (Kusakci, 2018). The sixth is any delay

in implementation of justice is inexcusable (Kusakci, 2018). Finally, the seventh is that

leaders should believe in justice wholeheartedly, support their belief through what they

say, and demonstrate all through their behaviors (Kusakci, 2018). In written form, these

claims of CS strategies and processes, again demonstrated that the concepts have been

part of the human experience throughout history.

In more recent human history, there is evidence that CS strategies and processes

became necessary at the systemic level of government involvement. Not until the end of

the 19th century did it occur to government leaders in the United States that

governmental procedures are not sustainable even in the short term (Schuler et al., 2017).

Pinchot talked Congress into passing the Forest Management Act of 1897, setting aside

National Forests as reserves for lumber (Schuler et al., 2017). The Forest Management

Act was the first move in environmental protection, then, on the national scene,

exemplified the Brundtland Report's understanding of sustainable development (Schuler

et al., 2017). Sustainability should restrict profitable use, that we can use any natural

resources for our profit, but we must keep such use possible into the indefinite future

(Schuler et al., 2017). The new government procedures were significant because they

represented the United States regional perceptual change to CS practices and models.

CS strategies and processes of our current human paradigm are in crisis. Few discussions about CS strategies and processes reached beyond an instrumental understanding of the human-environment relationship; most emphasized that sustainable resource use is a means to serve human wellbeing. Schaltegger et al. (2016) argued that these crises, along with the lack of in-depth conversations about CS strategies and processes, prompted various international organizations and researchers to reconsider companies' possible contributions of sustainable development systemically, and holistically, through measurement systems. First, however, a set of normative principles of organizational development together form an *ideal type* of sustainability-oriented business model (Stubbs & Cocklin, 2008; Schaltegger et al., 2016). The *ideal type* comprises different structural and cultural attributes of an organization, such as the development of community spirit, investment in employees' trust and loyalty, and engagement in CS assessment and reporting (Schaltegger et al., 2016). Finally, Schaltegger et al. (2016) suggested a systemic sustainability-oriented business model that deals with an organization's purpose, goals, performance measurement approach, stakeholders, and nature, with leaders who drive the necessary cultural and structural changes to implement CS. With our current human paradigm in crises regarding sustainability, a review of the strategies and processes of CS business model archetypes followed.

Corporate Sustainability Strategies and Processes of Business Model Archetypes

There are many types of business models available that managers can utilize. Although extant research on CS strategies and processes of business models is rooted in

ecological sustainability, scholars have seen business models as tools for addressing social needs. What these different approaches have in common is their focus on organizational value creation, which focuses on social and ecological values by sustainability researchers (Schaltegger et al., 2016). Companies can and must adapt or even transform their existing business models through organizational learning and new routines and knowledge to cope with increasingly CS-driven demands (Schaltegger et al., 2016). Understanding such adaptive and transformational organizational processes requires detailed analyses of business models' architecture, principles, and components (Schaltegger et al., 2016). There is still a need to develop furthermore integrative theories of CS strategies and processes that can effectively contribute to the sustainable development of the economy and society (Schaltegger et al., 2016). The CS strategies and processes of business model archetypes are significant because it describes the functional structure of an organization. Painter et al. (2019) stated that changes in values and mindsets require new, sustainable, and ethical business models and consumption practices to flourish. To achieve long-term sustainability, Roelich et al. (2015) argued that infrastructure needs new designs and operations to provide essential service delivery at radically decreased levels of resource use. Business professionals widely recognize that embedded practices and beliefs constrain change. However, there is a keenness to investigate the emergence of business and consumption practices that shift away from traditional resource-depleting forms of capitalism (Painter et al., 2019). The claims of these researchers demonstrated the need for CS strategies and processes of business models, but implementation can be complex.

Managers struggle with the implementation and adoption of CS business models. Business model innovation and change can be a significant undertaking for a firm and require managers and staff to understand change management techniques (Evans et al., 2017). The elements of a generic business model concept: (1) value proposition: what embedded value is in the product/service offered by the company, (2) supply chain: how upstream relationships with suppliers are structured and managed, (3) customer interface: how downstream relationships with customers are structured and managed, (4) financial model: costs and benefits from (1), (2), and (3) and their distribution across business model stakeholders (Painter et al., 2019). When combined with a perspective on social and environmental sustainability, these four business model elements describe the CS practice and model (Painter et al., 2019). Owners, managers, and staff committed to sustainable strategies and processes integrate their social, environmental, and economic activities to create value for their customers and society (Painter et al., 2019). The claims of these researchers demonstrated the systemic struggle of implementation and buy-in of CS models, so there was a need for new approaches.

New approaches to CS models will need to incorporate the end user. To do so, managers need to systemically consider the end-users wants and behaviors, while simultaneously focusing on the service provided, use information and communication technologies more effectively, integrate the operation of different infrastructure systems, governed in a manner that recognizes the complexity and interconnectedness of infrastructure systems, and rethink current infrastructure valuation (Roelich et al., 2015). In addition, changes in consumption needs to occur and range from the selection of more

ethical and sustainable options, slower acquisitions, and the replacement of goods to more radical shifts in lifestyles, such as voluntary simplicity (Painter et al., 2019). A CS model archetypes description and operationalization guideline should include: (1) maximize material and energy efficiency, (2) create value from waste, (3) substitute with renewables and natural processes, (4) deliver functionality rather than ownership, (5) adopt a stewardship role, (6) encourage sufficiency, (7) re-purpose the business for society/environment, and (8) develop scale-up solutions (Painter et al., 2019).

Theoretical and empirical research on CS practices and models is gaining popularity. Ulvenblad et al. (2018) stated that companies might follow multiple business models, especially with different customer segments, compete in different markets, or produce/sell various products. Given the uncertainty regarding processes and outcomes of business model innovation, firms are hesitant to pilot business model innovations in the real world (Evans et al., 2017). Nevertheless, Evans et al. (2017) suggested that experimentation, trial and error, and learning are all methods required to discover new business models and to simultaneously obtain a better grasp of the business practices and models as a unit of analysis. Most business practices and models research address the importance of business models for companies' competitiveness, renewal, and growth (Ulvenblad et al., 2018). In practice, Ulvenblad et al. (2018) stated that managers should implement and design frameworks developed for companies to envision and implement CS measures and stress the importance of competitiveness, development, and growth in business practices and models. The systems approach to management began to develop in the 1950s. It influenced the development of CS models such as Lean Six Sigma, the

learning organization concept by Senge, the triple bottom line by Elkington of the 1990s, and corporate social responsibility (Iwu et al., 2016), among other business models. To start, an exploration into the Lean Six Sigma approach to CS practices.

Lean Six Sigma is a business model that provides organizations with tools to improve business processes' capabilities, decreasing process variation and increasing performance that led to profit. The concept of Lean Six Sigma first appeared in an article entitled 'Triumph of the lean production system' by Krafcik, 1988, and was further popularized by the book The Machine That Changed the World by Womack, 1990 (Ghobadian et al., 2018). Lean Six Sigma builds on and extends the Toyota Production System ideas from Ohno, 1989. The central aim of the Lean Six Sigma business model is to eliminate all unnecessary sources of process waste to reduce costs, improve efficiency, increase flexibility and maximize value generation to customers (Ghobadian et al., 2018). The Lean Six Sigma practice has embraced process damage to the physical environment and excessive use of natural resources as additional sources of waste (Ghobadian et al., 2018). Overall, the Lean Six Sigma business model seeks to reduce waste incrementally. By attacking waste, the Lean Six Sigma business model reduces the negative impact on the physical environment. Although, Ghobadian et al. (2018) stated that the relevance of Lean Six Sigma beyond mass production and stable business environments is in question. However, Burawat's (2019) study confirmed the relationships between lean manufacturing and CS performance and argued that lean manufacturing is applicable in any industry.

A learning organization is a business model that facilitates learning of five disciplines to continuously improve the entire staff and the organization's CA. The challenges of the postmodern society have led to new business models to provide solutions to the need for the company's staff to adapt and survive. One way is through Senge's learning organization model (Paraschiva et al., 2019). The aim of a learning organization is one of continuous development. Implementing continuous organizational learning and development, the managers constantly extend the staff's ability to form a shared future creatively and adapt actions to changed market conditions. The various concepts for *learning organizations* describe organizational learning as the ability to constantly expand the learning ability of the staff and, consequently, the skills to solve problems from individuals and organizations themselves. Senge's integrative approach includes *personal mastery*, *shared vision*, *mental models*, *team learning*, and finally, *systems thinking*, known as the fifth discipline, trying to close the research gap and clarify the phenomenon of organizational learning (Liebsch, 2011; Luhn, 2016). The use of systems thinking is vital to CS. The individual is an essential component of social organizations while establishing involvement in global participatory democracy with a goal of an increasing worldwide and inclusive shared vision perspective (von Bertalanffy, 1953). The inclusive shared vision perspective will broaden the system through evaluating goals and establishing relationships to achieve sustainability (von Bertalanffy, 1950). Evaluating a system requires a way of thinking referred to as systems thinking. Systems thinking is when an individual can identify multiple facets and aspects of a system, consider them, and then adjust them for desired results. Sustainability in relation

to systems thinking, which focuses on a system's interrelated parts, could help with the social impact of people understanding the complexity of sustainability (Palmberg et al., 2017). Management research has not identified many conceptual differences between the processes of constructing a CS strategy and the traditional strategy (Rodrigues & Franco, 2019). Furthermore, a *learning organization* is where people continuously deploy their capabilities, and fulfill their actual goals, supported by new ways to think and new common hopes delivered, where people learn how to learn together through open communication (Senge, 1990; Luhn, 2016). Organizations where managers utilize the learning organization business model have higher employment rates, so communication is a more important component (Luhn, 2016).

With the implementation of a learning organization model, the advantages are a higher problem-solving ability, a value increase in human capital, a reduction of risks within decision-making processes, and higher satisfaction of the employees (Luhn, 2016). Learning activities are developed between the individual and the organization that produce benefits to both parties and underpins the achievement of performance and CA. Work collaboratively as a *network organization* – where vertical control is replaced by lateral collaboration and consultation relationships. As an *intelligent organization* – where CA is not obtained from high-quality, ephemeral products, but through a needs analysis and the implementation of strategies around core elements – knowledge and service-based activities (Paraschiva et al., 2019). However, the visionaries and advocates of learning organizations provide little guidance on how to put a learning organization into practice (Garad & Gold, 2019). Among business practices and models, the *learning*

organization is the most challenging since the results of its implementation are identified

in the long run. It is essential to encourage permanent development, with continuous

learning at all levels of the organization (Paraschiva et al., 2019). Due to inconsistent

results with learning organizations, suggests more research to other multifaceted

approaches to business practices and models (Luhn, 2016).

      Triple Bottom Line (TBL) is a business model where an organization's entire

staff commit to focusing as much on the social and environmental systemic concerns as

the organization does on profit. TBL links profit: the measure of corporate profit, people:

a measure of social responsibility of the corporation, and planet: a measure of

environmental responsibility of the corporation (Spezio, 2015). The United Nations'

Brundtland Report defined sustainable development. Elkington and others modified the

concept with the triple bottom line, which sought to balance environmental stewardship,

economic growth, and social responsibility (Spezio, 2015). Fakhimi et al. (2017) stated

that organizations are increasingly conscious of the fact that their continued success is

dependent on the achievement of a balanced outlook of three main types of

responsibility: economic, social, and environmental, concerning the organization of their

strategic priorities through the lens of the Triple Bottom Line. Finally, to achieve

cooperation through the TBL, thus deliver a *solution where everyone benefits* that may

enable the realization of multiple interconnected aims and objectives in the economic,

social, and environmental dimensions (Fakhimi et al., 2017). The TBL is a framework

that guides organizations towards achieving CS success to help ensure that they remain

profitable while also fulfilling their environmental and societal obligations.

Corporate Social Responsibility (CSR) is a business model that managers can use to focus on self-regulation and ethically oriented practices. CS business models include issues of corporate social responsibility and citizenship, along with improved management of corporate social and environmental impacts and improved stakeholder engagement (Epstein & Rejc, 2014). The factors that drive firms towards investment in CS business models include perceived urgency, research publications, economic and social demands by shareholders, and public policies with ecosystem stability in mind (Schuler et al., 2017). Managers use the CSR agenda to emphasize economic, social and environmental aspects based on the triple bottom line (TBL), with three basic principles: profit, people, and the planet (Samsudin et al., 2019). In contrast, Tam (2016) argued that CSR has an underlying assumption that corporations have an indispensable responsibility to society. Tam (2016) explained how a corporation invests its limited resources into the different social groups within society, and the extent to which the social groups hold responsibility, pointing to the need to explore how professional services offered could contribute to a corporation's overall CSR strategies. Even though corporations have the freedom to attach meanings and, thus determine actions, for CSR, they still must operate within prevailing business and social norms and consider their interests simultaneously (Tam, 2016). Thus, being strategic is about being selective in their CSR efforts to prioritize resources for optimal CSR outcomes. A corporation's definition of its CSR practices would drive how it plans and implements its CSR efforts (Tam, 2016). A corporation's definition of CSR, or any CS business practice or model utilized, is significant because it would set the concept parameters for the managers, staff, and

community to understand. The presentation of CS practices and models is complete, so now a presentation of CS measurement systems and indicators.

Corporate Sustainability Measurement Systems and Indicators

The formulation of the research question for the study explored *strategies and processes* that CI managers develop through a business model. The construction industry is vital to encouraging societal change toward sustainable development, with the intellectual competence of managers representing the most important factor in sustainable building accomplishments (Tabassi et al., 2016). The intended CI potential participates for this case study were known to practice CS strategies and processes, which meant the CI managers may utilize a pre-designed CS business model to dictate their business activities. However, little is known about the specific managerial processes whereby companies may translate their motivational factors into improved performance and CA (Lisi, 2015). For strategy and processes development, Lisi (2015) suggested using specific control mechanisms through a business model that incorporates CS measurement systems and indicators (CSMSI). CSMSI business models are multidimensional and complex; hence there are few successful cases (Evans et al., 2017). Business model innovations for sustainability tend to be ad hoc and not systemic (Stubbs & Cocklin, 2008; Evans et al., 2017). Therefore, the CI participants for this case study may not utilize a pre-designed business model. The lack of knowledge about these CSMSI business models and successful cases is significant because it represents the need for more research on the topic.

Corporate Sustainability Performance Measurement Systems & Indicators

To illustrate how to calibrate CS, researchers have introduced a multi-tiered typology of CS performance measurement systems and indicators (CSPMSI). The job of CSPMSI is, as the term suggests, to indicate performance on CS activities, with the end goal of achieving CS development (Baue, 2019). However, Baue (2019) stated that current indicators almost universally need more ability to indicate the achievement of CS development, as they need to reference thresholds that delineate between sustainability and unsustainability. Baue (2019) suggested all companies should apply a context-based approach to CS reporting, allocating their fair share impacts on common capital resources within the thresholds of their carrying capacities. Further, that multilateral organizations should collaborate to create a global governance body of scientists, academics, business practitioners, non-governmental organizations (NGOs), and other stakeholders to provide guidance on methodologies for determining ecological and social threshold and on approaches to allocations (Baue, 2019). To be competitive, Baue (2019) suggested reporting standards, and guidance bodies such as Global Reporting Initiative (GRI), International Integrated Reporting Council (IIRC), Sustainability Accounting Standards Board (SASB), Carbon Disclosure Project (CDP), etc. should integrate *sustainability context* more explicitly into their business models. Current CS performance measurement systems and indicators typically compare performance to incremental goals, which do not say anything about the sustainability of the impacts (Baue, 2019). The Sustainability Quotient ($S = A/N$), developed by Baue (2019) compares actual impacts (in the numerator in tier one) to normative impacts (in the denominator in tier two) to calibrate

sustainability. There is a total of three tiers of indicators and measurements systems that illustrate how to calibrate CS strategies and processes.

Tier One Indicators and Measurement Systems

Tier One Indicators and Measurement Systems start with measuring the organization systems to establish the numerator. This first tier encompasses *numeration* indicators that look at actual impacts, which include absolute and intensity indicators (Baue, 2019). An example of an absolute indicator; is carbon footprint, which is the amount of carbon an entity emits over a distinct period. An example of a relative/intensity indicator is the carbon emitted per widget produced, which is the actual impact compared to a unit of output. Incrementalism alone, Baue (2019) argued, is insufficient to measure and report CS; instead, take a further step to assess performance against thresholds and limits. B-Lab is a non-profit organization that assists managers to identify and measure aspects of the organization's CS activities. B-Lab staff created a scoring system with a minimum score to meet their requirements for B-Lab certification. Obtaining the minimum score provides the title of B-Corp certified. However, the B-Lab staff assistance does not provide managers with strategies for employee shared vision development, environmental stewardship, or profit development.

Tier Two Indicators and Measurement Systems

Tier Two Indicators and Measurement Systems start with measuring the organization's systems to establish the denominator. The second tier adds a *denominator* to compare actual impacts to normative ones, to determine if performance (Baue, 2019) is sustainable. The sustainability quotient places tier one indicators in the quotient's

numerator. It relates these actual impacts to externally defined norms or thresholds that contextualize the carrying capacities of vital capital resources in the denominator to arrive at tier two indicators (Baue, 2019). However, that tier two approaches are practically non-existent, which is alarming, given the existential threat humanity faces from climate change and other crises (Baue, 2019).

Only 8% of 108 surveyed companies establish greenhouse gas emissions reduction targets per the Paris Climate Agreement of well below 2°C (Baue, 2019). The 8% is significant because while companies have been producing *CS* reports for almost two decades, however, only a small number of companies establish greenhouse gas emissions reduction targets at all (Baue, 2019). These findings are crucial as they highlight the significance that organizations translate these limits to development and strategy, which suggests that tier two indicators need more attention (Baue, 2019). There are no tier two type measurement systems in the available research. Therefore, no tier two type measurement systems available would indicate the need for continued research on topic.

Tier Three Indicators and Measurement Systems

Tier Three Indicators and Measurement Systems start to direct our attention to indications of change other than only numerically quantifiable. The third tier suggests not thinking *if* but *how* an organization achieves CS development practices and methods, specifically transforming existing unsustainable systems (Baue, 2019). The third indicator goes beyond the traditional quantitative space of indicators into the more qualitative space of policy process, practice – and even more profound, perception. Tier

three indicators add comparative measurement elements of practices to normative

indicators, which gives managers information to initiate change within the system (Baue,

2019). Tier three indicators transcend the reductionistic, mechanistic paradigm of

measurement embedded in indicator thinking, as they adopt a more holistic, systemic

approach that looks more for interconnected, mutually reinforcing triggers (Baue, 2019).

The tier three measurement systems are primarily uncharted territory, which presents

challenges (in terms of appealing to pathbreakers who have already done the work for us)

and opportunities (to propose approaches that fulfill the job of indication in ways that

encompass this broader, more holistic scope). There are no tier three type measurement

systems in the available research, indicating the need for continued research on the tier

three indicators and measurement systems topic.

CSPMSI and CA

The implementation and use of CSPMSI lead to a CA. There is a growth in the

popularity of organizations that address CS through product and service market

opportunity. The current market for CS through products and services is over $290

billion, and socially responsible investments grew to $3 trillion in assets just in the USA

(Alberti & Varon Garrido, 2017). Executives and managers recognize opportunities for

improved performance and CA as they design new or modify existing business models,

products, and services to address CS challenges (Alberti & Varon Garrido, 2017). For a

CSPMSI business model, one approach is to treat CS goals as a trade-off and choose

between profit and societal impact, looking at societal demands (Alberti & Varon

Garrido, 2017). Another approach, from Alberti, and Varon Garrido (2017), is to

incorporate societal demands to rethink firms' business model so that trade-offs can potentially become new business strategies. With the market for CS through the development of products and services reaching billions and trillions of dollars in potential profit, CA utilizing CS strategies and processes would be beneficial for businesses and society.

CSPMSI and Environmental Stewardship

The implementation and use of CSPMSI lead to environmental stewardship. The CS framework by Baral and Pokharel (2017) suggests managers must generate a profit for the organization to exist, however, the organizations long-term existence may not endure by profits alone. Baral, and Pokharel (2017) argued that external stakeholders and customers evaluate favorably and show loyalty toward companies and their products when companies show their commitment to CS through significant environmental initiatives and stewardship. Employees prefer to work not just for money but also for meaning and satisfaction, which can come from creating higher-level values rather pursuing economic value only (Baral & Pokharel, 2017). For stewardship to work, the initial creation of a mission statement in terms of economic, social, and environmental outcomes enables managers to apply CS strategies and processes.

S&P 500 companies' have mission, vision, and value statements, and Baral and Polharel (2017) analyzed the extent to which they each reflect the systemic concept of CS. From April to June 2013, Baral, and Pokharel (2017) collected data from public domains. After using inductive methods, Baral, and Pokharel (2017) concluded that managers reach CS goals only when they are not solely trying to generate profit but also

show care for people and the planet. The theme *generating profit* emerged in 69.2% of

the companies, while other themes of *caring for the people* and *safeguarding the planet*

appeared respectively in 34.0% and 14.8% of the companies (Baral & Pokharel, 2017).

Unfortunately, Baral and Pokharel (2017) found that only 12.0% of the managers had the

triple bottom line themes in their strategies and processes. The balance between the three

dimensions is desirable, but what *balance* means is contentious, so the creating and

implementing a CS societal shared vision is in need.

CSPMSI and Sustainable Societal Shared Vision

The implementation and use of CSPMSI lead to CS and societal shared vision.

For CS strategies and processes to work, Evans et al. (2017) argued the need for

balancing the ecological, social and economic sustainability aspects that must be viable

and healthy if the planet system is to flourish. Evans et al. (2017) proposed equilibrium

achievement; however, the task is a formidable undertaking for managers, staff, and

society at large. If a firm's focus remains on economic value, any solutions adopted are

insufficient and vulnerable to conflicts (Evans et al., 2017). If the value created in firms is

of several types, however, Evans et al. (2017) stated that it is possible to find better ways

to create economic and non-economic value sustainably, so that all stakeholders who help

to create the value also share the systemic benefits. Socially conscious organizations have

mutual recognition and acceptance of others, including customers and other stakeholders,

as *responsible* parties (Evans et al., 2017). The need for managers to realize an integrated

and balanced system, deliberate interaction, partnering, networking, and learning from

multiple and diverse stakeholders is critical (Evans et al., 2017). The mutual value

creation in CS strategies and processes requires systemic consideration.

Conclusion

Businesses need to make a profit, so there was no wonder that profit was often the

focus of some managers, as opposed to people and the planet. The frequent appearance of

the profit theme in CS models is because companies need to make profits to survive

(Baral & Pokharel, 2017). There could be two explanations for the less frequent

emergence of the people and planet themes in the strategic documents (Baral & Pokharel,

2017). First, Baral and Pokharel (2017) argued that companies might not believe that CS

has any strategic benefits, or do not mention it, and that managers subscribe to core

values of CS strategies and processes. Thus, it is likely that CS has yet to become one of

the *core values* of many companies (Baue, 2019). Second, Baue (2019) suggested

managers might need to understand the interdependence between society and business.

As a result, managers might be missing meaningful opportunities for innovation, growth,

and sustainable social impacts in their strategic documents and actions (Baue, 2019). The

breadth and interconnectedness of CS strategies and practices make it evident that

professionals from different disciplines and sectors must work together to deliver

systemic goals (Annan-Diab & Molinari, 2017). Multifaceted issues, such as climate

change, poverty and human rights, and profit generation, requires knowledge and skills

from distinct disciplines in an integrated and systemic manner (Annan-Diab & Molinari,

2017). That interdisciplinarity promotes understanding complex problems and acting on

them, then aligning to the expected outcomes from CS development (Annan-Diab &

Molinari, 2017).

The general systems approach is essential to CS strategies and processes because

it emphasizes the interlink of environmental, economic, and social systems and how each

is responsible for the other (Barbier & Burgess, 2017). An abrupt social and economic

paradigm change would occur due to human population growth, resource depletion, and

economic activity that exceed perceived planetary boundaries (Barbier & Burgess, 2017).

Warning that crossing the perceived planetary boundaries may cause irreversible damage

to major Earth systems (Barbier & Burgess, 2017). Irreversibly damaging systems that

we are part of and utilize will further limit economic activity in the future (Barbier &

Burgess, 2017). Barbier and Burgess (2017) have identified that there needs to be

suggestions for maneuvering business strategies and processes in the quest for global

sustainability. The claims therefor warranted more research on CS strategies and

processes that led to CA.

Transition

The background of the problem, problem statement, purpose statement, and

nature of the study, which provided the reason for using a qualitative method multiple

case study design, were discussed at the start of Section 1. Also discussed were the

research question, interview questions, conceptual framework, operational definitions,

assumptions, limitations, delimitations, and the significance of the study. Finally, and

finishing Section 1, the review of the literature included subsections of general systems

theory, sustainability, CS business strategies and processes, CS performance measurement systems and indicators, and CA.

Section 2 consisted of the purpose statement, role of the researcher, participants, research method, and research design. Section 2 also included a discussion of the population and sampling, ethical research, data collection, data organization techniques, and data analysis. Completing Section 2, a discussion of the study reliability and validity. At the start of Section 3 was a discussion of the presentation findings, application to professional practice, and implications for social change. Finally, section 3 concluded with a discussion of the recommendations for action, recommendations for future research, and reflections.

Section 2: The Project

This qualitative multiple case study aimed to explore the strategies and processes CI managers used to achieve CA through profitable CS practices. The targeted population consisted of senior/mid-level managers working in the CI in the United States, who gained CA through the development implementation strategies and processes for profitable CS goal achievement. The implications for social change may emerge as people in the CI become knowledgeable about profitable CS strategies and processes that they, in turn, systemically implement. Implementing these CS strategies and processes ensure that those within the CI treat each other well, care for the planet, and obtain profit for their organizations ethically.

Role of the Researcher

For a qualitative case study, the role of the researcher in the data collection process is to gain access to the participants' natural environment and record data in the form of opinions, feelings, and experiences (Clark & Veale, 2018). Interpretive thinking is critical with the researcher as the primary instrument of data collection and analysis (Clark & Veale, 2018). Typically, qualitative researchers tend to view social phenomena holistically, engage in systematic reflection, be sensitive to personal biography/social identities and how it shapes the study, use complex reasoning that is multifaceted and iterative, and conduct inquiries systematically (Marshall & Rossman, 2016). The desired attributes of a qualitative case study researcher include readiness to ask good questions, good listening skills, adaptability, a firm grasp of the issues studied, and the ability to conduct research ethically (Yin, 2014).

My knowledge of CS practices consisted of experience within the CI as an interior designer with over 25 years industry experience at organizations such as architectural/design firms, residential design companies, and commercial furniture dealerships. As an employee at an office furniture dealership, the commitment to CS practices and design was inspirational. As an example, a commercial furniture manufacturer represented received the world's most sustainable company award for the 12th consecutive year, by RobecoSAM (The Sustainability Yearbook 2018, 2018). My formal education at Antioch University New England, where I obtained a Master of Business Administration in Sustainability and a Sustainable Business Certification, further enhances my relationship with the topic.

Researchers' ethical practices require clarity and conciseness, concepts from the Belmont Report protocol and the moral principles of respect for persons, beneficence, and justice (Marshall & Rossman, 2016). Respect for persons provides autonomy, which allows people to make their own choices (Miracle, 2016). Beneficence means to do no harm to oneself and to increase potential benefits and decrease possible adverse events or harm (Miracle, 2016). Justice demands equal treatment and fairness for all people (Miracle, 2016). Finally, ethical researchers assure participants that they can stop the research without fear of reprisal, and be without undue influence (Miracle, 2016).

To mitigate bias, researchers should enter a case study setting with a neutral stance (Morse, 2015). The use of stepwise verification during data gathering, with correction of data during the collection and analysis processes and verification strategies will provide a system of checks and balances (Morse, 2015). An interview protocol aided

in the mitigation of bias. A case study interview protocol should have four sections: (a) an overview of the case study with relevant reading about the topic, (b) data collection procedures for protecting human subjects, (c) protocol questions that utilize specific questions for collecting data and potential sources of evidence, and (d) a tentative outline for the case study report (Yin, 2014). The interview protocol for this study is included in the Appendix B.

Participants

Case study researchers collect data from a participant, usually through interviews; one or more participants later asked to review the draft case study report for accuracy, transparency, and ethical considerations (Yin, 2014). Purposive sampling, where a researcher focuses on the attraction of experts with knowledge of a known phenomenon (Trotter, 2012), was used for this case study. The eligibility criteria for selecting participants were senior/mid-level CI managers with five years of experience in the CI, with five years of experience with the developing and implementing CS strategies and practices of competitiveness. These participants were appropriate for this study because they worked in the CI and with corporate sustainability-driven strategies and processes experience.

A video recording provided a straightforward way for potential participants to consider. In the video, I read an approved script that explained the process if interested in participation. The video was posted to the social media platform known as YouTube. The video was shared directly with potential prescreened participants, with a profile review of the social media platform LinkedIn, with resume type information listed, and participants

expected to fit the criteria to participate with a minimum of five years in the CI, utilizing CS strategies and processes. The participants aligned with the overarching research question: What profitable CS strategies and processes do senior/mid-level CI managers use to achieve CA?

Research Method and Design

Research Method

To address the research question for the study, "What profitable CS strategies and processes do senior/mid-level CI managers use to achieve CA?" I used a qualitative methodology with a multiple case study design. The use of a qualitative approach based on interviews is relevant to an in-depth analysis of individuals' perceptions, which relate to interpretations and meanings that are difficult to measure (Diouf & Boiral, 2017) quantitatively. The use of a case study design is suitable for research questions that require a detailed understanding of organizational processes because of the rich data collected in context (Albertini, 2018). The use of a case study approach allows a researcher to perform an in-depth and contextually informed examination of specific organizations (Albertini, 2018). Researchers prefer case studies when a contemporary phenomenon, such as initiative-taking sustainable business strategies and practices, through real-life contexts (Albertini, 2018). The use of a case study approach can produce and communicate information about what managers do and how they do it, and furthermore, produce information about a topic that will be valuable for practitioners (Albertini, 2018). For this study, the goal was to explore the profitable CS strategies and

processes that senior/mid-level CI managers used to achieve CA through CS practices, so a qualitative approach worked.

Differentiating qualitative research from quantitative research is distinguishing between non-numeric data and numeric data (Saunders et al., 2015). A researcher's qualitative approach often uses as a synonym for data collection techniques, such as an interview, or data analysis procedure, such as categorizing data, which generates or uses non-numerical data (Saunders et al., 2015). The quantitative approach is a synonym for any data collection technique, such as a questionnaire, or data analysis procedure, such as graphs or statistics, which generates or uses numerical data (Saunders et al., 2015). Quantitative researchers employ survey research strategies that utilize questionnaires, structured interviews, or structured observations (Saunders et al., 2015). Quantitative researchers usually examine relationships between variables, which measure numerically and analyzed using a range of statistical and graphical techniques (Saunders et al., 2015). The expectation was not to explore the quantifiable extent of CA s through profitable CS practices, so a quantitative approach was not suitable for this study.

Qualitative and quantitative used together create the mixed method research design (Saunders et al., 2015). For example, a researcher may use quantitative analysis of officially published numerical data followed by qualitative research methods to explore perceptions (Saunders et al., 2015). Mixed method research design is often used for extensive studies to obtain and determine whether converging evidence, such as, triangulation, use together is better than separately (Saunders et al., 2015). For this study,

the expectation was not to explore a large study that needs the combination of numerical and non-numerical analysis, so a mixed methods approach was not suitable for this study.

Research Design

Three research designs to consider for a qualitative study on CI profitable CS strategies may include (a) phenomenological, (b) narrative, and (c) case study. Phenomenology involves the study of participants' recollections and interpretations of experiencing phenomena (Saunders et al., 2015). The phenomenological approach typically involves several in-depth interviews with individuals who have experienced the phenomenon of interest (Marshall & Rossman, 2016). The purpose of the phenomenological type of interviewing is to describe the meaning of a concept or phenomenon that several individuals have shared (Marshall & Rossman, 2016). This study focused on researched and established acute approaches to long-term profitable CS strategies and processes. Therefore, the research focused on individuals personal lived experiences.

A narrative inquiry is a qualitative research strategy to collect the participants' experiences as whole accounts or narratives or which attempts to reconstruct such experiences into narrative form (Saunders et al., 2015). Inquiries yield narrative data include interviews that solicit participants' stories, or written autobiographies and biographies (Butina, 2015). These inquiries involve a mutual and sincere collaboration, with a caring relationship like a friendship that develops over time for full participation (Marshall & Rossman, 2016). The main goal of this study focused on immediate

strategies and processes for profitable CS development, so the narrative inquiry strategy would not work.

Across several disciplines, researchers use the case study design, particularly the social sciences, education, law, and business, to address a range of research questions (Harrison et al., 2017). Qualitative researchers utilize case study designs because of their explicit focus on context and favor intensity and depth, as well as to explore the interaction between case and context (Marshall & Rossman, 2016). These studies involve an empirical inquiry to investigate a contemporary phenomenon in depth and within its real-world context (Yin, 2018). Case study research may refer to a person, group, organization, association, a change process, an event and many other types of case subjects (Saunders et al., 2015). As Roberts et al. (2019) stated, semistructured case study interviews draw on aspects of descriptive research that allow a comprehensive summary of events in everyday terms and allow for in-depth exploration of a specific phenomenon. Therefore, the case study approach was most appropriate as the intention was to look for what, how, and why of manager's strategies and processes for profitable CS practices.

Population and Sampling

The expected population pool was five to eight senior and mid-level managers. This population was ideal because senior and mid-level managers would have at least five years' experience in the position, would have over five years' experience in the CI, and can make the organizational decisions that answer my interview questions. Saunders et al. (2015) suggested that for data saturation, the minimum non-probability sample size

of semistructured interviews is between five and 25 participants. The aim was to seek a minimum of five participants and interview more if available.

There are three main types of sampling strategies in qualitative research: quota, snowball, and purposeful sampling (CIRT, 2018). In quota sampling, the researcher attempts to gather data from a certain number of participants that meet certain characteristics (CIRT, 2018). For this case study, the aim was not to expect a specific number of participants, nor to meet any specific characteristic, so quota sampling did not apply. In snowball sampling, the participants refer the researcher to others who may be able to potentially contribute to or participate in the study (CIRT, 2018). To avoid one participant's objectivity potentially influencing the other's, the goal was to avoid a snowball sampling and focus on purposeful sampling. The aim was to use purposeful sampling using pre-selected participant criteria based on the research question (CIRT, 2018). In purposeful sampling, the researcher usually utilizes information-rich to effectively use limited resources (Duan et al., 2015). The use of purposeful sampling was appropriate for this case study because the objective was to interview senior and mid-level managers who met the study participant eligibility criteria of individuals with at least five years of experience in the CI and in-depth knowledge of profitable CS. As a result, the selected participants provided information-rich responses that remained with congruent the study objective.

Ethical Research

The U.S. Department of Health and Human Service's regulations for the protection of human subjects in research require that an investigator obtain legally

effective informed consent from the participant (U.S. Dept. of Health and Human Services, 2018). For the informed consent process, the plan was to utilize three key features: (1) disclose to the potential research subject information needed to make an informed decision, (2) facilitate the understanding of the disclosed information, and (3) promote the voluntariness of the decision about whether to participate in the research and the steps to withdraw from the study (U.S. Dept. of Health and Human Services, 2018). The informed consent process, from start to finish of the research process, is the critical communication link between the prospective human subject and an investigator (U.S. Dept. of Health and Human Services, 2018). Furthermore, the expectation is to employ the deontological philosophical position that the ends served by research can never justify research that is unethical (Saunders et al., 2015).

The procedures to seek and obtain informed consent is in terms that the participants can understand (U.S. Dept. of Health and Human Services, 2018). The aim is to inform the potential participants that they can voluntarily decide whether to participate as a research subject (U.S. Dept. of Health and Human Services, 2018). The goal is to strive for the highest ethical standard, including responsibility to scholarship, to be honest, to neither plagiarize nor falsify information, to avoid deception, and accept responsibility for the work (Yin, 2018). An agreement document will be in the Appendices and listed in Table of Contents. The goal was to store the data securely for five years to protect the confidentiality of participants. The final doctoral study Walden IRB number is **05-24-0676903**.

Data Instruments

For data collection, I was the primary data collection instrument. Using the

semistructured interview process, scripted carefully developed questions in a specific

sequence, as advised by leading research exponents (Marshall & Rossman, 2016). I

utilized Yin's (2018) four tests for judging the quality of research design: construct

validity, internal validity, external validity, and reliability. Construct validity is the

process that identifies correct operational measures for the concepts studied and to which

extent they measure the presence of those constructs intended to measure (Yin, 2018;

Saunders et al., 2015). Internal validity is when a researcher seeks to establish a causal

relationship, to minimize systematic errors or bias, and to which extent the findings

attribute to interventions rather than possible flaws in research design (Yin, 2018;

Saunders et al., 2015). External validity is when a researcher utilizes casual relationships

that make a general statement or transfer to different people or organizations (Yin, 2018).

Reliability is trustworthiness and demonstrates that the operations of a study are

repeatable, with the same results (Yin, 2018). I took interview notes and provided

member checking to the participants to verify the findings. The interview questions,

interview protocol, and video request for participation are in the Appendices and listed in

the Table of Contents.

Data Collection Technique

The expectation was to utilize interviews as a technique for data collection. The

aim was to have two jobs throughout the interview process: (1) to follow the line of

inquiry, utilizing the case study protocol, and (2) to ask questions in an unbiased manner

that also serves the needs of the line of inquiry (Yin, 2014). The case study protocol

provided an overview of the case study, data collection procedures, and specific questions

and created an outline for the case study report. With the audio recordings used as an

opportunity to review the interviews, understand the content more thoroughly, and for

transferability into notes. Saunders et al. (2015) stated that notes provide a backup if the

audio recording does not work. In addition, taking notes helped to maintain concentration

and formulate points to summarize back to the interviewee to assess understanding

(Saunders et al., 2015).

      All research techniques have advantages and disadvantages, and the use of

targeted interviews as a data collection technique also does. Some advantages of targeted

interviews, as Yin (2014) stated, can focus directly on case study topics and provides

explanations as well as personal views (e.g., perceptions, attitudes, and meanings).

Whereas Yin (2014) stated that some disadvantages of targeted interviews are notable

bias due to poorly articulated questions, response bias, inaccuracies due to poor recall,

and reflexivity (e.g., the interviewee says what the interviewer wants to hear).

      For data collection of the semistructured interviews, I utilized Yin's (2011) five

analysis phases: compiling, dissembling, reassembling, interpreting, and concluding. In

addition, I reviewed physical data before and after conducting semistructured interviews

for a thorough understanding of the topic. The member checking process involved

sending summaries of the research data back to participants to confirm the researcher's

accuracy, by permitting them to comment on, correct, and validate the content (Saunders

et al., 2015).

Data Organization Technique

A case study entails systematically noting and recording events, behaviors, interactions, and responses to questions (Marshall & Rossman, 2016). For the data organization technique, the intention was to utilize a database, which is a systematic archive of all the data, including field notes, documents, audio-recording, and archival records (Yin, 2014). For data organization, Microsoft Word and Excel were the primary software utilized. In addition, the plan was to continue to keep a research notebook/binder, to record chronologically aspects of the research project such as articles, notes of discussions, and thoughts about aspects of the research (Saunders et al., 2015). The intention was to store the data of electronic and hard copies and all raw data securely for five years, utilizing a flash drive, hard drive, and lockable file. After the five years, will destroy through a shredder or deleted files.

Data Analysis

I used thematic analysis to analyze qualitative data collected. Thematic analysis involves the researcher searching for themes, or patterns, across a data set (Saunders et al., 2015). Through the interview process, the intention was to collect verbal and nonverbal responses from the case study participants. The most crucial use of documentation is to corroborate and augment evidence from other sources (Yin, 2018). The information from different angles confirms, develops, or illuminates the research problem (Abdalla et al., 2018). This strategy limits personal and methodological biases and increases the possibility of reproducing the findings (Abdalla et al., 2018).

The goal was to utilize the classic data analysis method to sort all the concepts and ideas to identify themes and utilize stacks, piles with clusters of concepts and ideas on a wall, table surface, and in binders. During the compiling phase, the intention was to organize the data to create a database. Then, through the disassembling phase, divided complied data into fragments and labels. The reassembling process involved cluster and categorizing of the labels into sequences and groups. Finally, in the interpretation stage, narratives are created from the sequences and groups to include conclusions and correlations of critical themes from new studies published since writing this proposal.

Reliability and Validity

Criteria analogous to the CI managers used to achieve CA through CS practices used for this qualitative multiple case study through the approach of reliability, validity, credibility, confirmability, and transferability. Since these criteria are not measurable, the intention was to utilize transcript review and triangulation. These criteria forecasted the expectations during the implementation of the study, as a demonstration of how the study design would likely ensure that the data and interpretations will be sound and credible (Marshall & Rossman, 2016).

Reliability

Reliability is the extent to which data collection techniques will yield consistent and repeatable case study findings (Yin, 2018). With similar observations made or conclusions reached by other researchers, and how after review of the raw data, the researchers demonstrated transparency (Saunders et al., 2015). To enhance the reliability of this study, triangulation, member checking, data saturation, and an interview protocol

were utilized. For the analysis process, data triangulation was important, and required the use of multiple sources to ensure the same findings (Yin, 2014). To ensure data saturation, multiple sources for triangulation are the interview responses and data from peer reviewed literature. Member checking occurred through participants' verifications and feedback of the findings for clarification and correction. The interview protocol content is provided in the Appendix B.

Validity

Validity is the extent to which data collection methods accurately measure what is intended to measure and to which research findings are intended to profess (Saunders et al., 2015). In a qualitative multiple case study trustworthiness refers to my findings' transferability, dependability, confirmability, and credibility. Transferability occurs when evidence supports the generalization of findings to other context, whereas dependability is if a study repeated, similar finds would occur (Suter, 2012). Marshall and Rossman (2016) conferred that the burden of demonstrating that a set of findings applies to another context, transferability rests more with another researcher who would make that transfer than the original researcher. Even though the burden may rest with another researcher, the intention was to meticulously adhere to the research design's data collection and analysis techniques, using interview protocol, and reach data saturation. For transferability, I provided explicit assumptions and contextual inferences about the research setting and participants. For dependability, I provided a detailed description of the research methods and had chair committee review. Confirmability is to have objectivity, or neutrality, and the control of researcher bias (Suter, 2012), and was my

goal. For confirmability, I checked and rechecked the data throughout data collection and analysis to ensure the results were likely repeatable. Credibility refers to the believability of the findings and enhances the trustworthiness of evidence by confirming the evaluation of conclusions of the researcher by research participants (Suter, 2012), and verified through member checking. Triangulation (Saunders et al., 2015) is defined as the use of two or more independent data sources or data-collection methods within one study to ensure the data are telling you what you think they are telling you. For credibility, I reviewed multiple perspectives throughout the data collection process, utilizing methodological triangulation techniques such as reviewing archival data, participants interview question responses, member checking and participants current or past employment website CS reporting.

Transition and Summary

The purpose statement, the role of the researcher, participants, research method, and research design were discussed at the start of Section 2. Followed by a discussion of the population and sampling, ethical research, data collection, data organization techniques, and data analysis. The details of the measures and approaches to enhance study validity and reliability completed Section 2. At the start of Section 3, was a discussion of presentation findings, application to professional practice, and implications for social change. Section 3 included recommendations for action, recommendations for future research, and my reflections.

Section 3: Construction Industry: Profitable Corporate Sustainability Strategies and

Processes Achieve Competitive Advantage

Introduction

This qualitative multiple case study aimed to explore the strategies and processes

CI managers use to achieve CA through profitable CS practices. The data came from

eight semistructured interviews of senior to mid-level managers who worked for eight

different CI organizations within the United States and who answered 10 open-ended

questions. Table 1 shows the participants' job position titles, teaching experience, and

total years incorporating CI CS.

Table 1

Participants' Job Position Titles, Teaching Experience, and Total Years Incorporating
Construction Industry Corporate Sustainability

CI manager	Job position titles	Years	Teaching	Years
P1	Senior field engineer	3.66		
P1	Technology support engineer	0.92		
P1	Managed services & social project manager	2.08		
P2	Operations manager	5.75		
P2	Team leader PM group	9.83		
P2	PM team leader	8.83		
P2	Building systems team leader	8.08		
P2	Company steward	18.75		
P3	Senior director of design & construction sustainability coordinator	3.25		
P3	Director of design & construction sustainability coordinator	6.33		
P3	Project manager and sustainability coordinator	9.33		
P3	Interior architect	1.58		
P3	Interior designer	0.42		
P4	President / CEO	3.25		
P4	Vice president marketing	4.8		

P4	Head of sustainability and global director for segment strategy	5.58		
P4	Head of environmental initiatives and product development	5		
P4	Global products innovations manager	2		
P5	Chief operating officer	0.83		
P5	Vice president of operations	1.08		
P5	Engineering manager	2.25		
P5	Director of technology	0.42		
P5	Consultant	0.83		
P5	Owner / designer	15.42		
P6	Sustainability design leader	5.58	Adjunct faculty	9.75
P6	Vice president of advocacy	6.17	Adjunct faculty	5.92
P6	Sustainability practice leader	9.75		
P6	Job captain / LEED coordinator	0.50		
P7	Sustainability manager – design for the environment team	21.75		
P8	Managing principal	0.83	Educator	5.75
P8	Director of sustainability programs	14.5	Instructor	4.33
P4	Associate architect	3.5		
	Years of CI CS experience	182.85	*Years of CI CS teaching*	25.75

Secondary data sources included a review of the archival data presented throughout this document and participants' current or past construction company CS reporting retrieved from the construction company's websites. Member checking was conducted with six of the eight participants responding. The findings showed methods CI managers used to achieve CA through profitable CS strategies and processes.

Presentation of the Findings

This qualitative multiple case study aimed to answer the overarching research question: "What profitable CS strategies and processes do CI managers use to achieve CA?" To answer that question, I held semistructured interviews with eight senior to mid-

level managers in the CI who lived and worked within the United States. The participants had at least 5 years of experience in the CI using CS practices.

The original intent was to perform a qualitative single case study on one construction materials manufacturing industry organization's senior and mid-level managers. However, the organization representative declined. So, with chair and IRB approval, I further searched for potential participation from a single organization. Unfortunately, no other construction material manufacturing industry organization representative would allow senior/midlevel manager participation. After the struggles searching for one organization to allow participants, with chair and IRB approval, the study became a multiple case, which further justified the study title change from "construction materials manufacturing industry: CS strategies and processes achieve CA," to the new title, "construction industry: profitable CS strategies and processes achieve CA."

A video recording created an uncomplicated way for participants' consideration. In the video, I read an approved script that explained the process if interested in participation. The video was posted to YouTube, with chair and IRB approval. After a review of the resume information provided on the social media platform LinkedIn, I emailed the video directly to prescreened potential participants who all fit the criteria to participate with a minimum of 5 years in the CI, utilizing CS strategies and processes.

Additionally, the video with an explanation in the description box was posted to LinkedIn multiple times a week, on my personal page, on the pages of friends who shared my post, and on multiple group pages such as: (a) Cradle to Cradle Supporters, (b)

Construction Who's Who, (c) Building Green, a Sustainability Group, (d) Contract Office Furniture Professionals, (e) Lean Six Sigma, (f) Textile and Carpet Manufacturer's Network, (g) Doors & Windows Manufacturers Group, (h) ESG Data and Responsible Investing, (i) Impact Measurement & Management, (j) CASE Impact Investing Research Group, (k) Green Sustainable Living & Construction, (l) WSCP – Women in Sustainable Construction and Property, (m) Sustainable Construction & Building Materials, (n) Sustainability ESG CSR Eco Green Regenerative & Circular Economy Professionals & Enthusiasts, and (o) Reconsidering Business – A Group for Social Impact, Sustainability, and CSR Practitioners. The intent of posting in those groups was to spread the word that the study existed, with the hope that a potential participant would view and reply with interest.

Each participant was emailed the process to consider participation in the study through LinkedIn direct email messages that provided the link to the video for their view and consideration. If the participant was interested in learning more, they provided their personal email. I next sent a Consent Email from my Walden email account explaining the process, expectations, and how to provide consent. The participants reviewed the Consent Email and provided consent by replying to the email with the words 'I Consent.' After the eighth interview, finding no new data, data saturation occurred. Five participants identified as male, and two identified as female. One participant fit the mid-level CI manager, while seven fit the senior level CI manager. Table 2 shows the participants' demographic information.

Table 2

Participants' Demographic Information

CI manager	Years of experience in CI	Years of experience in CS	United States location
P1	5+	5+	Georgia
P2	30+	20+	New Hampshire
P3	15+	10+	Pennsylvania
P4	20+	20+	Florida
P5	20+	10+	New Hampshire
P6	20+	10+	Massachusetts
P7	20+	20+	Michigan
P8	30+	20+	New York

Interviews were scheduled and averaged an hour with participant consent to record responses. To assure confidentiality, the pseudonyms P1, P2, P3, P4, P5, P6, P7, and P8 were used throughout the study, where P indicates participant, and the number indicates the order of the participant interviews. Participant names and other identifying information will be kept confidential and will continue to be as per expectations of this program. During data collection of the semistructured multiple case study interviews, I utilized Yin's (2014) four principles: use multiple sources of evidence, create a case study database, maintain a chain of evidence, and exercise care in the use of data from electronic sources.

Yin's (2011) five phases: compiling, disassembling, reassembling, interpreting, and concluding, were utilized to analyze the data to develop themes. I created a case study database for each participant, utilizing Microsoft Excel to compile the data. During disassembling, I performed an exploratory analysis of compiled data into fragments and labels to categorize data. For reassembling, I searched for patterns by categorizing and recombining data to discover patterns to answer the research questions. While

interpreting, I questioned the recurring concepts, such as systemic thinking, education, and measurement systems to ensure the themes were complete, credible, and added value to business research. Through this analysis, I concluded with answers to the research question. Member checking summaries were created and provided to each participant within 2 weeks of the interview, with six of the eight participants responding with approval or providing additions or modifications to the summaries.

Yin (2014) explained that methodological triangulation is the convergence of data collected from different sources to determine the consistency of a finding. The most essential advantage presented by using multiple sources of evidence is the development of converging lines of inquiry. Thus, Yin persisted that any case study finding, or conclusion is likely to be more convincing and accurate if several different sources of information follow a similar convergence. The methods used to study the profitable CS strategies and processes that lead to CA include methodological triangulation techniques such as review of archival data; participants interview question responses including member checking and participants current or past employment website CS reporting. The archival data and the participant's responses, including member checking, provided a robust amount of data; however, the participant's current or past employment organization's CS content did not provide any valuable content for this study.

Before launching CS processes, ensure buy-in to the CS strategy and implementation (Burawat, 2019). P1, P6, and P8 demonstrated a bias toward the implementation of a measurement system process implementation either initially or very quickly; however, lived experience of these participants indicated otherwise. Participants'

experience in the CI started without identified CS strategies and processes; however, each

participant had a previous interest in CS prior to their current career position. All

participants expressed interest and systemic concern for the CI environmental, social and

profitable aspects. Each participant's lived experience demonstrated an initial strategy to

establish a shared definition of CS and to obtain buy-in from all members of the

organization, then establish measurement system processes.

Theme 1: Systems Thinking Leads to Competitive Advantage

Managers can teach systems thinking without involving CS, but managers cannot

teach CS without involving systems thinking (Palmberg et al., 2017). All participants

referenced the systemic approach and consideration for the Triple Bottom Line concepts

of the planet, people, and profit into CI CS strategies and processes. Participants

demonstrated their understanding of systems or systems thinking through examples. P6

shared that they leveraged a sort of systems thinking approach to CS. Table 3 shows

participants' reference and frequency to theme 1: systems/systems thinking.

Table 3

Participants' Reference and Frequency to Theme 1: Systems/Systems Thinking

CI manager	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Total
P1	0	1	0	0	0	0	0	1	1	0	3
P2	0	0	0	1	1	1	1	0	1	1	6
P3	2	0	0	0	0	0	1	0	1	0	5
P4	1	1	0	1	0	0	2	0	1	1	7
P5	2	1	0	0	1	0	1	3	4	2	14
P6	0	1	0	0	0	1	1	3	1	1	8
P7	1	0	0	1	1	1	1	1	1	1	8
P8	1	1	1	1	1	1	1	0	0	1	8

P7 strongly suggested that the corporation always remembers it needs to be a good citizen, and each part plays a particularly significant role in the short and long-term success. While P5 shared that by being involved in those systemic concepts, they (staff) are more actively committed to the process because they are knowledgeable and brought in (feeling of inclusion). P7 stated that CS requires a holistic systemic approach, and our responsibility is to not only our company but also our community and environment.

P8 shared, be sure that you are feeding back the results to the people who can use them in the yearly/daily work, systemic thinking. P2 stated that CI CS managers are constantly working on setting up systems that give people a collaborative mindset - that sees what needs to be done and then they will make the right decision, and, in the process, they can help identify areas where we can make changes to the system that will overall improve the outcome and the transparency.

P2 suggested to bring together all participants in the process and ask them to make the process as efficient as it can be, and as good as it can be, which creates the sustainable process. It is a balance between showing that there can be economical success, P2 continued and the satisfaction of individuals in organizations achieving something that is better than it was yesterday. P4 indicated that if you can start out smaller and show that financial return on investment, demonstrating that the CS projects reduce costs, increasing profitability to encourage C-suite buy-in.

Theme 2: Motivate and Nurture Buy-In Through Learning, Engagement and

Thankfulness

The second theme identified is to motivate and nurture buy-in through learning,

engagement, and thankfulness. Table 4 shows participants' reference and frequency to

theme 2: motivate and nurture buy-in through learning, engagement and thankfulness.

Table 4

Participants' Reference and Frequency to Theme 2: Motivation/Buy-in, Learn/Educate,
Community/Engagement, and Thankfulness/Perks

CI manager	Motivation buy-in	Learn educate	Community engagement	Thankfulness perks
P1	2	3	0	2
P2	5	1	3	3
P3	3	4	3	2
P4	2	2	2	1
P5	1	3	7	1
P6	2	5	4	3
P7	1	1	4	1
P8	2	1	1	2

For CI CS managers, P6 suggested doing things like transportation programs, bike

infrastructure with helmets for everybody, and guaranteed rides home to reduce

greenhouse gas emissions. P7 stated that the CI CS has really allowed us to form many

relationships with customers or others in the industry, enabling us to adjust our strategy

and in the way we look at CS's chain reaction. The how behind creating and

implementing these strategies is just learning and educating.

Celebrate, P8 strongly suggested to pointing out when people are doing good

work and is a great motivator, have an interest in what matters to those you're trying to

motivate. P5 noticed that too often you find a lot of companies especially in construction

that talk about culture, but they do not cultivate culture, they do not nourish culture, but your people are your greatest commodity without your people you don't have a construction business.

Theme 3: Profitability Through Corporate Sustainability Measurement Systems

The third and final theme is profitability through CS measurement systems. Table 5 shows participants' reference and frequency to theme 3: profitability through CS measurement systems.

Table 5

Participants' Reference and Frequency to Theme 3: Profit/Profitable, Competitive Advantage, Measurement System

CI Manager	Profit/Profitability	Competitive Advantage	Measurement System
P1	1	4	1
P2	1	7	1
P3	1	5	2
P4	3	5	4
P5	2	6	7
P6	2	6	4
P7	1	5	4
P8	3	5	3

All participants provided content relating to CI strategies; however, only P5 provided examples of CI CS implementation processes. P5 stated,

The prefabrication shop was created due to the identification of the drywall and framing division waste. Those two consumables; steel and gypsum, are heavy waste items, so we considered our CS strategy and reviewed the existing process. Eventually we found efficiencies through CS best practices in prefabrication. A specialized router machine was used to create predetermined drywall shapes, reducing the overall waste of

the project, our organization, and industry. Typically, steel framing is sold in a stack of

steel studs in lengths of 10, 12 or 14 feet. The lengths are ordered at the standard size

above the needed length, then cut to the needed length during installation, with the rest

discarded. Using our design platform, we can have the machine cut the steel studs to the

specified length, further reducing waste. P5's CI manager approach demonstrates how the

addition of CS strategies to the CI processes produces material, waste, and staff

efficiencies that lead to CA.

Although only P5 provided specific CI processes and CS implementation

examples, each participant shared third-party organization's measuring criteria, system,

and/or product utilization. The measurement systems and who referenced Lean Six Sigma

- P2, LEED - P4, P6, and P8, CSR - P5 and P6, US Green Building Council - P4 and P7,

B-Lab - P6, with all participants referencing the learning organization, often in an ad hoc

fashion. However, no participant mentioned the Global Reporting Initiative (GSI), P2 and

P6 referenced admiration for the European approach to CI CS strategies and processes.

P3 strongly suggested accepting certain materials and certain building practices, which

over time powers the industry to change to CS strategies and processes.

When implementing CS practices, P4 suggested do not take on too much at once,

you and your staff will get discouraged and potentially stop these strategies and

processes, start with the low hanging fruit to show the C-suite that commitment towards

CS also makes financial sense. Different agencies provide templates to assist in CS

strategies and processes, use available templates. P4 stated,

The more data you have and content to review the easier it will be to then develop company strategies and processes around your CS commitment. When I first started in sustainability there was not data on showing that green building design could create profitability for a company, but the data is out there now so it is all about stepping up and making the commitment to CS strategies and processes.

Almost never profitable, P1 continued that mostly a cost reduction process, can make savings, bring costs down, which will increase margin; in a way that is making profit. Must get away from expecting a direct access to profitability. Whereas P2 stated CS does not always make the most financial profit for the organization and the individuals in it. However, P6 stated that CS was not an awfully expensive investment, and in terms of profitability, CS gave us more than it took, and it just became part of who we were to the point where it was just the cost of doing business, like keeping the lights on, did not expect it to make us money.

My favorite measure is my employees, which, P5 stated, means me taking the time to know each of them, understanding what is important to them and how they are giving back. CS strategies and processes are an opportunity for a company to find efficiency and increase profitability. Finally, P7 stated that if businesses do not develop and incorporate CS strategies and processes, they will become less profitable as a corporation.

Connection to Literature and Conceptual Framework

There are few conceptual differences between the systemic processes of a CS management strategy and the traditional management strategy (Rodrigues et al., 2019).

CS in the CI is a systemic process that seeks to maintain harmony between nature and the built environment by creating human settlements with a strategy to achieve a balance among economic, social and environmental aspects (Giannoni et al., 2017). Managers' use of CI CS strategies and processes aims to reduce the impact of a project on the environment over its entire lifetime while optimizing its economic viability without compromising aesthetics, comfort and safety (Sfakianaki, 2015). CI managers should possess the necessary leadership competencies, skills and knowledge to achieve CS in building projects (Tabassi et al., 2016). The CI manager must know CS as a concept and implement the CS business model through strategies and processes (Marchichova, 2019).

Participants initiated the CS strategy with the creation of an organization wide shared definition of CS, which usually include a strategy that (a) incorporates a social aspect to staff engagement with executive management systemic support, (b) an appreciation, respect, and perpetual consideration for all planetary systemic health including all fauna and flora, and (c) in a capitalist societal structure, such as the United States, a processes specific CS measurement system that justifies the CS strategy with the intent to create long-term profitable CA.

The CI CS manager and staff starting point for the definition must indicate the needs of the individuals to generate their personal wellbeing (Sev, 2009). Creating and developing a successful CI CS business model relies on the ability of managers to monitor, evaluate and establish a learning organization, defined as the incoming intellectual capabilities of the company, and outlines the new directions for company development and growth (Marchichova, 2019). The CI CS managers' capability to

nurture wellbeing relies on their personal and public wealth (Sev, 2009). Homes, appliances, cloths, and electronics are personally owned assets, while roads, public buildings, and airports are publicly owned assets (Sev, 2009). Therefore, personal ownership is not a crucial part of one's systemic wellbeing; however, the wellbeing of society is crucial for CS (Sev, 2009). CI CS managers must constantly identify the changes in the environment, analyze the possible alternatives for development and develop complementary strategies (within conventional ones) to adapt to the changes (Marchichova, 2019) successfully.

CI CS managers have processes to measure outcomes and gather data, interpret, understand and transform it into actual knowledge, implement to instill behavioral and cognitive changes (Teravainen & Junnonen, 2019). Managers recognize the importance of formulating a CS strategy but need help in execution of the systemic concepts (Lloret, 2016). CS strategies and processes benefit from applying systems thinking, using multiple viewpoints that contribute to a greater understanding of the system's behavior (Moldavaska & Welo, 2015). CS strategies require participants to understand systems, those with the ability are known as systems thinkers (ST), which participants referred to as sustainability champions.

The participant's examples demonstrated their understanding of ST through CI examples that lend support for themselves being sustainability champions and for a business model that encourages ST of all members of the organization. There is a strong need for a shared understanding of CS's inherent interconnectedness and complexity, with the development of a common system language for harmonizing various tools,

methods, and disciplines within the organization (Onat et al., 2017). Participants'

examples demonstrated that systems thinkers are usually more apt to understand the

systemic concepts needed for CS practices initially. However, participants did not

indicate how to identify a systems thinker.

Participants indicated that early buy-in occurs with systems thinkers who are

usually open-minded to learning and incorporating sustainability practices. Individual

employee readiness is the crucial element upon which the change implementation success

or failure depends. All observed elements need to be coordinated and incorporated in the

system to maximize value for the construction company and customer (Milovanovic &

Cvjetkovic, 2021). Analyzing the various benefits, challenges and opportunities of CS

helps to create a bold vision that demonstrates it is possible to address CS practices in a

spirit corresponding with the times, characterized by demand for quality products and

services generated efficiently and in compliance with national and international standards

of environmental protection and respect for workers' rights while maintaining adequate

profit margins to remain in the market (Armando et al., 2021).

Learning Activities. Managers utilize experiential or transformational leadership

styles to develop CS strategies and processes competence, which involves both cognitive

and practical development in the ability to deal with increasing complexity and learning

of values and ongoing reflection of the CS practices (Haney et al., 2020). Marsh et al.

(2022) administered a structured questionnaire survey completed by 108 CI professionals

who indicated an initial need for managers to improve the capability, opportunity, and

motivation of employees' buy-in to CS strategies, to facilitate the adoption of CI CS practices.

Applying CS in construction encounters many problems during the implementation process; the main problem is the construction workforce's weak awareness of CS in construction (Shurrab et al., 2018). Knowledge about sustainability and the environment is vital for adopting sustainable behaviors if customers are aware of environmental problems (Shurrab et al., 2018). Teams develop a shared understanding of knowledge management and how it is an essential strategy for improving organizational competitiveness, with the organizational culture a crucial factor in determining the initiative's success or failure (Mojibi et al., 2015). P5 stated that CI managers educate their teams on the importance of CI CS strategies and processes, meanwhile, showing the systemic impact on the team, project, profitability, and community to inspire, encourage, and nurture.

Engagement Activities. The role of leadership is to ensure the engagement of every employee, stakeholder, shareholder and customer (Garad & Gold, 2019). Participants indicated that CI managers support CS and incorporate an inclusive community-based perspective through engagement activities. P7 stated that to implement CS strategies and processes is to form relationships because then everyone is part of the grand scheme of things, we're all working towards the same goal. P7's statement implies that relationships in the CI are important because for example, when a CI team is standing on rafters to complete constructing a roof, they must trust each other is informed, and will be considerate of others on the construction site. The social aspect of

the working relationship through participation in activities strengthens the trust between participants and further strengthens the trust on the work site. Participants shared that informed, inclusive CI cultures volunteer together to a social activity, which allows performing a different task than customarily performed together. Participation in the social activity is an attempt to remove potential stressful social anxieties, with the intent to share enjoyable moments and further encourage open communication.

Expressions of Thankfulness. As a gesture of appreciation, CI managers provide thankfulness such as paid time off to attend the shared activity, which encourages the employees to promote the organization. P8 stated that a great motivator is CI managers expressing interest in what matters to the CI employees. CI managers, P8 stated, engage with CI employees in a way to be aware of what motivates and drives, to know why they care, and celebrate with an expression of thankfulness, historically referred to as a benefit (perk), such as a celebration or paid time off. Although these activities have no direct profitability, the participants shared that the CI managers know that it does. Lastly, P5 stated that for a perk, consider how many hours volunteered, so leave early on Friday.

CS innovation is a driver for CI managers to achieve long-term CA. There is a positive stock market reaction to incremental sustainability innovation announcements in the CI (Duong et al., 2021), demonstrating the potential for profitability. P3 stated that everybody's job is in some fashion aligned to the company's economic sustainability, with the hopes that it will ensure the company can continue to function. Participants stated that once the CS strategy has complete buy-in from all management and staff, there

is no longer a need to measure for profitability; however, the CI managers still measure for profitability.

Applications to Professional Practice

CI managers are under major pressure to utilize a CS business model, save resources and minimize the construction activities that could negatively impact the environment (Shurrab et al., 2018). Currently, the CI generates negative impacts related to raw material extraction, material manufacturing, infrastructure construction, operation and demolition (Giannoni et al., 2017). CI's negative impacts are the consumption of non-renewable resources, the decline of biological diversity, the destruction of forest zones, the loss of agricultural areas, the destruction of natural spaces, global warming, and water, air and soil contamination (Giannoni et al., 2017). To mitigate the current situation, CI CS managers can promote sustainable development that eliminates or mitigates these negative impacts (Giannoni et al., 2017). CS is profitable, socially responsible, and does not deplete the use of the planet's resources (Burkynskyi et al., 2021). The knowledge of CS strategies applied in the CI will clarify sustainability concepts, enable sustainable design strategies, and facilitate the fulfillment of the proposed objectives through a systemic application (Giannoni et al., 2017).

The conceptual framework, referenced in the literature review, is the general systems theory developed by von Bertalanffy (1968) who stated an organism, such as the managers of an organization, measure the effectiveness of the inputs, processes, outputs, feedback and subsystems through structured models, principles, and laws, which then apply to all their usable generalized systems. All participants mentioned the concept of

systems, the need for corporate staff's inclusive understanding of systems, and the ability to modify processes of the system for profitability. A CI CS business model is a conceptual framework that helps to relate a company strategy with its activities and processes to the strategy implementation (Marchichova, 2019). The use of the general system theory for this study aided in the generalization of the systemic CI CS strategies and processes, which led to the creation of the Czelusniak-Serviss Profitable CS Business Model.

Czelusniak-Serviss Profitable Corporate Sustainability Business Model

Sustainability champions establish a learning organization with engagement activities, expressions of thankfulness, community stewardship, and a measurement system for profitable CA. The type and purpose of CS learning and engagement activities are left unidentified to enable each team to develop a shared vision for the organization perpetually. Managers provide learning and engagement activities to establish a learning organization where employees develop systems thinking skills, are committed to and the share development of the organizational vision and mission statement and participate in community stewardship with transparent personal and systemic accountability.

The application to professional practice is for managers' implementation and the perpetual use of the Czelusniak-Serviss profitable CS business model. Figure 1 shows the Czelusniak-Serviss profitable CS business model.

Figure 1

Czelusniak-Serviss Profitable Corporate Sustainability Business Model
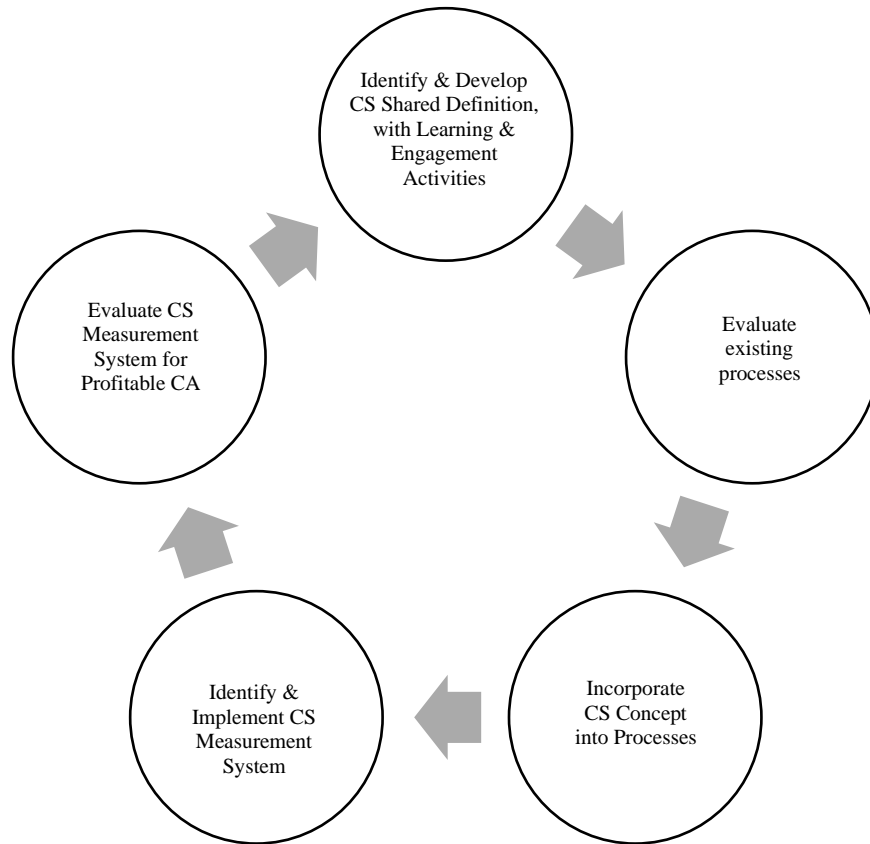
Implementing and utilizing a CS business model is a time-consuming process that may only be welcome by some stakeholders due to time constraints and overall reluctance to change (Othman & Al Nassar, 2021). However, adopting and applying the Czelusniak-Serviss profitable CS business model requires long-term organizational commitment.

The achievement of a successful CS business model incorporation and buy-in requires managers use of an improved business decision-making model that simultaneously increases revenues and revises the supply chain for meeting the principles

in the sphere of human rights, economic growth, satisfactory working conditions, and the environment, and combating corruption as the key driver of CS business models (Burkynskyi et al., 2021). A CS business model strategy requires perpetual mission reformulation, strategy redefinition and involves managers' broader thinking, leaders capable of open mindedness, and creativity (Kroupová, 2015). The Czelusniak-Serviss profitable CS business model initiated with the identification of a need or desire for CS strategies and processes, which is immediately followed by the development of a shared organizational definition of CS. The developed shared definition of CS is then shared with all stakeholders to instill a sense of accountability and transparency. The CS definition development, learning and engagement activities, and other like processes are not identified specifically here due to the expectation of inherent flexibility.

Managers evaluate existing processes for efficiency and further how to incorporate a CS strategy into those processes or create new processes. To evaluate the existing process, managers meet with the employee(s) performing the task/process. The manager, and employee(s) evaluate how to incorporate the organizational shared CS strategy into the task/process. After consideration of employees' ideas, managers research similar CS processes in related industries. Managers then design a corporate-wide CS standard for the task/process. Once the CS task/process is decided upon, review with the employee(s) responsible for the task/process and obtain agreement. Implement new or modified tasks/processes with the CS strategy.

The use of sustainability measurement systems directs managers to incorporate systems thinking ideas into sustainability assessment and to identify actions towards CS

practice (Moldavaska & Welo, 2015). Managers research industry wide existing CS measurement systems and the incorporation of CS into the organizational culture. The type and purpose of CS measurement systems are purposefully left unidentified to enable each team to perpetually develop a shared vision of CS measurement systems for the organization. After organizational-wide review and consideration, managers select a CS measurement system, then either implement a predetermined measurement system as designed or in an ad hoc fashion. Link new tasks/processes to the employee's job description responsibilities for systemic accountability, transparency and compensate for added workload and responsibility. As tasks/processes with measurement systems become a routine strategy and process, managers use the measurement system to evaluate for profitable CA. By scheduling process reviews, managers can introduce or re-introduce the shared organizational definition of CS to existing or new employees while providing an opportunity further to develop CS practices through learning and engagement activities.

The Czelusniak-Serviss profitable CS business model is designed to repeat, as the industry changes with new developments and trends, managers identify new needs and consider incorporating them into the current CS strategies and processes. When onboarding new staff, managers inform of the Czelusniak-Serviss profitable CS business model while explaining how and why to motivate buy-in.

Implications for Social Change

The CI generates about one-third of all waste, half of all extracted materials and consumed energy, a third of all water consumption, and is one of the most significant

economic market segments worldwide (Sfakianaki, 2015). Implementing CS strategies

and processes in the CI makes it possible to contribute to the sustainable development of

society and companies (Giannoni et al., 2017). The addition of the finding of this

research and the Czelusniak-Serviss profitable CS business model in the CI may lead to

several benefits: (1) environmentally, CS practices reduces the use of non-renewable

resources, minimizes environmental risks and uncertainty, with reductions in waste and

pollution and increases the reuse and recycling of building materials, (2) socially, CS

practices focus on the identification of stakeholders' requirements and ensure that the

developed project fulfills their needs and meets their expectations, and (3) economically,

CS practices supports growth in the CI through increasing GDP, and provides more job

opportunities (Othman & Al Nassar, 2021).

Social change may occur as CS strategies and processes evolve using the

Czelusniak-Serviss profitable CS business model. The employees may become systems

thinkers who understand the holistic effect of CS practices on organizational culture,

systems and profitability. In turn, the employees, may identify the correlation between

the organizational CS practice benefits to their lives outside of work in the community.

Implementing these profitable CS practices may ensure that people treat each other well,

that people care for the planet, and that people obtain profit for their organizations

ethically.

Recommendations for Action

Recommendation 1: Implement or Comply

The expectation of government regulations, community relationships, cost and revenue imperatives, and societal and moral obligations are the four main reasons why CS demands urgent attention (Buhovac, 2014). The first recommendation for action is that CI managers implement the Czelusniak-Serviss profitable CS business model in preparation for future governmental regulations. Strategic and financial motivations for CS are emphasized for the food, construction, and other industries, however, the CI managers are strongly motivated by regulatory compliance (Paletta et al., 2021). Recently, government's issued green construction-related laws and standards, which protect the environment, further save water and energy (Shurrab et al., 2018). P6, P7, and P8 mentioned potential future governmental regulations such as carbon taxes or having to provide documented proof of the organizational practices for carbon neutrality. P4 stated that managers need to be the drivers and create change without the need for government regulations. It really takes good strong corporate culture and sustainability champions to say we are going above and beyond compliance because it is good business and the right thing to do.

At the time of writing this study, stalled in the New York Senate, is the Fashion Sustainability and Social Accountability Act. If the Fashion Act (FA) passes, it will make New York the first state in the United States and the world to pass legislation that would effectively hold the biggest brands in fashion to account for their role in climate change (NYSenate, 2022). The measurement system under this legislation would require FI

companies to pay great attention to the CI-built environment that supports garment-making (Morrison, 2022). In addition, the FA would impact the CI through direct requirement to disclose the impacts of greenhouse gas emissions, water footprints and chemical use throughout the supply chain (Morrison, 2022).

The FA would require fashion industry (FI) companies to map a minimum of 50 percent of their supply chain, starting with the farms where the raw materials originate through factories and shipping, with all CS information available online for stakeholders to view (NYSenate, 2022). The FA has factors that will likely disseminate throughout other industries due to proximity and dependence, which includes the CI (Morrison, 2022). Similar legislation is debated in the European Union, and while Germany, France, Britain and Australia have existing laws regarding human rights and slavery, there is no general legislation in any country governing the greater social and environmental actions of the fashion industry and mandating change (Morrison, 2022). If the FA does not pass in the New York State Senate, the act still came under consideration, which means it is only a matter of time before a governmental agency implements systemic level CS expectations and publicize them for a level of transparency and accountability.

Recommendation 2: CS in Human Resources

Human resource development has the potential to influence the ethical standards encompassing all organizational levels, with training emphasizing the organizational values and mission and assisting managers and employees in applying those values every day (Frye, 2019). The second recommendation for action is when a manager hires new staff to introduce the Czelusniak-Serviss profitable CS business model during the human

resource processes such as hiring, on-boarding, and retention efforts. An initial step in the Czelusniak-Serviss Profitable CS Business Model is identifying the need for CS. Through learning and engagement activities, a new hire will need to be aware of the Czelusniak-Serviss profitable CS business model strategies and processes and further buy-in to the rest of the business model strategies and processes. Managers and employees using CS practices need to encourage each other to reflect on their personal value mastery, and morals and use those values/morals to guide their business decisions (Frye, 2019). P1 shared that CS practices are mostly about talent attraction and retention, more often smart, hardworking people want to work for an organization that cares. P5 stated that when somebody talks about mission, values, and culture in a company, with implementation in the form of recruiting for business profitability. With an organization using CS practices, future employees adream of working for you. They want to be a part of that team, that ecosystem, that sense of giving back.

Dissemination of Results

The Czelusniak-Serviss profitable CS business model shall be disseminated via scholarly journals, including business and research articles, book series and conferences with learning and engagement activities. The results shall appear on social media platforms, such as LinkedIn and all groups mentioned earlier in this document, Google Scholar, Science Direct, and international business sites.

<div align="center">

Recommendations for Further Research

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This qualitative research study aimed to explore the profitable CS strategies and processes of senior/mid-level CI managers to achieve CA. The recommendation for

further research includes the Czelusniak-Serviss Profitable CS Business Model

effectiveness in the CI and similar industries. Each CS strategy and process in the

Czelusniak-Serviss Profitable CS Business Model shall be a guide to encourage further

research for managers interested in an approach to consider, or for future researchers

interested in expanding upon this research.

The available literature provided few examples of an existing organization's

processes and strategies of profitable CS. This first limitation was addressed by changing

from a single case study to a multiple case study. The second limitation was that only

senior and middle managers could provide feedback on the interview questions, which

was a correct limitation. The third limitation was the lack of available organizations,

within the geographic area of the study that are known for having profitable CS practices.

Finally, the third limitation was addressed by no longer limiting the study participants

from one organization, participants could come from outside of the geographic area.

Reflections

In August of 2016, I started a journey to obtain a Doctor of Business

Administration in Social Impact Management degree, with no identified outcome

expectation besides drafting a doctoral-level paper and gaining the title of doctor.

Unfortunately, in past 6 years, two Presidents were elected in the United States, and a

pandemic occurred that caused global social, political, and economic disruption expected

to last for generations. Meanwhile, I was business faculty at a community college, a

disaster relief business advisor, and Minority & Women Business Enterprises (MWBE)

Specialist at several economic development type corporations. All the while, I stayed tirelessly focused on the goal of my doctoral study completion.

Once the doctoral-level courses were complete, I was excited to start collaborating with a mentor who was to become my committee member first chair. However, the first mentor/chair had an approach to critique that did not fit my expectation and requested a new mentor/chair. The new mentor/chair provided the guidance and approach that fit my expectation, which further aided in completing the doctoral study. At the start of the doctoral study program, there was no identified expected outcome. However, at the end of the program, I have direction because I understand systemic concepts and how to help others understand those concepts for sustainable development. The long-term goal is to teach at a university, continue assisting in economic development, and potentially write a book series of suggestions for small/mid-level business owners to initiate CS.

Conclusion

Horace Mann is known for saying, "Be ashamed to die until you have won some victory for humanity." The Czelusniak-Serviss profitable CS business model has the potential to link systemic thinking sustainability leaders throughout industries and communities for a shared vision of sustainability. For a small victory for humanity, I hope to inspire future sustainability champions.

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Appendix A: Interview Questions

I will conduct face-to-face semistructured interviews with participants who have experience with strategies and processes that managers use to achieve CA through profitable CS strategies and processes.

1. How do you define CS, and sustainable business practices?

2. How, and in what ways, has your construction materials manufacturing industry experience influenced your use, development, and implementation of CS practices?

3. Why have you made CS strategies and processes a priority?

4. How did you develop CS strategies and processes?

5. What technique(s) do you use to implement the CS strategies and processes?

6. What technique(s) do you use to motivate employee buy-in to the CS strategies and processes?

7. How do you determine the profitability of CS strategies and processes?

8. How do the CS strategies and processes achieve CA?

9. What is important to understand your organization's success in developing and implementing CS strategies and processes?

10. What other information do you see pertinent that has not been discussed in this interview?

Appendix B: Interview Protocol

1. Introduction of participant and researcher.

2. Ensure participant signs consent letter.

3. Review and discuss the purpose of the research.

4. Review confidentiality and interview times schedule (approximately 60 minutes).

5. Remind participant that the interview will be audio recorded.

6. Discuss any questions or concerns.

7. Commence recording and start with the interview questions.

8. Conclude the interview and stop audio recorder.

9. Allow participant to ask questions.

10. Thank the participant.

11. End protocol.

Appendix C: Video Request for Participation

Video Title – 'Doctoral Study: Request for Participants from the Construction Industry'

Description under posted video:

Doctoral Study: Request for Participants

Contact Information: XXX

Doctor of Business Administration in Social Impact Management Candidate at Walden University.

Email: XXX

Phone: XXX

Audio transcript: *(will include in the description as well)*

Hello, thank you for clicking on this video. My name is XXX, I am a Doctor of Business Administration Candidate at Walden University and have created this video to request participation.

My study is directed toward senior/mid-level managers who work in the construction industry, regarding your experiences with CS strategies and processes that lead to CA. With your input, I know we can improve the construction industries approach to CS for others.

In all the research around construction industry CS, we have not yet listened to those who have participated in these strategies and processes.

This is a multi-case qualitative study, for which I am seeking five-8 senior/mid-level managers in the construction industry, with five+ years of experience in CS strategies and

processes and are interested in participating in this study. Please find my contact information in the description below.

Okay, so - who am I?

As I said, I am XXX.

I have worked in the construction industry as a commercial and residential interior designer for over 20 years. There is a lot of talk about sustainability (a.k.a. going green), but little to no conversation about how to adjust a business model toward sustainability practices. It feels great to be affiliated with organizations with business models that utilize CS, but how do I get started? Most recently I have been a Business Department Faculty member, along with being a Disaster Relief Business Advisor, and have seen firsthand throughout my experiences the failings of organizations to create, implement, manage, and maintain CS business model strategies and processes.

Interestingly, there does seem to be a financial benefit for those who adjust their business model toward CS strategies and processes. These thoughts led me to this current research project. To learn more about me, find me on LinkedIn.com.

Unfortunately, many construction industry managers do not understand the strategies and processes of systemic business model change toward CS and hence limit their CA.

This study is rooted in the belief that senior/mid-level managers with five+ years of experience, using CS strategies and processes in the construction industry are integral to informing our understanding of this issue.

The information you share with me will be protected and confidential. Your personal identity, general identifying information, the identity of the construction industry

organization, and the fact that you are participating in this study will remain private. I will assign a pseudonym to preserve your personal identity, and the identity of the organization.

If you are a senior/mid-level manager in the construction industry, with five+ years of experience in CS strategies and process, and are interested in participating in this study, please find my contact information in the description below.

To email me:

- First, copy and paste my email address in the description below, and create an email from your private email account.

- Then - copy the phrase: **"I am interested in your Doctoral Study."**

- Paste that phrase in both the subject line, and in the body of the email.

Once I receive your initial email, with your contact information, I will reply to that email with a Consent Form for you to review, potentially complete, and further return to confirm participation. Of course, I am open to questions for clarification of these details. Finally, please review the information in the description below.

Thank you for your consideration and I am hopeful to begin this study with you soon!