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Brazilian Women Entrepreneurs: Exploring Strategies for Building Sustainable Business Organizations

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Walden University

College of Management and Technology

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M. Ana Church

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2015

Abstract

Brazilian Women Entrepreneurs: Exploring Strategies for Building Sustainable Business
Organizations

by

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BA, Universidade do Estado de São Paulo - Marília, Brazil, 1981

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

Walden University

August 2015

Abstract

Brazilians create an average of 1.2 million new registered enterprises annually, but some struggle to keep their business in operation. Thirty percent of the new ventures are unable to survive the first year, and 58% go out of business after the first 5 years. The goal of this phenomenological study was to explore the perceptions of Brazilian women entrepreneurs concerning the strategies needed to build sustainable business organizations in Brazil. The individual concepts of sustainable development, sustainability, business strategies, and business models served as the theoretical foundations for the study. Data were collected via in-depth interviews with 20 women entrepreneurs engaged in a range of sustainable or green businesses in Brazil. Moustakas' modified van Kaam analysis method was used to analyze the data. Major themes identified were sustainability trends, health concern solutions, environmental and social distress solutions, cooperatives, and institutional support. Results are significant to all small business communities and entrepreneurs of Brazil because of the high rate of business failures and the need for sustainable business practices. Findings indicated that implementing value-added business strategies through sustainability may increase the likelihood of continued business financial capability. The implications for positive social change are the potential benefits to small business entrepreneurs in the developing world. By learning and implementing the economic, social, and environmental principles of sustainability, entrepreneurs could increase revenue from improved business practices and extend the life of their companies.

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Dedication

I dedicate this study to my husband Marshall who supported me throughout the process, to my son Renato who encouraged me from Brazil, to my daughters Simone, Marcela, and Nathaly who were my cheerleaders, to my grandchildren who motivated me, to my family in Brazil who showed interest in understanding my topic, to my friends who provided words of wisdom, and to the Brazilian women entrepreneurs participants who made it all possible.

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Section 1: Foundation of the Study

The economy of Brazil depends greatly on the entrepreneurial activities of small businesses. Small businesses represent 99% of Brazil's companies, providing 52% of job growth (Brazilian Support Services to Micro and Small Enterprises [SEBRAE], 2012). Despite their significance to the country's economy, 58% of new startups are unable to survive, and they terminate their activities within the first years of operations (SEBRAE, 2013). Experts enumerated some of the factors causing early business termination. They included (a) entrepreneurship ineptitude, (b) inaccessibility to credit, (c) inadequate education, (d) lack of planning, and (e) excessive tax burdens among others (Hamrouni & Akkari, 2012; Nascimento, Montenegro, Lima, & Ensslin, 2013; SEBRAE, 2013). Experts agree failure occurs because startups are ill prepared to compete (Ferreira, Oliva, Santos, Grisi, & Lima, 2012).

In this qualitative phenomenological study, I explored the strategies needed to create sustainable business organizations from the perspective of implementing economic, social, and environmental sustainability principles. Nidumolu, Prahalad, and Rangaswami (2013) argued that there is no substitute for sustainable development. Considering that women entrepreneurship initiatives have grown considerably in Brazil in the past decade (Global Entrepreneurship Monitor [GEM], 2012b), I conducted the study with women entrepreneurs from all regions of Brazil. The results of the study might support women entrepreneurs in Brazil and other developing nations in planning their business strategies based on sustainability principles.

Background of the Problem

Brazilians create 1.2 million new registered enterprises annually, of which 99% are micro and small companies and individual entrepreneurs (SEBRAE, 2011). These companies generate 52% of the country's employment and pay 40% of wages, solidifying their importance to the country's economic stability (SEBRAE, 2012). Thirty percent of these new enterprises close their doors within the first year of activities, and 58% fail before reaching 5 years of existence (SEBRAE, 2013).

Early business termination disturbs local segments of the economy. Owing to financial losses, premature business terminations can provoke psychological and social devastation (Ucbasaran, Shepherd, Lockett, & Lyon, 2013). Experts agree failure occurs because startups are ill prepared to compete (Ferreira et al., 2012). In recent years, Brazil has witnessed an extraordinary economic phenomenon, as the rate of individual microenterprises started by women has reached 46% (SEBRAE, 2012). In 2012, women entrepreneurs operated 52% of the micro enterprises in the industry sector, and 50% of them in the service sector (SEBRAE, 2012).

Further research is needed on the strategies Brazilian women entrepreneurs need to create sustainable business organizations in a country where the rate of business failure is high. For that purpose, I explored the concept of sustainability applied in business. The concept of sustainability derived from the concept of sustainable development – to meet the needs of contemporary societies, but also to consider and respect the needs of future generations (WCED, 1987). Based on that concept, I explored the strategies

Brazilian women entrepreneurs needed to implement to create sustainable business enterprises.

Problem Statement

Brazilians create 1.2 million new registered business ventures annually, of which 99% are micro and small companies and individual entrepreneurs (SEBRAE, 2011). In recent years, Brazil has witnessed an extraordinary economic phenomenon as new ventures started by women have gradually increased. In 2012, women entrepreneurs represented 52% of all micro enterprises in the manufacturing sector and 50% of those in the service sector (SEBRAE, 2012). High rates of early business termination occur because small business entrepreneurs are ill prepared to compete (Ferreira et al., 2012). Many novice entrepreneurs without adequate formal education fail to realize the need for preparing a business plan or acquiring management competencies prior to registering a company (Ferreira et al., 2012). The general business problem was that, in Brazil, 27% of all new companies closed within the first year of activities, and 58% failed before 5 years of operation (SEBRAE, 2011). The specific business problem was that women entrepreneurs in Brazil often lack strategies to sustain their business ventures.

Purpose Statement

The purpose of this qualitative phenomenological study was to acquire information about the strategies women entrepreneurs in Brazil need to advance practice in creating sustainable business ventures. The research question guiding this project was: What strategies do women entrepreneurs in Brazil need to create and sustain business ventures? To answer the research question, I prepared a qualitative research

questionnaire to explore the lived experiences of a purposively selected sample of 20 Brazilian women entrepreneurs.

The selected group performed business activities for economic achievement in alignment with the needs of society and the environment. With the help of SEBRAE, I located those participants in different regions of the country, including large metropolitan centers, small cities, towns, and farmlands across Brazil. There are contributions for positive social change for the small business community and in particular for women entrepreneurs in developing nations.

Nature of the Study

The qualitative method incorporates six approaches to inquiry (Denzin & Lincoln, 2011). Those approaches include (a) phenomenology, (b) case study, (c) ethnography, (d) narrative, (e) grounded theory, and (f) heuristic approach (Denzin & Lincoln, 2011). Qualitative research involves subjective interpretations of an objective world that exists independently of our perceptions and idiosyncratic interpretations (Edwards, O'Mahoney, & Vincent, 2014). Because of its interpretative structure the qualitative research method allows for human-oriented views of phenomena to achieve shared social principles (Trotter, 2012).

There was a purpose for the choice of qualitative research methodology. Quantitative methods rely on numerical data to examine the relationships among variables in testing theories (Leedy & Ormrod, 2013). Conversely, qualitative research methodologies use open-ended questions, which begin with *what* or *how* to investigate, explain, or describe phenomena (Denzin & Lincoln, 2011). I chose a qualitative

phenomenological strategy to understand the emotions, values, opinions, and rationales that dictate participants' behavior (Bluhm, Harman, Lee, & Mitchell, 2011). Husserl's philosophical method requires (a) adoption of a phenomenological attitude, (b) selection of a phenomenon of interest, and (c) careful description of essence discovered (Giorgi, 2008). Phenomenological research is a process of inquiry that offers detailed interpretations of participants' conducts and attitudes. It provides guidance as to what issues to investigate and describe, to best convey the meaning of the lived experiences of individual participants (Moustakas, 1994).

Research Question

In this study, I addressed the following research question: What strategies do women entrepreneurs in Brazil need to create sustainable business ventures?

Interview Questions

1. Could you please describe the types of products or services your company offers?
2. How were you able to identify this business opportunity?
3. What strategies did you apply for designing, producing, marketing, and selling your products or services?
4. What is the business structure in place to manage sustainability goals?
5. What difficulties arose for management because of the tripod of sustainability?

[Prompting

Financial returns,

Eco-friendly practices,

Socially responsible actions]

6. What obstacles did you come across (if any) when searching for materials, equipment, suppliers, office space or land, workers, information, financial capital? What about green certification (if any), product demand, infrastructure for the flow of production, and any specific training for your business?
7. What are the most difficult challenges women must overcome to sustain their business ventures?
8. What kind of support did you receive and from which institutions?
9. What is it like for a woman to launch a business organization aiming to be financially profitable, environmentally and socially responsible in a country rapidly mass producing, and where profit seems to be the only focus?
10. How can business organizations have an impact on the quality of life on the planet?

Conceptual Framework

A theoretical framework is appropriate for research focused on deductive reasoning, while a conceptual framework is appropriate for inductive reasoning, which researchers use in qualitative studies (Imenda, 2014). The concepts informing the conceptual framework for this study were sustainable development, business sustainability, business strategy, and business models. *Sustainable development* is an economic development that satisfies the necessities of modern societies considering that future generations will also need the planet's resources to fulfill their needs (WCED, 1987). Such a characterization set the stage for rationalizing the sustainable development

model from a macroeconomic perspective, as well as from a microeconomic perspective where the concept is relevant to the performance of business activities.

A sustainable business is socially desirable, culturally acceptable, and psychologically nurturing (Hawken, Lovins, & Lovins, 2013). It is economically sustainable, technologically feasible, and operationally viable; it is also environmentally robust, generationally sensitive, and capable of continuous learning (Hawken et al., 2013). These characteristics of a sustainable business set the stage for numerous innovation opportunities.

Relating the concept of sustainable development is appropriate to explore long-lasting strategic solutions for business sustainability. Business leaders would need a framework to quantify economic, social, and environmental sustainability performance of their business activities. In the absence of quantified measures for sustainable development, Elkington (1994) established a framework with seven sustainability drivers to measure sustainability performance known as the *triple bottom line* (TBL) accounting. Those drivers were (a) time, (b) good corporate governance, (c) values, (d) transparency, (e) life-cycle technologies, and (f) partnership with community stakeholders (Elkington, 1997). Through the triple bottom line framework companies can strategically incorporate sustainability ethics into their business practices. They combine the traditional measures of economic performance, with the socially and environmentally acceptable principles of sustainability (Mujtaba & Cavico, 2013). The TBL encourages companies to create innovative business models and implement new business strategies.

The concepts of *business model* and *business strategy* also supported the study. In 1980, Michael Porter provided an in-depth conceptualization for strategy in his book *Competitive Strategy*. In the book, he defined strategy as the five fundamental forces present in industry competition (Harvard Business Essentials, 2005). From that definition, a business strategy is a blueprint for doing business in a competitive environment, which is superior to those of opponents in the same segment (Harvard Business Essentials, 2005).

A business model, on the other hand, explains the foundations and procedures through which an enterprise produces revenue from its activities (Harvard Business Essentials, 2005). A business strategy is a framework within which a business model undergoes modification while a business model is the sum of the components of a strategy combined at a particular time (Stefanovic & Milosevic, 2012). Among scholars, there has been no satisfactory consensus about the definition of a business model as a concept. Despite this divergence, the literature indicates that a business model explains how the firm creates value through its activities as part of a system (Zott, Amit, & Massa, 2011). These characterizations anchored the current study and clarified why the concepts of sustainable development, sustainability, business model and business strategy come together to explore new strategies for business continuousness.

Operational Definitions

Efficiency-driven economy. Stage of development of a country that possesses efficiency in the production systems. There is increased product quality, well-developed higher education centers, effective labor and product markets, efficient financial markets,

and eagerness of the population for new technologies (World Economic Forum [WEF], 2012).

Innovation-driven economy. A stage of development of a country in which business operations occur within sophisticated business networks in a location conducive to innovation (WEF, 2012).

Microenterprise in Brazil. A company that generates annual gross income less than or equal to 433,755 Brazilian Reals (R\$). For tax purposes related to the SIMPLES Law, a microenterprise has an annual gross income less than or equal to R\$240,000 (SEBRAE, 2014).

Necessity entrepreneurs. Individuals forced to start a business because no other options for work exist or are satisfactory (GEM, 2012b).

Opportunity entrepreneurs. Individuals who start a business to exploit a perceived business opportunity (GEM, 2012b).

Small enterprise in Brazil. A company that generates annual gross income over R\$433,755 and less than or equal to R\$2,133,222. For tax purposes related to the SIMPLES Law, a small enterprise has an annual gross income above R\$240,000, but less than or equal to R\$2,400,000 (SEBRAE, 2014).

Sustainable development. Sustainable development is an economic development that provides for the necessities of contemporary societies without bargaining away the ability of future populations to use the planet's resources for their needs (WCED, 1987).

Assumptions, Limitations, and Delimitations

Assumptions

An assumption is something unverifiable, perceived to be true (Cottrell & McKenzie, 2010). An assumption that I made in this study was that the sample size of 20 participants was representative of the women entrepreneurs in sustainability entrepreneurship in Brazil, considering the newness of the phenomenon, and the small numbers of sustainability-focused businesses. Another assumption was that no difficulties would arise while reaching participants via long-distance communication devices such as telephones, computers, or Internet. There was an expectation that all participants would understand and respond to the interview questions comprehensively and in a straightforward way. There was the assumption that most Brazilians were aware of sustainability issues because of international environmental agreements enacted by the federal government into laws over two decades ago. Finally, one last assumption was that official statistical data used in the study were authentic and correct.

Limitations

A limitation is a factor that may affect the study, but that is beyond the control of the researcher (Cottrell & McKenzie, 2010). One of the limitations of this project related to conducting a study with participants residing in Brazil while living in the United States. The small sample size of 20 participants to represent the population of women sustainability entrepreneurs of Brazil was also a limitation. Also, the use of the term *sustainability* in the study referred to both the continuity of the business and its economic, social, and environmental sustainability, as per the Elkington (1994) TBL

framework. Interviews conducted over long distance presented another limitation, perhaps limiting sincere sharing of information. Upon concluding data analysis, I sent the results to participants, via e-mail, for their feedback. Most responded providing feedback, but not all. That might be one of the limitations of the studies.

Delimitations

Delimitations are the geographic, demographic, and other bounds placed on the study by the researcher (Cottrell & McKenzie, 2010). The study included all five regions of Brazil, comprising North, South, Northeast, Southeast, and Midwest. Study results may not represent the realities of all sustainability-focused women entrepreneurs. Each region has its climate, specific geographical characteristics, natural resources endowment, demographics, infrastructure development, education system, and government commitment, making it unwise to generalize findings to all regions. Participants purposefully selected were women entrepreneurs implementing the sustainability principles, in their micro and small business. They were of different ages, ethnicity, economic and educational achievements and resided in metropolitan centers, small towns, rural areas, or in remote regions of the Amazon.

Significance of the Study

Contribution to Business Practice

This study helped to fill the gap in the literature on business sustainability and women entrepreneurship in response to sustainable development opportunities in Brazil. Through careful data collection and analysis, I captured the strategic choices implemented by participants who demonstrated new business models for sustainability.

Results might contribute value to scholarship and practical business applications by showing that unsophisticated, basic sustainable business practices can help prolong the life of a company.

Business termination prematurely has a negative impact on the life of the entrepreneur and destabilizes the financial flow of local economies. Scholars of entrepreneurship have identified some of the causes of business failure, which included (a) entrepreneur's ineptitude to business, (b) lack of credit access, (c) lack of formal education, (d) ineffective planning, and (e) excessive tax burdens among others (Hamrouni & Akkari, 2012; Nascimento et al., 2013; SEBRAE, 2013). In this study, I explored the strategies Brazilian women entrepreneurs needed to create and sustain their business ventures over time. Women entrepreneurship initiatives have grown considerably in Brazil in the past decade (GEM, 2012b) and have sparked the interest of scholars. However, a research gap remained regarding the strategies Brazilian women entrepreneurs need to sustain their business ventures.

Through the lens of sustainability theory and sustainable development, the study contributed empirical, qualitative data to the literature on small business sustainability amongst women entrepreneurs, highlighting the significant role women play in pioneering improved business practices. It is my expectation that the information collected, organized, and analyzed with the collaborative assistance and efforts of participants will inspire new entrepreneurs to start companies they can sustain in both good and hard times. I hope that the community of scholars in Brazil and elsewhere might find inspiration in these findings and continue to explore small business

sustainability pursuits, particularly efforts by women entrepreneurs sustaining local economies through their enterprises.

Implications for Social Change

Study results might have implications for positive social change because it advanced the body of knowledge related to sustainable business practices in the developing world. It is imperative to continue the debate on sustainability principles applied in business as a possible shield against failure, and about the role of women entrepreneurs in sustainable development.

Because of the meaningful contributions of women as behind-the-scenes agents of change in their communities, continuous discussions about women's role in local economies are necessary (Figueiredo & Perkins, 2011). In many countries, women are stewardesses in the administration and use of natural resources (Meinzen-Dick, Kovarik, & Quisumbing, 2014). Ultimately, study outcomes might contribute to a paradigm shift about women; from *underutilized resources* to *fundamental agents of change* as entrepreneurs supporting local economies. The implications for positive social change are latent benefits to the small business community that may increase the survivability of their company through implementing business practices in accordance to the principles of sustainability. The study was an exploratory endeavor and findings might require further in-depth investigation.

Review of the Professional and Academic Literature

The purpose of this exploratory study was to gain knowledge about the strategies women entrepreneurs needed to advance practice in creating and sustaining business

organizations in Brazil. Reports on high rates of business startups followed by high percentages of business failures sparked my interest in exploring new strategies for business sustainability. The literature on the topic and subtopics contributed to establishing the contextual framework for this study.

Articles that I considered in this review showed contemporary discussions on entrepreneurship, women entrepreneurship, sustainable development, sustainability and current trends in Brazil. The literature reviewed included up-to-date scholarly articles on small business entrepreneurship and the many causes of business failure. Peer-reviewed articles on the research themes provided me with the inspiration for exploring improved business practices. Besides issues of personal nature, entrepreneurship ineptitude, lack of planning, and inefficient process management were some of the causes of early business termination (Nascimento et al., 2013; SEBRAE, 2013). Other factors obstructing business creation and development were inefficient government policies, and the economic downturn (Nascimento et al., 2013; SEBRAE, 2013). These are valuable findings and demonstrated the significance of exploring new strategies for business sustainability.

Following is an account of how and where I accessed literature on the topic and subtopics. Access to research articles and literature was possible through Walden University library databases such as ABI/INFORMS Complete, Business Source Complete/Premier, Emerald Management Journals, and SAGE Premier. Multidisciplinary databases, such as the Academic Search Complete, ProQuest Central, and Science Direct, also were used in this research project. My search of Google

Scholar, which I accessed within and outside the Walden Library website, resulted in a wealth of peer-reviewed articles. Google Search provided non-peer-reviewed materials in the form of conference reports, books, videos, and government websites. Google Earth provided access to an aerial view of participants' regions and cities.

The Walden Library Thoreau data bank also was a valuable source of information. The Global Entrepreneurship Monitor (GEM) combining researchers from Babson College and the London Business School provided reports on entrepreneurship research worldwide. Finally, Brazilian Support Services to Micro and Small Enterprises (SEBRAE) facilitated information via its various agencies' websites, which served to anchor the study. Keywords that I used to search the literature included *sustainability*, *entrepreneurship*, *strategy and business model*, *innovation*, *sustainable development*, and *Brazilian female entrepreneurs*. I used 132 sources, 112 (90%) published within the previous 5 years. The following is a thematic review covering concepts key to the research topic and the conceptual framework anchoring the study.

Sustainable Development: A Historical View

One of the foundational concepts anchoring this study was the *sustainability model*, which originated with the sustainable development concept. In 1972, the United Nations held a conference on the Human Environment in Stockholm, Sweden, known as the Stockholm Conference (United Nations Conference on Sustainable Development [UNCSD], 2012). Resulting from the summit was the formation of the United Nations Environmental Programme (UNEP), with the goal of promoting environmentally sound development (UNCSD, 2012). Subsequent international gatherings culminated in the

formation of the World Commission on the Environment and Development (WCED), announced by the Prime Minister of Norway, Gro Harlem Brundtland, in 1983 (UNCSD, 2012). The WCED's mission was to reexamine the severe economic and environmental expansion anomalies around the world and to follow up with realistic strategic proposals to address those issues (UNCSD, 2012).

In 1987, the WCED defined sustainable development as economic development that satisfies the necessities of modern societies considering that future generations will also need the planet's resources to fulfill their needs (WCED, 1987). This high-level thinking became the foundation for the concept of sustainable development. Such a proposition would now be part of the notion of economic development, emphasizing the quality of life of the population.

The WCED report triggered the decision to form the UN Conference on Environment and Development (UNCED) known as the Rio Earth Summit, which took place in Rio de Janeiro in 1992 (UNCSD, 2012). Present at the Rio Earth Summit was a delegation of 140 countries. Summit delegates produced the Declaration on Environment and Development to help people become aware of matters related to development and environment with sustainable development goals in mind (UNCSD, 2012). In 2002, 60,000 people from all over the world attended the first World Summit on Sustainable Development (WSSD) in Johannesburg, South Africa. Ten years later, in 2012, those government representatives gathered again in Rio de Janeiro, Brazil, to participate in the Rio+20 Summit, a United Nations Conference on Sustainable Development to assess progress made.

Although possessing conflicting meanings in various parts of the globe, the concept of sustainable development and sustainability brings hope and a vision of an improved world today and for future generations. Sustainability delivers the hope of prosperity to humankind in the form of healthy living and fulfillment through meaning and purpose (Marans, 2013).

Business Model Versus Business Strategy

Among scholars, there has been no satisfactory definition to conceptualize a business model. Nevertheless, continuous debates substantiate its foundational usefulness for managers and researchers in the classification of enterprises, analysis of performance results, and as the basis for innovation (Lambert & Davidson, 2013). In the field of strategic management theory, scholars have not been able to reach a consensus on the definition of strategy. In the absence of differentiation in meaning for the two terms, business leaders quite often use the terms strategy and business model interchangeably (Harvard Business Essentials, 2005). The term *strategy* emerged from the Greek word *strategos*, which was used to define battlefield strategies in times of war. Later, business executives borrowed and began to use the word to refer to winning approaches to business (Harvard Business Essentials, 2005).

A business model shapes the foundation of a company's strategy in the form of a system with executable activities through which the business can secure profitable margins (Harvard Business Essentials, 2005). A business model explains the procedures through which the enterprise produces revenue from its activities (Harvard Business Essentials, 2005). Most recently, Stefanovic and Milosevic (2012) defined *business*

strategy as a pattern within which a business model changes. For Porter (1996), to strategize a business is to find a distinctive and beneficial position to compete, based on inbuilt systems of activities that are difficult to duplicate. Conversely, Ronda-Pupo and Guerras-Martin (2012) proposed a definition of strategy as the fundamental strength of the firm's relationship with its environmental context.

The environmental context determines the actions needed to achieve the mission and evaluate performance grounded on conscientious use of resources (Ronda-Pupo & Guerras-Martin, 2012). As such, a business model represents the fragmentation of practical strategies fused together in a defined period. Contemporary business organizations attempting to implement sustainability principles might need to develop innovative business models and strategies. The relationship between these two concepts served in part to anchor the study.

Sustainability Applied in Business

Sustainability originated with the concept of sustainable development. Sustainable development is an economic development that satisfies the necessities of modern societies considering that future generations will also need the planet's resources to fulfill their needs (WCED, 1987). Such propositions would now be part of the notion of economic development, emphasizing the quality of life of the population and opening up colossal opportunities for the business community worldwide. In this way, sustainability seems to provide a completely new approach to business.

The term sustainability has denoted conflicting meanings amongst the business community worldwide (Bateh, Heaton, Arbogast, & Broadbent, 2013). Social and

environmental sustainability are becoming significant mechanisms by which companies evaluate economic achievement (Koo, Chung, & Ryoo, 2014; McEwen, 2013).

Consequently, healthy economic performance equals business sustainability. Global economic growth and development have caused natural resources depletion in parts of the world and have consequently disturbed the ecosystem.

During the Industrial Revolution, a company's only preoccupation was with increasing profit margins, not computing *externalities*. Businesses can play an important role working with government and nongovernmental organizations (NGOs) to mitigate the negative implications global industrial growth brought upon society and the environment (Lion, Donovan, & Bedggood, 2013).

Sustainability implementation carries inspiration and a breadth of view for real life endeavors (Brundiers & Wiek, 2011). Sustainability triggers an optimism and confidence around the world, where many can visualize an improved contemporary society and a better future for humankind (Moldan, Janoušková, & Hák, 2012). Sustainability applied in business requires that companies develop new processes for economic achievements, which takes into considerations society and the natural environment including the preservation of nature and life-sustaining communities (Shepherd & Patzelt, 2011).

In Brazil, the current pace of industrialization has increased the need to protect the natural resources of ecosystems (Ditty & Rezende, 2014). Such concern for the environment has revealed countless opportunities for businesses of all sizes.

Sustainability is a new approach through which business create *shared value* by

reengaging with society for social progress and economic success (Porter & Kramer, 2011). The following paragraphs are summaries of literature related to the topic.

Sustainable business characteristics. A sustainable business is socially desirable, culturally acceptable, and psychologically nurturing. It is economically sustainable, technologically feasible, and operationally viable. It is also environmentally robust, generationally sensitive, and capable of continuous learning (Hawken et al., 2013).

There is no substitute for sustainable development. Nidumolu, Prahalad, and Rangaswani (2013) examined the sustainability initiatives of 30 companies and determined that sustainability is a rich source of both technological and organizational innovations. They prepared an outline to guide companies in the pursuit of sustainability. Three of those steps were (a) to consider compliance as an opportunity, (b) to challenge the supply chain to become sustainable, and (c) to conceptualize sustainable products and services. Furthermore, business leaders could (a) design innovative business models, and (b) build new platforms for practice could be the determinants of sustainability (Nidumolu et al., 2013). The sustainability concept forces business leaders to rethink their approach to business. Small business entrepreneurs might benefit from the implementation of the five-step framework.

Sustainability: A role for both business and government. Adegbite, Amiolemen, Ologeh, and Oyefuga (2012) studied sustainability awareness and performance among companies in Nigeria to evaluate the firms' undertakings toward economic, social, and environmental principles. Results indicated that management

possessed very low knowledge regarding the need to protect the environment, but higher commitment toward socioeconomic development. The researchers concluded by highlighting opportunities for companies to adopt the principles of sustainability. Those opportunities were organizational commitment, continuous improvement, education and training, research and development, environmental management, building of partnerships, compliance and legislation, transparency and reporting, and government involvement. They concluded that government and business alike have a critical role to play in supporting the development of sustainable companies (Adegbite et al., 2012).

Sustainability: An evolving concept. It has been over 2 decades since the publication of the Brundtland Report in 1987; there are still business leaders who think of sustainability as being limited to environmental precautions, not understanding the meaning of social sustainability. Bateh et al. (2013) argued that modern Western societies appreciate the value of egocentricity, a philosophy that emphasizes merely economic performance, focusing on the laws of supply and demand. The field of sustainability science and research poses a challenge to the business community to shift from purely profit-seeking intentions to include individuals and their institutions as part of a larger system. In the pursuit of sustainability, management and academia ought to engage in a combined effort to merge their expectations of sustainability outcomes. A platform could provide a clearer understanding of sustainability to satisfy stakeholders, management, and workers supporting them to promote emerging sustainability strategies (Bateh et al., 2013).

Sustainability: Real costs and benefits. The business community has often wondered about cost and benefits to their companies of sustainability implementation. Epstein and Yuthas (2012) prepared a cost-benefit analysis for sustainability including the following steps (a) definition of desired sustainability outcomes, and (b) identification of stakeholders. Business leaders could also include (a) anticipation of stakeholders' reactions and (b) evaluation of costs and benefits of stakeholders' feedbacks (Epstein & Yuthas, 2012). Environmental and social implications of sustainability affect the economic bottom line because they can influence the decisions and activities of economic stakeholders (Epstein & Yuthas, 2012).

Waste avoidance for sustainability. Kraemer, Silveira, and Rossi (2012) conducted a study where they explored the motivations behind individuals' decrease in consumption. They sought to understand people's motivations, influences, and practices toward the concept of sustainability. Findings revealed an individual propensity toward homegrown products, a decline in quantities of products used, and substitution of certain items in favor of sustainable/green ones. Outcomes also indicated that staple foods, specifically those from chain stores, suffered the most consumption resistance. Government's enticements toward consumption increase can backfire and reinforce people's embrace of the concept of a sustainable society (Kraemer et al., 2012).

Eco-innovations might improve waste prevention. Wilts, Dehoust, Jepsen, and Knappe (2013) examined various studies conducted in Germany on the topic of waste prevention at the local, regional, and federal levels. Conclusions indicated numerous efforts toward waste prevention nationally, but a deficiency in the exchange of

experiences among the various stakeholders, including producers, retailers, consumers, and the local, state, and federal administrative bodies. Participation and exchange of information on the success or unsuccess of waste prevention programs could help resource conservation and help evaluate effective and efficient measures (Wilts et al., 2013).

Sustainability appeals to investors and stakeholders. Woo, Chung, Chun, and Seo (2014), conducted a survey of Korean small and medium-sized enterprises (SMEs), to explore the relationship and effect of environmental innovation on labor productivity. Results of the study indicated that environmental innovation used as a business strategy produced positive outcomes that sustained the firms' sustainability efforts. Findings revealed that meeting the needs of stakeholders through implementing environmental innovation resulted in increased labor productivity and improved performance. Sustainability efforts in the form of green growth were appealing to both investors and stakeholders alike (Woo et al., 2014).

Sustainability helps to eliminate inefficiencies. One of the primary requirements for the execution of the triple bottom line concept is the elimination of waste. Companies could eliminate inefficiencies if they anchor their business on the principles of sustainable development, expanding their accounting system to include measurements of economic achievements, intertwined with ecological and social performance (Okafor, 2013).

Sustainability inspires continuous learning. If a company is negligent and is causing economic, environmental, and social ills, public trust is diminished, and

competitiveness disappears. Such a business is not sustainable. Porter and Kramer (2011) argued that the principles of sustainability empower companies to create economic value in tandem with social value or *shared value*. Business leaders collaborate and communicate their sustainability efforts to all stakeholders in society, including non-profit agencies and government bodies. When business leaders center their attention on the making of products and services that are beneficial and valuable to business and society, they create shared value. In the performance of those business activities, continuous learning takes place, and more opportunities open up for sustainable companies to improve people's lives (Porter & Kramer, 2011).

Sustainability is a long-term process that requires time. Muller and Pflieger (2014) studied a German medium-sized enterprise to document sustainability practices. They argued that sustainability requires a succession of actionable business strategies and cannot be a one-time occurrence, suggesting that there are stages of development and maturity in sustainability execution. Sustainability requires a commitment to (a) reducing the use of energy, water, and resource materials, and (b) managing employees' work-life balance including direct participation in company profits. Sustainable companies would support social and cultural activities in the community while reaping long-term economic gains as a consequence of satisfied buyers and committed employees (Muller & Pflieger, 2014).

Sustainability awareness might increase profitability. In 2010, Australian researchers Barth, Thomas, and Day (2013) conducted a survey of 65 employers in diverse industry sectors to find out what graduate capabilities associated with

sustainability principles the employers most valued. Results revealed that 60% of respondents considered knowledge about sustainability highly important. While many of those employers considered sustainability to be a significant aspect of their activities, many still did not understand the term sustainability practitioner. The authors showed that a wide array of sustainability competencies and skills might confuse industry participants, indicating a need to find ways to consolidate the meaning of sustainability to facilitate teaching and learning. Business sustainability achievements will require time and constant dialog between academia and industry (Barth et al., 2013).

Sustainability might involve incremental innovation. Angelo, Jabbour, and Galina (2012) proposed a definition for environmental innovation based on arguments of past studies. The reviewed literature evidenced obstacles for management to implement environmental innovation including failure in the communication process, insufficient training for green teams, including unfamiliarity with sustainability related issues. Other difficulties for environmental innovation were building teamwork, issues of unqualified workforce, long-term return on investment, insufficient capital for implementation, and inefficiencies in government regulations. Based on the review their final argument was that ecological innovations are managerial executions toward the environment, with inferences about companies' products and processes that are unique. Environmental innovation, they argued, could be merely incremental improvements or extreme, unprecedented positioning of the company toward reducing environmental footprints. Despite all these challenges, environmental innovation whether from sophisticated

breakthroughs or rather rudimentary activities in the performance of economic activities, could over time sustain the livelihood of a company (Angelo et al., 2012).

Environmental innovation might increase productivity. Porter (2011) restated the five forces encouraging business competition including the three generic strategies of low cost, differentiation, and focus. The three generic strategies are the drivers to guide and position an enterprise for profitability within an industry. They involved some compromises. Porter and Van der Linde (1995) argued that the relationship between environmental goals and industrial competitiveness was a tradeoff between social benefits and private costs. It became the environment-competitiveness argument. There seemed to be no way to fulfill society's demand for environmental protection without placing an economic burden on the industry. Such an argument was later proven incorrect. Competitiveness at the industry level arises from higher productivity from lowering costs or from offering products with a superior value that would justify a premium price (Porter & Van der Linde, 1995).

Sustainability might require suppliers' inputs. Lee and Kim (2011) explored suppliers' roles in improving manufacturers' competencies in designing and developing green products. Results revealed a significant relationship between business compliance and green product development. Through technological integration synergy occurred between environmental partners, suppliers, and buyers. Finally, the strategic involvement of major suppliers in product development (to satisfy demanding customers) resulted in profitable undertakings (Lee & Kim, 2011).

Sustainability achievement must be measurable. For Webb, Hodge, and Thompson (2012), sustainability is market driven, and, as such, can provide both threats and opportunities for both businesses and certified public accountants (CPAs). Neglecting to implement strategic sustainable practices could adversely impact a business and undermine the increase in revenue. The CPA's role in sustainability is fundamental to support business leaders' efforts toward sustainability practices, especially in SMEs. Webb et al. (2012) argued that as the practice of sustainability expands, the clientele for professional accounting firms is likely to expand equally. As such, these accounting firms must acquire comprehensive knowledge related to sustainability applied in business and how to measure and report it. Nevertheless, one major challenge for both business leaders and CPAs is the inexistence of conventional, dependable rules or processes related to sustainability reporting (Webb et al., 2012).

The Triple Bottom Line Challenge

In the absence of quantifiable processes of sustainability approaches, in 1994, John Elkington created a framework to measure sustainability in business called triple bottom line (TBL) accounting. Elkington (1994) found that, by implementing the TBL accounting method, business leaders were able to measure the three dimensions of sustainability, including the economic, social, and environmental aspects of their business performance. In 1997, Elkington expanded the TBL framework to introduce the seven sustainability drivers. The TBL sustainability drivers included (a) the concept of time, (b) good corporate governance, (c) values, (d) transparency, (e) life-cycle technologies, and (f) partnership with community stakeholders (Elkington, 1997).

Companies recognizing and promoting these elements can reap sustainability compensations since these drivers have proven to be appealing to increasingly demanding customers. Stoddard, Pollard, and Evans (2012) argued that modern businesses have followed the traditional ways of the neoclassic economic philosophy, which deeply disregarded the basic ethical and cultural values of the economy. Business leaders employing the triple bottom line accounting approach can merge their business goals with those of sustainable development (Stoddard, Pollard, & Evans, 2012). Companies implementing the TBL accounting standard can strategically intertwine socially and environmentally acceptable principles into their business practices to achieve high economic performance (Mujtaba & Cavico, 2013). The sustainability approach through the TBL system has ignited the development of sustainability management theories.

Sustainability thinking might need complexity theory. Porter and Derry (2012) recognized that business leaders are gradually considering the importance of sustainability in all business organizations. They acknowledged that scholars and practitioners now recognize that traditional approaches to systemic problems have limitations, and complexity theory increasingly occupies the interest of researchers. They addressed the existing gap in the literature through the use of a qualitative approach to complex systems, describing the fundamental potential of the theory. The result was a framework integrating the principles and limitations of sustainability. They concluded advocating the use of complexity theory to stimulate research on the topic of sustainability (Porter & Derry, 2012).

TBL needs to be inclusive. In Brazil, Arruda and Granado (2013) studied the sustainability implementation of a program by the Pão de Açúcar supermarket chain called *Faces of Brazil* to analyze business inclusion strategies for small suppliers. Findings indicated that the program established rules and requirements for the small suppliers to participate, including adapting their products to the requirements of the supermarket chain. Once approved for inclusion in the program, small producers were then able to participate in the supermarket's business processes as part of the supply chain. The inclusion of small producers in the *Faces of Brazil* program gave small producers the assurance of steady income. Their quality of life improved, their self-esteem increased, they felt socially included and able to participate in the formal market sector (Arruda & Granado, 2013).

Sustainability Entrepreneurship

Entrepreneurship is fundamental for the economy of any nation due to its intrinsic capability of generating jobs and income through new ventures, consequently adding to the improvement of life in society (GEM, 2013). Nevertheless, in the traditional ways of measuring business effectiveness, business leaders often factored in merely the direct monetary costs and benefits associated with doing business (Epstein & Yuthas, 2012).

Scholars in entrepreneurship theory see entrepreneurship through different lenses. Schumpeter (1934) defined entrepreneurs as innovators: individuals responsible for introducing change into an organized economic system. For Schumpeter, innovation was a form of creative destruction. Sustainability implementation efforts have brought much creative destruction to make room for innovative products and services. Such new

products and services will nullify the need for old-fashioned, harmful products that have affected both society and the environment. However, sustainable entrepreneurship begins at the individual level, emerging from personal values anchored by a conscientious decision to pursue sustainability (Spence, Gherib, & Biwole, 2011).

Sustainability pursuit starts at the individual level. Using theory, Gawel (2012) explored the relationship between entrepreneurs' individual orientation and the implementation of the sustainability. The research question addressed was whether a financial development company with an entrepreneurial orientation could fulfill the promises of sustainable development. The entrepreneurial traits of a person most favorable for sustainability implementation were (a) being innovative, (b) proactive, (c) risk-taker, (d) autonomous, and (e) competitively aggressive. Entrepreneurship and Sustainability could be strategies employed at the company level. Results pointed to a promising relationship between entrepreneurship and sustainability through the implementation of pro-social and pro-ecological concepts inbuilt into a company's strategy with measurable benefits to the bottom line. In this quest for sustainability, individual entrepreneurs will be at the forefront as individuals who welcome the risk of failure in the complex endeavor of enterprising (Gawel, 2012).

Sustainability entrepreneurship influenced by perceptions. The number of business practitioners motivated to implement sustainability principles is still small. Koe and Majid (2014) explored entrepreneurs' inclination toward applying the concept of sustainability and uncovered that personal perceptions might influence intention toward sustainability entrepreneurship. Factors indirectly influencing that intention might come

from personal, situational, and cultural influences and might promote the practice of sustainable entrepreneurship. In this case, the prerequisite was to understand the meaning of sustainability entrepreneurship. The researchers concluded by presenting a conceptual and practical model for sustainable entrepreneurship, including situational, cultural, and personal factors that lead to perceptions (Koe & Majid, 2014).

Entrepreneurs might pursue sustainability out of necessity. Because of its implications for socioeconomic development, the concept of sustainable entrepreneurship has gained prominence in developing nations, especially in climate-threatened communities. In such regions, entrepreneurs, and specifically community entrepreneurs, play a significant role in creating new processes and structures to solve regional societal problems (Handy, Cnaan, Bhat, & Meijs, 2011).

Corporate social responsibility in small business firms. Nagypál (2014) surveyed small and medium-sized Hungarian firms to learn of their efforts toward corporate social responsibility (CSR). Findings indicated that with financial support, SMEs can develop CSR practices through improving customers' awareness, and enlisting large firms to support supply chain's CSR actions. Results also showed that employees have a critical role to play, especially on issues related to workplace safety, and environmental awareness and performance. Large clients of SMEs are also beneficial in helping to formulate those practices. They concluded that SMEs might want to familiarize with ISO 26000, a standard for measuring Corporate Social Responsibility. Cooperation along the supply chain and the establishment of CSR tools could improve

knowledge and performance in SMEs and contribute to their competitiveness (Nagypál, 2014).

Sustainability entrepreneurship and challenges in manufacturing. To explore sustainable entrepreneurship in the apparel industry, Plieth, Bullinger, and Hansen (2012) utilized a case study method to investigate the commitment to the sustainability of a small German clothing manufacturer. Although the commitment to sustainability-oriented innovation is exceptionally rare, this case study revealed a commitment to the company in consuming eco-friendly materials produced regionally and employing local, highly motivated workers in full- and part-time positions. The major challenges were limited tacit knowledge pool, scarce repairable machinery, and suppliers' compliance. However, the enthusiastic and knowledgeable entrepreneurs were able to incorporate innovative ideas into their business to build a sustainable enterprise (Plieth et al., 2012).

Sustainability entrepreneurship depends on market acceptance. Medeiros, Ribeiro, and Cruz (2012) used a qualitative approach to explore managers' perceptions of factors triggering the market acceptance of sustainable/green products. Study results indicated market knowledge, workers' collaboration, intracompany shared knowledge, and procreative culture as decisive factors. Findings also revealed new fundamentals, which included technological expertise, reasonable price, quality, brand, and return on investment. The evidence indicated that technological proficiency might classify as one scale of measurement involving specialized people, research budget, facilities, and equipment budget. Authors recommended further studies to measure the impact of those dynamics on the success of green products (Medeiros et al., 2012).

Sustainability innovation might require incentives. Schaltegger and Wagner (2011) proposed a framework to identify sustainability entrepreneurship regarding sustainability innovation. They focused on sustainable entrepreneurship that meets societal goals and facilitates changes in the market environment, correlating it to sustainability innovation. The authors suggested a qualitative measurement of sustainable entrepreneurship based on the degree of environmental and social commitment expressed in company's purposes and policies. In such a framework, measurements of social and environmental impact are about market share and sales growth. The study has implications for theorists and practitioners, suggesting that previous archetypes of sustainable entrepreneurship need improvement, and future investigations ought to focus on the incentives for innovation (Schaltegger & Wagner, 2011).

Sustainability education in the school curriculum. Sustainability management requires sustainability awareness. Palma, Alves, and Da Silva (2013) conducted an exploratory study to advance knowledge of how Brazilian educational institutions approached the subject of sustainability education within schools of technology and business management. Although educational organizations offering programs in business management demonstrated a preoccupation with sustainability issues, most of them had yet to establish policies integrating sustainability education programs in their curricula. Education for sustainability will provide students with the skills they need to fulfill the green jobs positions increasingly available in the labor markets (Palma et al., 2013). Although challenging, environmental education or education for sustainability requires

the development of tools that cut across disciplines, utilizing ethics as guidance (Kronlid & Öhman, 2013). These findings support the view that sustainability science education needs to become part of the Brazilian curriculum. For that purpose, education for sustainability ought to inform research (Gabatshwane & Bose, 2013).

Sustainability awareness: The need for a nationwide campaign. In Brazil, results of a survey by GEM (2012a) indicated that schools have been unable to prepare men and women for job positions requiring fundamental basic knowledge. Consequently, creating awareness of sustainability would require a continuous sustainability education campaign. Aklin, Bayer, Harish, and Urpelainen (2013) studied the public opinion of socioeconomic relationship dynamics and found that Brazilians, in general, are favorable toward protecting the environment but need more education. Carvalho, Rosa, Bufoni, and Oliveira (2013) investigated ways that business and government working together could transform household solid waste in the city of Rio de Janeiro into sources of revenue. They examined reports, financial statements, and documents, as well as the pertinent legislation and analyzed results of other studies. In their economic analysis, they highlighted the importance, not only of generating revenue from waste, but also of reducing its quantity. They concluded that the public administrators lacked awareness of the costs of implementing such a project. Carvalho et al. (2013) suggested an education campaign to educate the population and the dissemination of the results of successful sustainability projects to engage people's participation and collaboration.

Brazilian Women Entrepreneurs

Women entrepreneurship plays a substantial role in the economic development of countries. In the past decade, Brazil has witnessed an extraordinary economic phenomenon as the rate of new ventures started by women has gradually increased. In 2010, 45% of the entrepreneurs in the category of individual microentrepreneurs were women, increasing to 46% in 2012 (SEBRAE, 2012). Women represent half of the world's population and execute most of the work in the informal sector (Gokus, Ozdemiray, & Goksel, 2013). As women position themselves as substantial players in national economic development, their participation as entrepreneurs is particularly relevant (De Vita, Mari, & Poggesi, 2014). Through their entrepreneurial activities, women have created extraordinary value in societies across the globe and have made significant contributions to the development of their countries' economies (GEM, 2012b). Researchers have shown that women go into free enterprising hoping to provide for them, and for their families, and to achieve financial independence through their entrepreneurial activities (GEM, 2012b). Women possess distinct interpersonal skills, an extreme sense of social perception, and a sense of commitment, which are inherent characteristics contributing to the success of women's enterprises (Nassif, Andreassi, Tonelli, & Fleury, 2012). The cognitive and affective traits of women cannot be dissociated from their businesses (Nassif et al., 2012) and are thus significant attributes to consider in a study on business sustainability involving female entrepreneurs. In all nations, women retain their valuable tacit knowledge of local ecology, society, and politics (Figueiredo & Perkins,

2011). A nonviolent, unbiased, and sustainable economy can only take place through aggregating women's equal participation in economic activities (Ki-moon, 2011).

Opportunity or Necessity. GEM (2012b) claimed that the primary motivation for individuals to start a business is either necessity or opportunity. Necessity-driven entrepreneurs are individuals driven into starting a business of low technological complexity, which requires few resources when all other alternatives for employment are either lacking or inadequate (GEM, 2012b). Conversely, opportunity-driven entrepreneurs are those pulled into entrepreneurship because of a perceived opportunity. In 2012, over 70% of women entrepreneurs worldwide were opportunity-driven, compared to 30% of women entrepreneurs who were necessity-driven (GEM, 2012b). The number of women working in the formal economy has increased. However, the percentage of women working as necessity entrepreneurs in the informal sector is still high (Ramani, Thutupalli, Medovarszki, Chattopadhyay, & Ravichandran, 2013). In this case, formal education is a factor to consider. Women who lack formal education often initiate their businesses due to necessity. Those with college degrees, technical degrees, or the equivalent are more likely to have established their companies due to a perceived opportunity (SEBRAE, 2012).

Gender does matter. Carrieri, Diniz, Souza, and Menezes (2013) employed a qualitative, phenomenological study using semistructured interviews to explore their views on the social representation of femininity and masculinity. They interviewed well educated Brazilian women aged 31-60 who held positions in both the public and private sectors as entrepreneurs or as managers in manufacturing plants and the service sector.

They utilized discourse analysis for analyzing data. Conclusions indicated that in linking gender to women's qualifications in executive positions revealed positive and negative elements. Those elements included the portrayals of an executive, competency, and incompetency of women, problems related to feminine sensitivity, seductive control, workplace blunders, biases, and violence affecting women, besides motherhood. Carrieri et al. (2013) concluded that, in the corporate world, organizations are both consumers and producers of masculinity and femininity.

Despite women's gradual rise to corporate executive positions through their merit, they still face issues of discrimination and harassment in the workplace (Sampaio, Fagundes, Souza, Fonseca, & Lara, 2013). These women executives have tolerated their organizations' domineering systems and have remained in their jobs because of necessity. Most women expressed anticipation for the day their male counterparts will treat them as equals, with the dignity and respect they have earned (Sampaio et al., 2013).

Transition

Through this study, I examined the lived experiences of 20 Brazilian women entrepreneurs focusing on sustainability for their business. Data collection included Internet searches for information on participants' companies, along with an examination of their websites. Subsequently, participants were contacted via telephone and e-mail, and they responded to an open-ended questionnaire. After analysis, they provided feedback for final clarifications and agreed to the study implications.

In Section 1, I presented the purpose of the study and began the section with an overview and background of the problem and a statement of purpose. Subsequently, I

described the nature of the study, the research question, the conceptual framework, the importance of the study of women, and the implications for social change. Finally, I presented a literature review on topics related to sustainable development, sustainability, Brazilian women entrepreneurs, and sustainable development in Brazil.

In Section 2, I present a complete overview of the purpose statement, the role of the researcher, methods for accessing participants, and a description and justification of the research process and design. I describe the population and sample, the criteria for sample selection, and the data collection procedures. I close Section 2 by presenting the techniques of analysis used and the reliability and validity strategies applied. The findings of the study, as well as a discussion of their implications, are the topic of Section 3.

Section 2: The Project

Section 2 begins with a reiteration of the purpose of the study and follows with a discussion of my role, as the researcher, in the data collection process. I provide an account of the procedures used for accessing participants and a description of the population and sampling method. It includes an introduction to the research methodology and design, as well as a systematic description of ethical procedures. I also provide a description of data collection techniques, data organization techniques and analysis, and measures taken to secure reliability and validity of results. The section is concluded with a summary.

Purpose Statement

The purpose of this qualitative phenomenological research project was to acquire knowledge of the strategic approaches women entrepreneurs in Brazil need to develop sustainable business enterprises. The research question guiding the study was: What strategies do women entrepreneurs in Brazil need to create and grow sustainable business ventures? To answer that question, I prepared a phenomenological research questionnaire to explore the perceptions and lived experiences of a purposively selected sample of 20 Brazilian women entrepreneurs in sustainable small businesses.

Due to high rates of business failure and the increasing percentage of entrepreneurship activities that women conduct, it was necessary to explore those strategies from the standpoint of the women participants. In 2012, women entrepreneurs operated 52% of the individual micro enterprises in the manufacturing sector and 50% of those in the service sector (SEBRAE, 2012). Such a high percentage of women-owned

companies justified the need for the study. With the help of SEBRAE, I located those participants in different regions of the country, including large metropolitan centers, small cities, towns, and farmlands across Brazil.

Outcomes of the study add empirical qualitative data to the literature on small business entrepreneurship. Findings supplemented new knowledge about women entrepreneurs' implementation of innovative business models for sustainability, contributing to scholarship and improved practices. There are contributions for positive social change for the small business community and in particular for women entrepreneurs in developing nations. Improved sustainability practices could help small business entrepreneurs increase revenue and extend the life of their companies. Still, this study was an exploratory endeavor suggesting the need for further in-depth investigation of the topic.

Role of the Researcher

According to the Belmont Report (1974) researchers must abide by ethical principles during the conduct of research involving humans. The Institutional Review Board (IRB) is the institution that grants approval for the conduct of research. Part of the ethics procedure is to receive IRB approval prior to collecting any data.

In qualitative studies, the researcher serves as a key instrument in the data collection process (Thomas & Magilvy, 2011). Referring to the usefulness of qualitative research outside of academia, Sallee and Flood (2012) argued that researchers can model theory and practice in significant ways. Prior to conducting this academic research project, I had no personal relationships or connections with participants other than being

women citizens of the same country, with similar goals of building sustainable business ventures. The topic of sustainability entrepreneurship has become my passion, and I intend to become a sustainability entrepreneurship researcher.

About 5 years ago, the company I work for signed an agreement with a biosciences group that holds technology patents for renewable energy production. The company sought capital for renewable energy projects implementation from a global investment firm that showed great interest in our vision, project objectives and potential gains through return on investment. Subsequently, the global financial crisis of 2007 hit the world markets and caused funds for business investment to disappear. As a result, the group never acquired the funds for the projects we had planned. It was a huge disappointment for the group and a terrible setback for the startup.

The economically depressed community and business environment that followed the international financial crisis angered many and prompted our company's involvement with the local community. Our micro enterprise's social sustainability performance resulted in the implementation of small beautification projects involving stakeholders in the community, and free entrepreneurship classes to area teenagers. As a former public school teacher, youth education was one of my concerns and encouraging entrepreneurship initiatives in the community seemed to be a good company strategy for social sustainability. Furthermore, company's involvement with stakeholders in the community could help promote the business regionally. However, almost immediately, the social issues in the community became overwhelming, and there was little time left to dedicate to the business. There had to be a better way of making a difference. The

complexity of systems affecting the lives of people in the community influenced my decision to enroll in a doctoral program. My idea was to acquire a better understanding of the world around me, to learn and develop business opportunities to create sustainable jobs.

The academic research project that followed has provided guidance concerning the processes needed to keep a business economically sustainable, socially responsible, and environmentally accountable. As a sustainability practitioner, my goal is to build an effective and efficient international consulting firm to facilitate the export of technologies to advance sustainable development in developing nations. It is a complex undertaking that involves technology transfer from one country to another. The process requires considerable time for fruitful results. The company is focused and learning to implement sustainable practices.

My lived experiences with building this company have provided insights into this academic research project. Leedy and Ormrod (2013) argued that a researcher's past and present experiences might deepen the understanding of participants' views. Those experiences can also facilitate for audiences to appreciate the topic and the researcher's version of the phenomenon (Leedy & Ormrod, 2013; Chan, Fung, & Chien, 2013).

Mostakas (1994) postulated that interview data collection in phenomenological studies requires a state of epoch on the part of the researcher. Epoch is the suppression of preconceived ideas and suppositions about the reality under investigation (Moustakas, 1994). Epoch is a critical component of phenomenological studies that requires the researcher to focus exclusively on the lived experiences of participants (Moustakas,

1994). Making an allowance for epoch and bracketing, I prepared an interview protocol (Appendix H) to serve as reference during the interview process. While it is possible that some of these ideas influenced results of the study, I made every effort to remain truthful and objective. The long absence from participants' country and consequent remoteness from their business settings might have helped to bracket past experiences in their environment.

Participants

The decision about the selection of participants came from observing the high rates of new business ventures by female entrepreneurs as an extraordinary phenomenon taking place in Brazil (SEBRAE, 2013). The eligibility criterion for selecting participants was sustainability implementation by those female entrepreneurs. I selected a purposeful sample of 20 participants from a list of female entrepreneurs provided by SEBRAE. I invited them to participate in the study.

Women entrepreneurs who responded affirmatively accepted to sign a letter of informed consent (see Appendix E). The informed consent letter clarified the purpose of the study and explained that they were free to withdraw from the study anytime they wanted without consequences. Mason (2010) argued that there are strategies for determining the sample size. The purposeful sample size of 20 participants was justified and anticipated in qualitative phenomenological studies because a single manifestation of the data can be valuable in understanding the evolution of a topic (Mason, 2010).

The objectives of the project were the determinants of the research design and the sample size (Charmaz, 2006). A purposively selected sample of 20 female entrepreneurs

provided awareness into the lived experiences of members of that population group (Ritchie et al., 2013). Other female entrepreneurs would fall into the same category and for that reason the sample was a purposefully selected sample (Ritchie et al., 2013).

The sample size of 20 participants was in alignment with the research question addressed: What strategies do female entrepreneurs in Brazil need to create sustainable business ventures? Participants selected were representatives of all regions of the country including South, Southeast, Central-West, North, and the Northeast region, each region comprising diverse demographics. Their businesses differed in terms of industry type, business structure, and years in operation. They performed activities within different sectors and subsectors of the economy, including agriculture, manufacturing, commerce, and service.

Upon receiving Walden University Institution Review Board (IRB) approval, I communicated with representatives of various SEBRAE agencies and received contact information for prospective participants. I prepared an invitation letter stating the purpose of the study (see Appendix C) and sent to each prospective participant. Those entrepreneurs who replied affirmatively received an informed consent form, which they signed and returned prior to being interviewed (see Appendix D). One of the measures taken to protect participants' rights was to let them know they were free to withdraw from the study at any time. Also, there was a commitment not to reveal any confidential information about their companies or their personal lives that was not yet public domain in websites or online news.

Research Method and Design

Research Method

Using a qualitative research methodology, I sought to increase understanding of the strategies female entrepreneurs need to build a sustainable business in Brazil. Unlike quantitative methods, qualitative research is an exploratory process. Quantitative methods test theories according to a positivist, deterministic philosophical assumption in which the researcher examines the relationships among variables to attain acceptance or rejection of a hypothesis (Babbie, 2012). Qualitative inquiry is appropriate for exploratory studies when the problem is too complex for a survey (Bryman & Bell, 2011). This study is an exploratory endeavor spanning into other fields outside the business world.

Qualitative research is interpretative and requires continuous exchanges between researcher and participants (Thomas & Magilvy, 2011). Those exchanges facilitate the understanding of the meanings participants attribute to their experiences within a particular environment (Lyons et al., 2013). In a qualitative research study, the researcher makes an inquiry employing different methods, identifies the factors involved in a personal situation, and discloses the results to the world (Denzin & Lincoln, 2011). Qualitative research focuses on the environmental context of the phenomenon, accommodates flexibility in its methodology, and underscores each problematic situation to answer key questions (Sallee & Flood, 2012). It provides mechanisms that both practitioners and policy makers may use to increase the effectiveness of business and policy implementation (Sallee & Flood, 2012).

Research Design

The research design that I used was a qualitative phenomenological approach for studying the structures of experiences, or consciousness of research participants (Moustakas, 1994). This strategy of inquiry enabled a focus on the lived experiences of participants, which later became the basis for an interpretative, descriptive, structural study depicting the essences of those experiences (Moustakas, 1994). A phenomenological approach to inquiry entails the researcher's active involvement in the research process (Roberts, 2013). That dynamic involvement validates the engagement with participants' realities to capture the knowledge of their environments, value systems, principles, aspirations, and attitudes toward life and business (Roberts, 2013).

Based on that methodology, I explored the lived experiences of 20 Brazilian women entrepreneurs using a semistructured interview with each of them utilizing open-ended questions. Participants' responses to the open-ended interview questions facilitated the primary data collection since this type of questionnaire enables participants to speak freely about their daily experiences. The goal was to obtain rich data about what participants experienced while attempting to implement sustainability principles in their small business. Holloway and Todres (2004) maintained that only those individuals experiencing phenomena are qualified to express those phenomena to others outside of their environment.

Population and Sampling

Population

The target population group was women entrepreneurs operating small business ventures in Brazil. Within the targeted population, I selected a purposive sample of 20 participants based on the criteria of sustainability implementation models in their business organizations, as per their understanding of the concept. The purposive, nonprobability sample was in alignment with the research question addressed: What strategies do women entrepreneurs in Brazil need to create sustainable business enterprises? The intention in selecting this particular group was to set apart an information-rich group that could best provide insight into the research question (Emmel, 2013).

The selected women entrepreneurs were representatives of all regions of the country including South, Southeast, Central-West, Northeast, and North. Participants were of different ages, ethnicity, education levels, economic statuses, and levels of business experience. Their business activities encompassed different sectors and subsectors of the economy, including agriculture, manufacturing, commerce, and service. Their enterprises diverged in terms of industry type, structure, years in operation, and success level. The purposeful sample size of 20 participants is justified and anticipated in qualitative phenomenological studies because a single manifestation of the data can be valuable in understanding the evolution of a topic (Mason, 2010). Other women entrepreneurs in sustainability would fall into the same category, for that reason the sample was purposefully selected (Ritchie et al., 2013).

Sampling

Following IRB approval, I selected a purposive sample of 20 women entrepreneurs implementing sustainability in their small companies in Brazil, and invited them to participate in the study. A purposive sample holds four components of research including (a) location of activities, (b) participants, (c) actions to be observed, and (d) course of events shaped by participants' engagement (Miles & Huberman, 2013). The location where events took place was Brazil, participants were women entrepreneurs, actions were sustainability implementation, and the probable survivability of participants' business.

The purposeful sample size of 20 participants was justified and anticipated in qualitative phenomenological studies because a single manifestation of the data can be valuable in understanding the evolution of a topic (Mason, 2010). Purposive sampling helps researchers understand the lived experiences of members of a population group that would fall into the same category (Ritchie et al., 2013). The goal of purposive sampling is to select information-rich groups to acquire insight into the research question that would satisfy the research audience (Emmel, 2013; Ritchie, Lewis, Nicholls, & Ormston, 2013).

There are guidelines for determining sample size. Purposive sampling is dependent on the concept of saturation when no new facts or themes occur in the data (Guest, Bunce, & Johnson, 2006). During the interviews, data saturation occurred at P18 when I observed that the information offered was the same and sufficient to represent that target group.

Within the concept of data saturation, researchers occasionally use smaller sizes for purposive sampling. Stattman and Mol (2014) used a sample size of 13 participants, presidents, and managers of biodiesel cooperatives in Brazil. They determined the sample size of 13 as sufficient to evaluate the extent to which eight cooperatives incorporated family farmers into the biodiesel supply chain and its impact on the social sustainability of the biodiesel industry.

Ethical Research

Research involves issues of ethics from the beginning to publishing. Part of the ethics procedure includes Institutional Review Board (IRB) approval prior to collecting data. Isreal and Hay (2006) argued that investigators must care for and be respectful of their research contributors in a way that mutual trust, a requirement for the integrity of research, will take place. Campbell and Scott (2011) argued that the manner by which researchers approach contributors is critical and must be at the forefront of all research decisions and considerations. Furthermore, researchers must refrain from misconduct and offensive behavior that might jeopardize their organizations principles, and must be able to manage issues that might result from the conduct of research (Isreal & Hay (2006).

My authorization to conduct this research study was provided by the Walden University Review Board (IRB) under the number 07-06-12-0072709. The procedure following the Institutional Review Board (IRB) research approval was the selection of participants. I selected prospective participants' from a list provided by SEBRAE, and sent a letter in the Portuguese language (see Appendix D) inviting them to participate in

the study (see Appendix D). Those who responded affirmatively were asked to sign a letter of informed consent (see Appendix E) acknowledging that they had understood the purpose of the study. The informed consent letter clarified the purpose of the study and explained that they were free to withdraw anytime they wanted without consequences.

Researchers must refrain from offering payments to research participants (Largent, Grady, Miller, & Wertheimer, 2012). Holding back from paying researcher participants is a cautionary measure considering that money may encourage prospective participants, and compromise the volunteer nature of consent (Largent et al., 2012). There was no financial compensation for participants to take part in this project. Instead, they understood and accepted that upon study conclusion they would receive a small gift as a token of appreciation for their participation. To protect and maintain participants' data safe, an external storage device will hold participants' information for 5 years and then delete all data. To protect participants' privacy, I attributed numbers to their names as P1, P2, P3, and so on, and referred to them as such during the research process.

Data Collection Instruments

Qualitative research requires the investigator to be the primary instrument for data collection (Leedy & Ormrod, 2013; Thomas & Magilvy, 2011). Researchers can also create a data collection instrument or reuse an instrument (Leedy & Ormrod, 2013). The data collection method was through the use of phenomenological in-depth interviews using ten open-ended questions presented in Section 1 (see Appendix A). The questionnaire was developed on the basis of the research question addressed: What strategies do women entrepreneurs in Brazil need to build a sustainable business

organization? During the interview process, I followed a protocol (see Appendix G). The interview protocol is part of the Table of Contents shown on the last page of this document. Jacob and Furgerson (2012) argued that an interview protocol goes beyond the interview questions to include the topic and the research literature.

Interviews data collection in phenomenological studies requires a state of epoch on the part of the researcher (Moustakas, 1994). Epoch is freedom from assuming knowledge of things prior to internal reflection and detection of meaning (Moustakas, 1994). For Ritchie et al. (2013) the validity of a study must be safeguarded throughout the research process. Transcript review was a way to determine the reliability and validity of data collected (Leedy & Ormrod, 2013). Secondary data from multiple sources were also instrumental in data collection, and provided an opportunity for the transcript review. Reliability of the data collection transpires when the data gathering process is steady, unchanging and does not contradict itself (Leedy & Ormrod, 2013). If the researcher's goal is to capture shared perceptions and lived experiences of individuals in a group with similarities, then 12 interviews are sufficient (Guest et al., (2006). However, during the interview process I achieved data saturation at P18 of the 20 participants – a moment that the information they provided was no longer unique.

Data Collection Technique

In qualitative studies, the researcher becomes the major instrument in data collection (Thomas & Magilvy, 2011). I gathered primary data from participants through audio-recorded telephone interviews using semistructured, open-ended questions and assembled secondary data from multiple sources including personal observation.

Secondary data sources included online newspapers and videos, government, non-government, and university websites. For Patton (2002), the most common sources of qualitative data include interviews, observations, and documents.

In qualitative studies, the technique of interviewing participants is appropriate because interview questions facilitate the study of human affairs and behaviors (Aken, 2010). Jacob and Furgerson (2012) argued that also to the interview questions, researchers should use an interview protocol containing procedural guidelines for novice qualitative researchers to follow. For conducting the interviews, I prepared an interview protocol (Appendix H) to serve as reference during the interview process. The physical locations that I considered for the interview process were the business settings from which participants managed their business activities, events, processes, and procedures on a daily basis (Miles & Huberman, 2013).

Interviews data collection in phenomenological studies requires a state of epoch on the part of the researcher (Moustakas, 1994). Epoch is the suppression of preconceived ideas and suppositions about the reality under investigation, or freedom from assuming knowledge of things prior to internal reflection and detection of meaning (Moustakas, 1994). I conducted long-distance phone interviews from the United States with participants living and conducting business in Brazil. During the interview process, I practiced bracketing (the suspension of my personal ideas and feelings about the phenomenon) to capture what participants experienced living the phenomenon as female entrepreneurs (Moustakas, 1994).

The process of bracketing requires that the researcher sets aside own experiences to understand those of participants (Ahern, 1999). The interview process comprised ten semi-structured open-ended questions with 20 participants. Each interview lasted an average of 60 minutes including the extra time for follow-ups questions. During such time, I refrained from assuming to possess cognizance of the situation under investigation in the context of Brazil, despite having retrieved much information on the topic to prepare the proposal.

Chan, Fung and Chien (2013) suggested that the concept of bracketing be in the mind of the researcher from the beginning of the process, even before any literature review is done. Tufford and Newman (2010) maintained that quite often researchers use the terms *epoche*, bracketing, and phenomenological reduction interchangeably. For Moustakas (1994), the phenomenological reduction is the researcher's unbiased description of the external and internal realities.

Considering phenomenological reduction, I concluded that prior to data analysis it was necessary an in-person observation of Brazil's environment for business development through sustainability implementation. Thus, I traveled to that country to evaluate the environment and kept a reflexive journal with observations and reflections prior to analyzing data. Online data collection technique has the advantages of saving time by providing fast access to data and participants but has the disadvantage of not epitomizing all aspects of the reality of participants' settings as face-to-face interviews.

To secure the reliability of this study was critical for me as a woman entrepreneur learning how to develop a sustainable business enterprise. Achieving epoch and

bracketing were the only course of action to arrive at conclusions that can guide strategy and management practices. Being in the United States and interviewing participants in Brazil facilitated for achieving epoch and bracketing – I could not assume to know Brazil's environment for building sustainable companies since I have been absent from that country long. Hamill & Sinclair (2010) postulated that the process of bracketing involves empathy. I can empathize with participants in many of their challenges to building an enterprise. I also understand that relevant for this project were the facts and lived experiences of the participants as they described them, and interpreted for findings sustainable solutions.

Data Organization Technique

Organizing data is an important step prior to analysis. Miles and Huberman (1994) suggested data reduction (extracting the essence), and data presentation (bringing together for meaning). In this study, data organization involved checking for accuracy of information by keeping specific notes and often revising those notes (Leedy & Ormrod, 2013). Subsequent to interviewing participants was the process of data transcription and translation. Once the translation of all primary and secondary data sources was complete, I printed all related documents and spread the pages on a table to read and gain a general sense of the data. To foster the reliability of findings, data transcription (and translation) was as accurate as possible (Thomas & Magilvy, 2011).

Upon reading and pondering about the data I crosschecked content with the information participants provided in the interviews. This methodology of crosschecking collected interview data against public domain data is a means to reduce mistakes in the

research results (Gibbs, 2007). After I completed the research process all signed consent forms (see Appendix E) and interview transcripts went to an archive. I have retained and will keep all data collected from participants in an external storage device for five years, and then delete them all.

Data Analysis Technique

In a qualitative phenomenological inquiry, the researcher is focused on interpreting a phenomenon and controls the interpretation of the data (Bryman & Bell, 2011). My objective was to comprehend the lived experiences of women entrepreneurs active participants in a phenomenon and provide an answer to the research question “What strategies do women entrepreneurs in Brazil need to build sustainable business organizations?”

The purpose of qualitative research is to provide a description of the universal essence of a phenomenon, capturing the core of it (van Manen, 1990). The analysis and interpretation of data was a long process, demanding continual reflection and analytic thought about the relationships among the various data gathered. Additionally, I had to translate all data from Portuguese to English after transcribing interviews responses. The translation step consumed considerable time to secure the accuracy in meaning.

With translation complete, I performed a review of the literature on qualitative data analysis and gained sufficient information for doing a hand-coded analysis. The procedure for the data analysis process was the identification of categories, themes, patterns, and emerging leading topics, or contradictory interpretations (Leedy & Ormrod, 2013). Yin (2011) suggested thoroughness during the data analysis process by (a)

reviewing data systematically, (b) performing an extended comprehensive analysis of all data, and (c) safeguarding against potential bias.

To analyze and make sense of data, I used Moustakas' (1994) modified seven steps, which Adrian van Kaam created to determine the research findings. Van Kaam's procedural steps consisted of (a) transcribing the interviews, (b) coding, (c) grouping themes, and (d) checking participants' consistency. It also entailed (a) describing experiences, (b) recognizing common patterns in data, and (c) synthesizing the meaning of experiences. Miles, Huberman, and Saldaña (2012) suggested the technique of (a) comparing, (b) contrasting, (c) reproducing, (d) cataloguing, and (e) classifying the situation under inquiry. In empirical phenomenological studies, researchers use analysis of significant statements for the production of meaning units and the development of a description of the essence of the lived phenomenon (Moustakas, 1994).

I conducted the analysis based on the conceptual framework of sustainable development, sustainability, business strategy, and business models. Sustainability thinking and implementation produces companies that are socially desirable, culturally acceptable, and economically sustainable (Hawken, Lovins, & Lovins, 2013). During the analysis I kept in mind the conceptual framework. Participants' expressive and significant statements pertaining or not to the literature turned into a comprehensive set of categories constructed with participants' collaboration (Thomas & Magilvy, 2011). I converted those patterns into groups of meanings and, ultimately, into themes. Phenomenological reduction facilitated in capturing the essence of the meanings participants articulated about their entrepreneurial experiences. This approach repeated

itself as a phenomenon communicating the horizontalization of the method (Moustakas, 1994).

Data saturation is a concept researchers use in qualitative studies to refer to the view that no new evidence or themes can come from the data (Guest, 2006; Saumore & Given, 2008). To ensure data saturation with a sample of 20 participants, I sent each of them a copy of the interview transcript to prevent misinterpretations and mistakes. Guest, Bunce, and Johnson (2006) debated that while data saturation might be useful at the conceptual level, it does not provide adequate or practical direction for researchers to conduct quality research. Results of this analytical process facilitated the extraction of six themes as factors fostering business creation and development, and six themes representing factors hindering the creation and sustainability of companies.

Reliability and Validity

Reliability

In the traditional view, researchers use reliability in quantitative studies based on the postulation of its replicability (Guba & Lincoln, 1994). Qualitative researchers, when replicating the study, place emphasis on dependability, which involves consideration of the continuous changes occurring in the environment where research transpires (Guba & Lincoln, 1994). In qualitative phenomenological studies, researchers accentuate the credibility of study outcomes with strong involvement of participants in the conclusions (Guba & Lincoln, 1994; Marshall & Rossman (2006). To foster the reliability of findings, data transcription (and translation) was as accurate as possible (Thomas & Magilvy, 2011). In qualitative research, methodological procedures should inspire other

researchers to conduct inquiries; in other words, transferability deals with the possibility that researchers can replicate findings in other environments (Marshall & Rossman, 1999). The transferability of study outcomes to other environments or settings is possible if the researcher considers all changes that are occurring in that environment at the time of replication (Guba & Lincoln, 1994).

Validity

Validity is about being truthful to the research process and ensuring that results reflect the phenomenon being examined (Guion, Diehl, & McDonald, 2011).

Crosschecking interview data with multiple online data sources was a means for ensuring validity. My goal was to find evidence to support findings within the context in which the phenomenon occurred (in this case, the contextual environment of Brazil). For that purpose, I examined multiple types of data besides participants' interview responses, including online videos and news, e-mail communications, and participants' websites to compare data and confirm the results. I used phenomenological reduction while describing the reality of participants' lived experiences as per their account of those experiences (Moustakas, 1994). The possibility of bias might exist because of (a) same gender, (b) same country, (c) similar sustainability entrepreneurship goals, and (d) equivalent financial independence goals. However, my past and present experiences could be useful to this research project (Locke, Spirduso, & Silverman, 2007).

In this research project of business phenomena, the unbiased interpretations of participants' lived realities could help in finding solutions to improve the environment for competition. Ritchie et al., (2013) postulated that the validity of a study must be

safeguarded throughout the research process, via constant scrutiny of research findings and respondents' validation for confirmation of meaning. As a business person and a consumer of research, to ensure the qualitative validity of the findings was critical. Implementing verification strategies was fundamental to this goal, as it was self-correcting during the conduct of the investigation.

Transition and Summary

I began Section 2 with a restatement of the purpose of the study, followed by a systematic description of the data collection process. I included ethical considerations, data collection instruments, procedures, and data analysis, followed by reliability and validity measures. The qualitative research methodology was the most appropriate to explore the subject because of its holistic features. In Section 3, I present the findings, with applications for practice, implications for social change, and recommendations for action and further studies.

Section 3: Application to Professional Practice and Implications for Change

Introduction

This section includes an overview of the study and its connection to the conceptual framework and the research question. The conceptual framework anchoring the study involved the concepts of sustainable development, business sustainability, business strategy, and business models. I present the findings and general characteristics of participants' businesses and sustainability achievements. This section also includes the presentation of findings, applications to professional practice, implications for social change, recommendations for action, recommendations for further study, and reflections. Findings revealed six evolving themes fostering the creation of sustainable ventures and six themes hindering business sustainability.

Overview of the Study

The entrepreneurial population of Brazil continues to drive economic development, initiating over a million new startups every year. Fifty-eight percent of the new ventures are unable to survive after the first 5 years of operation. Women entrepreneurship has played a significant role in the country's economy and has gradually increased in recent years. Through this study, I pursued new knowledge about the strategies Brazilian women entrepreneurs needed to overcome the challenges of building sustainable business organizations.

Presentation of the Findings

Through using a qualitative phenomenological research methodology, I explored the lived experiences of 20 Brazilian women entrepreneurs operating green or sustainable

business organizations, according to their understanding of the sustainability concept.

The research question addressed was: What strategies do women entrepreneurs in Brazil need to create sustainable business ventures? Participants who responded to the interview questions were of different age, ethnicity, marital status, economic background, entrepreneurship experience, and education level, residing in different regions of Brazil.

Aiming to protect participants' privacy, I refer to them here by number as P1, P2, P3, and so on. I presented the findings in two distinct groups. The first group contained the strategies participants needed to start and maintain their business; the second group represented the difficulties they encountered. The following are six themes that emerged as the essence of factors fostering business creation and sustainability:

1. Sustainability trends
2. Health concern solutions
3. Social distress solutions
4. Environmental concern solutions
5. Business cooperatives
6. Institutional support

Additionally, from data analysis six themes materialized as factors hindering the creation and sustainability of business:

1. Scarcity of skilled workers
2. Insufficient education
3. Shortage of suppliers
4. Poor financial management skills

5. Inadequate public policies and corrupt practices
6. Gender issues

Factors Fostering Business Sustainability

I anchored the study on the concepts of sustainable development, sustainability, business strategy, and business models. Sustainability applied in business originated with the concept of sustainable development. It became evident through this study that the strategic choices of business models that participants adopted incorporated the conceptual framework of sustainability.

Sustainability trends. Inferences from this study indicated participants' adoption of an unconventional set of business models in transforming inputs into outputs. While searching for economic solutions as entrepreneurs, participants considered the execution of unusual business models incorporating sustainability as per their understanding of the concept. In sustainability, business leaders can secure economic gain, interweaved with social and environmental considerations, including the preservation of nature and life-sustaining communities (Schaltegger & Wagner, 2011; Shepherd & Patzelt, 2011). Participants' business models included elements of environmental, health and social concerns as per participants' testimonies:

We produce rugs from industrial textile waste, preventing it from being tossed into the environment – that is our practice of sustainability. (P1)

Our company offers organic vegetables – greens, legumes, and seasonal products for regular customers and local big retailers. The idea came from my need to

consume healthier products but finding no local stores selling organic products.

(P2)

My customers were thrilled receiving items wrapped up in PET recycled packaging. I saw in it, a business opportunity and a way to prevent dumping plastic waste into landfills. We make an effort to waste nothing (P3)

Brazil's entrepreneurs have neither training nor experience in business management. For this reason, we provide management training to those requiring sustainability in the supply chain. (P4)

I was concerned about the amount of organic waste accumulating in the city and was motivated to minimize harm to the environment and create jobs by turning the waste into a lucrative business. (P5)

I was very sick, and when someone indicated that some seed products would make me better, I started using them, and later turned it into a business. Our company utilizes 100% natural and regional products extracted in a sustainable way. (P6)

I always liked crafts, and so I chose to transform cattle horns into biojewelry – a technique, which is part of our regional culture. We purchase the material we need from slaughterhouses by the kilo. (P7)

We formed a group of women to work as a cooperative of flower cultivation – to earn a living, boost rural women's self-esteem, and prevent residents from fleeing to large centers. (P10)

Table 1 displays participants' business structures, institutions of support, sectors of economic activities, and total years of operation.

Table 1

General Characteristics of Participants' Ventures

No.	Structure	Support	Activity sector	Years
P1	Cooperative	SEBRAE	Recycled textile weaving craftsmanship	13
P2	Limited liability	SEBRAE	Organic vegetables farming	5
P3	Individual	SEBRAE	Recycled home décor craftsmanship	7
P4	Individual	CIESP	Environmental management consulting	13
P5	Limited liability	FINEP, FAPEG SEBRAE, FUNAPE	Organic fertilizers manufacturing	8
P6	Individual	SEBRAE ADS-AM	Dietary food supplements manufacturing & exports	4
P7	Individual	Local Government SEBRAE	Biojewelry craftsmanship & exports	11
P8	Limited liability	No support	Organic clothing manufacturing & retail	4
P9	Limited liability	SEBRAE	Ecological bags manufacturing & retail	7
P10	Cooperative	SEBRAE Paraíba Fed. Univ.	Organic floriculture farming & exports	15
P11	Cooperative	SEBRAE	Recycled home décor craftsmanship	5
P12	Cooperative	SEBRAE	Herbs cultivation & processing	12
P13	Limited liability	SEBRAE	Ecological machinery manufacturing	11
P14	Cooperative	SEBRAE SENAI	Organic agriculture processing & exports	14
P15	Individual	SEBRAE	Organic clothing manufacturing	9
P16	Limited liability	No support	Recycled clothing manufacturing & retail	8
P17	Limited liability	SEBRAE, SETRAB SUFRAMA	Biojewelry craftsmanship & exports	20
P18	Limited liability	No support	Custom-made uniforms manufacturing	10
P19	Limited liability	SEBRAE	Women's apparel design & manufacturing	9
P20	Limited liability	SEBRAE	Green management consulting	8

Data analysis revealed the essence of factors that motivated participants to go into business, including personal health problems, societal issues, and ecological concerns. Through their business models, participants demonstrated how they provided value to customers connecting myriads of sustainability-focused activities within their supply chain. The essence of their business strategy was the fundamental strength of their organizations' relationship with the environmental context (Ronda-Pupo & Guerras-Martin, 2012), caring for people and the environment. The realities surrounding them determined the actions needed to pursue their businesses' goals based on consistent and conscientious use of resources (Ronda-Pupo & Guerras-Martin, 2012).

As those examples show, participants assessed regional resources available to them, including waste streams and managed to transform those resources into innovative products and services in a variety of economic sectors. Those economic sectors included artisanship, manufacturing, commerce, and services. Their choice of business structure ranged from sole proprietorships to microenterprises and cooperatives. Each sector of activity showcased a different business model. In artisanship, participants' business models involved the recycling and reuse of industrial textile waste and the harvest and reclaim of forest products.

For participants P3 and P7, their business models encompassed collecting and reprocessing polyethylene terephthalate (PET) discarded items, and assemblage and reclaiming of bovine horns for producing personal and decorative exportable items. In the manufacturing sector, outputs consisted of agricultural soil enhancers and substrates, dietary food supplements from natural grains, ecological bags, machinery for ecological

brick production, and raw and organic cotton clothing. Participants' business models in the service sector consisted of providing environmental management consulting and labor law–related training to companies interested in sustainability implementation. In sustainable agriculture, activities included organic vegetable farming, exotic flower cultivation, and other agricultural food production. These examples demonstrated entrepreneurial activities in accordance to sustainability trends.

As business leaders in small enterprises, participants structured their business as individual microentrepreneurs, cooperatives, and limited liability companies. As shown in Table 1, 85% sought business assistance from institutions, whereas three participants preferred to learn on their own by trial and error. As shown in Table 1, the establishments offering business assistance to entrepreneurs including SEBRAE, which offered the most support. Local municipalities and state agencies also provided business assistance to participants.

Table 2 gives an account of participants' business structures, economic sectors, length of business operation, and perceptions of sustainability achievements. As these women entrepreneurs learn, implement, and improve, they consider their stakeholders. That is because participants know that sustainability is inclusive. A sustainable business is one that is socially desirable, culturally acceptable, and psychologically nurturing. It is economically sustainable, technologically feasible, and operationally viable. It is also environmentally robust, generationally sensitive, and capable of continuous learning (Hawken et al., 2013). The field of sustainability science and research poses a challenge to the business community (Bateh et al., 2013).

Table 2

Participants' Perceptions of Sustainability Achievements

No.	Structure	Industry	Years	Economic	Social	Ecological
P1	Cooperative	Recycled textile weaving craftsmanship	13	Breakeven	Yes	Yes
P2	Limited liability	Organic vegetables farming	5	Breakeven	Yes	Learning
P3	Individual	Recycled home décor craftsmanship	7	Yes	Yes	Yes
P4	Individual	Environmental management consulting	13	Yes	Learning	Yes
P5	Limited liability	Organic fertilizers manufacturing	8	Breakeven	Yes	Yes
P6	Individual	Dietary food supplements manufacturing & exports	4	Breakeven	Yes	Yes
P7	Individual	Biojewelry craftsmanship & exports	11	Yes	Yes	Yes
P8	Limited liability	Organic clothing manufacturing & retail	4	Yes	Yes	Yes
P9	Limited liability	Ecological bags manufacturing & retail	7	Breakeven	Yes	Yes
P10	Cooperative	Organic floriculture farming & exports	15	Yes	Yes	Yes
P11	Cooperative	Recycled home décor craftsmanship	5	Breakeven	Yes	Yes
P12	Cooperative	Herbs cultivation & processing	12	Yes	Yes	Yes
P13	Limited liability	Ecological machinery manufacturing	11	Yes	Yes	Yes
P14	Cooperative	Organic agriculture processing & exports	14	Yes	Yes	Yes
P15	Individual	Organic clothing manufacturing	9	Yes	Yes	Yes
P16	Limited liability	Recycled clothing manufacturing & retail	8	Yes	Ye	Yes
P17	Limited liability	Biojewelry craftsmanship & exports	20	Yes	Yes	Yes
P18	Limited liability	Custom-made uniforms manufacturing	10	Yes	Yes	Learning
P19	Limited liability	Women's apparel design & manufacturing	9	Yes	Yes	Yes
P20	Limited liability	Green management consulting	8	Yes	Yes	Learning

Business leaders' focus must change from merely profit-seeking purposes to include individuals of the society and their institutions as participants in the larger system (Bateh et al., 2013). As Moldan et al., (2012) argued, sustainability has triggered an optimism and confidence around the world, whereby many can visualize an improved contemporary society and a better future for humankind. The women entrepreneurs in this study embraced that claim. Their business models and activities express that vision of sustainability that businesses can generate.

Health concern solutions. Data analysis revealed some of the factors that motivated participants to go into business, including health concerns. Regions such as the Amazon and the Pantanal, rich in flora and fauna, have supplied participants with a wealth of natural resources and ideas for sustainable businesses. Participants living in proximity to the rainforest ecosystem were knowledgeable of the wealth of medicinal herbs that nature provides free of charge. They developed recipes to cure their ills without damaging nature's preserve, and in the process created employment for the whole household. Personal health problems led P6 to begin her own home-based natural food supplement business after her success in using natural herbs to improve her health. P6 recounted:

I started using natural grains as dietary food supplements, because of my health problems. As I continued consuming the products and sharing with friends the benefits, they started to ask if they could purchase some for themselves. I noticed that it could be a market niche. I started the business producing at home. Later it

was moved to an incubator inside a local university. The design of our trademark underwent several alterations before arriving at what it is today. (P6)

For P3, an accidental discovery, coupled with the desire to protect the natural environment and improve one family member's health, prompted her to start her company. P3's account was as follows:

I spotted a business opportunity by noticing how customers were amazed when receiving purchased items wrapped up in PET packaging. We were using many PET bottles at home and I was reluctant to toss them into the garbage. Thus, I started using them to wrap up gifts in my store. The idea was successful and prompted the creation of new products from discarded scraps. The startup was only possible with the help of my aging father, a retiree in need of an occupational therapy, who became very busy cutting out the PET bottles for me to produce biojewelry and decorative artistic items. (P3)

Environmental distress solutions. Concern over the accumulation of organic waste in city streets led P5 to start a business that would help solve that problem. She assembled ideas and retail information and sought support from a local university research center. P5 told her story this way:

The idea of undertaking the business appeared while I was still in college already getting concerned about organic waste accumulating in city streets. I found myself annoyed with the amount of waste and decided to start a project related to the problem. Without much clarity about sustainability concepts, the initial idea was to recycle the organic waste and to convert it into inputs for the production of

substrates and soil enhancers. Our biggest challenge was beating the competition, which cuts trees to produce the same products and sell them at lower prices. (P5)

Minimizing environmental damage and creating employment for people seemed to be the motivating factors for most participants. To substantiate their environmental sustainability, they are careful with the use of energy and water resources.

Knowledge of the concept of sustainable development prompted P7 to start a business utilizing regional horn scraps discarded by other artisans to handcraft women's accessories, including rings, bracelets, earrings, necklaces, and others. P7 explained how she started the business:

It took quite some time for products to reach the desired quality. I had to use much power of convincing to have the jewelry items arrive at an acceptable level. At the very beginning, everything depended on my creativity, artisanship, marketing, and my sales skills. Only through great persistence a person can succeed. (P7)

Through a new business model and strategy, P7's activities exemplify resource maximization with the reuse of discarded cattle horns and forest products. P7 is practicing environmental sustainability, of which Epstein and Yuthas (2012) argued that the careful management of natural resources and ecosystems aims to reduce environmental and ecological destruction. P7's employees work in partnership with other artisans through intense dialog, transparency, and respect. They testified to increased self-esteem, professional growth, and higher income for their families.

In another situation, the observation of people's behavior triggered a business idea for P9 when she noticed that customers were entering the store where she worked usually carried large quantities of plastic bags for taking purchased products. Her desire to protect the environment against the accumulation of plastic in landfills, plus her yearning for economic freedom, prompted her to transform her home into an environmental bag production facility. Today she earns increased revenue using her eco-bags to advertise for larger companies. P9 explained it this way:

Our ecological (raw cotton) bags function as an advertising agency for companies and events publicist. Buyers have accepted it well. Our hard-working sewing team is in charge of production, and a professional consultant helps us with marketing. (P9)

For P17, the natural beauty of the forest was always thought provoking, and this compelled her and her partner to create forest-inspired artisanal products, which they sell in both the domestic and international markets. This is how P17 explained it:

In partnership with the indigenous community and local artisans, our scale production is large. We produce artisanal products made out of fish leather, used tires, and natural fibers collected from inside the forest. (P17)

This example illustrates the business model of enlisting local suppliers for natural raw materials and recycled discarded products to produce various household items and personal fashion accessories. These products exemplify ways to make a living in harmony with the natural resources of ecosystems.

Along a similar line, P8 had an idea for a high fashion business utilizing nature as the inspiration and source of raw materials. To start her business, she procured suppliers of natural fibers, recycled materials, and organic cotton. She obtained most resources regionally. P8 and P7 told their stories this way:

We noticed that there was no company focusing on fashion associated with nature. We discovered some suppliers of natural fibers and opened up our business to produce high-quality clothing and accessories. Our fashionable style gives buyers a sense of being connected to nature for those living in city dwellings. (P8)

Our business is a sanctuary for those interested in combining style with the idea of sustainability. We combine art and nature in creating exceptional items and accessories. All of our products are from natural organic materials. (P7)

Participants' testimonials demonstrated that their choice of business models offered solutions for environmental issues. They included the activities of recycling, reusing discarded materials, designing, producing, marketing, and selling products based on the principles of sustainability. Their interactions with people in their local communities are consistent with the idea of sustainability implemented in business. The women participants in the study recognized and understood the complexity of the economy as a network of individual, family, and community, interweaved with ecology (Perkins, 2007). Those concerns confirmed the argument of Figueiredo and Perkins (2011) regarding women's resilience, keen social interaction, and tacit knowledge of

local realities as critical components for sustainable development. P2 expressed it this way:

Eco-friendly practices require time and much labor. Recognizing the complexity of living organisms, one must possess a long-term vision for eco-efficient practices. We do respect labor laws by providing decent working conditions and a learning environment for development. (P2)

Participants relying directly on the forest's natural resources as their primary source of raw, biodegradable material for their products were the most protective of the forest and the land. They assessed the quantity and quality of local forest resources for developing environmental products and services and enlisted local native Brazilian Indians in the partnership. P7 expressed it this way:

We use and promote the self-sustaining riches of the Amazon rainforest with great respect because it provides innovative and magnificent designs and concept ideas for ambiance. Additionally, we support local communities and indigenous people by purchasing supplies from them and indirectly preventing damage to nature. (P7)

Supply chain sustainability has become gradually relevant within the fashion industry because of consumers increased awareness of health and environmental issues and their demand for ecological products (Shen, 2014). A woman living in a large metropolis found inspiration to start a business that would help solve the problem of huge quantities of nonbiodegradable plastic bags accumulated in trash containers and landfills. Her

company produces ecological bags made out of natural raw cotton that carry advertisements for larger companies

The accelerated pace of Brazil's industrialization is causing its mega metropolises to become large producers of municipal waste. In the industrial metropolis of São Paulo alone, the quantities of discarded residues coming from households, commerce, and public transportation have increased considerably in recent years. The amounts of hazardous materials produced in hospitals, health organizations, as well as in business and construction have also increased. Gómez-Brandón and Podmirseg (2013) argued that major challenges remain for interaction between the various systems including the sociopolitical, environmental, legal, and economic, to engender a global waste management system. Waste management companies, engineers, microbiologists, and economic actors may want to reevaluate old processes and strategies to come up with advances in waste management systems (Gómez-Brandón & Podmirseg, 2013). Women entrepreneurs in Brazil are taking the leadership in solving some of these problems with the resources they have performing activities of recycling and reprocessing waste. In 2012, over 70% of women entrepreneurs worldwide were opportunity-driven entrepreneurs (GEM, 2012b).

Social distress solutions. In their search for business opportunities, two groups of women evaluated their regional resources of flora and industrial waste streams to create their business. The women observed that handcrafting activities performed long ago by city founders and forgotten over the years had returned and handcrafted products were back in the local market. The women were all unemployed and held a meeting to

discuss employment alternatives. In their assemblies, they agreed that the old regional tradition of handcrafting could become a business opportunity. They all voted in favor of reviving the tradition and soon they started producing artistic, handcrafted rugs from industrial textile waste discarded by the industry. P1 and P10 told their stories this way:

In the area we live in, the production of artistic handmade rugs is a traditional activity characteristic of the local culture. We make rugs from textile waste discharged by regional industries, utilizing a method that passed on from generation to generation. (P1)

Another group of women was compelled to start a business cooperative for the cultivation of exotic flowers to create employment in the community, to prevent it from disintegrating. When the only employer in town went bankrupt, the entire town lost their jobs, and young people started abandoning the area and moving to larger cities. P10 reported it this way:

I was unhappy to see our children, family, and friends leaving without any probability of returning home or seeing each other again. We noticed that most residents had knowledge related to agriculture and were used to growing flowers in their yards to sell in the farmer's market. For this reason, we got together and formed a group of individuals to cultivate exotic flowers. Today, we export flowers to European markets. (P10)

P10 and her neighbors held meetings under the trees to discuss solutions that would prevent their community members from seeking economic refuge in large urban centers. Results indicated that residents' greatest vocational inclination was cultivating the land,

and especially growing flowers. They sought support and guidance from SEBRAE and established their business cooperative of flower cultivation to fulfill a necessity. They chose to operate their venture as a cooperative. Cooperatives, when organized as micro and small business enterprises, have proven to be effective in fighting poverty because of their focus on principles (Ki-moon, 2012).

Business cooperatives. Responses to interview question number 4, “What is the business structure in place to manage sustainability?” generated the theme of business cooperatives. In the study, business cooperatives represented organizations of support, according to participants’ answers to this question. For 25% of the participants, structuring their business as a cooperative was an effective and efficient way of building an organization focused on economic, social, and environmental sustainability. Those 25% indicated that operating a business as a cooperative has brought them the needed support and benefits that they might not have obtained otherwise. The spirit of solidarity inherent to business cooperatives provided them the necessary shield to achieve their collective goals.

This perceived spirit of cooperative support was present in a group of women artisans seeking ways to improve their quality of life while generating income for their families. They gathered and decided to start a cooperative to take advantage of an old regional tradition of artistic rug making. Instead of conducting business as sole proprietors they decided for a more inclusive and participatory type of organizational structure - a cooperative. For participants, the cooperative form of business encourages autonomy, self-motivation, and decision making in its members. Without much formal

education, the women established a business anchored in their combined, practical experience of manual weaving. As per their testimonies, the business of artistic rug making in a cooperative group encourages constant creativity and helps improve the quality of the product. Income has helped improve members' household economics. The agencies supporting their endeavor have featured their success stories in online videos.

P1, P10, P11, and P12 expressed the benefits of cooperatives this way:

Within the simplicity of our group, we cannot measure the significant impact of what we do. We can only see the difference made in the lives of the women who work with us. They can do the work at home, take care of their children and household chores, confident of a monthly income from our business cooperative. (P1)

What always motivated our group to overcome challenges was to see the women working together for the common good, in a joyful disposition regardless of any limitations, for each possesses prominence and is significant to the group. (P10)

We work united with faith in God. Through our work, persistence, determination and the pursuit of the collective good, we can visualize the achievement of each person's dreams. (P11)

In our business, it is possible to live well and still keep our natural resources intact. Because we are a small cooperative group, it's easier to feed information and create a sense of concern for the greater good that we have – *our land*. (P12)

The ownership of a business by employees in the form of cooperative structures exists in many countries, and many consider it a productive working arrangement

composed of productive cooperative members (Ben-ner & Ellman, 2013). In Brazil, a study of sustainable fuels by Stattman and Mol (2014) explored a biodiesel chain to examine their social sustainability. The biodiesel policy enacted in 2009 aimed to advance biodiesel as fuel for transportation and to promote the social inclusion of family farmers. Findings revealed that Brazil's biodiesel policy supported the increase of family farmers in agricultural cooperatives, contributing to their economic development. This perceived efficiency caused UN Secretary-General Ban Ki-moon to declare 2012 the International Year of Cooperatives. Ki-moon stated that the cooperative as a form of business organization, have helped to control extreme poverty in communities worldwide. Also, cooperatives are less likely to end operations because control and decisions come from a group of individuals desiring their collective prosperity (Ki-moon, 2012). In emerging economies, cooperatives as business structures have proven beneficial to local communities. Cooperatives are becoming a preferred business structure for organizations concerned with social and environmental issues.

Institutional support. Participants' responses to interview question number 8, "What kind of support did you receive and from which institutions?" generated the theme related to institutional support. Evidence from the analysis revealed that one of the factors that nurtured participants in the pursuit of building a business was the institutions providing support. Eighty percent of the participants named SEBRAE as the institution that offered them the most support. According to most of the participants, SEBRAE agencies provided them the business support they needed, such as professional advice,

seminars and workshops, expos and fairs, business plan guidelines, and project incubation phases. P1, P2, P3, P17, and P18 expressed it this way:

When we faced difficulties commercializing our recycled products, we sought help from SEBRAE, who helped in the structuring of our cooperative. (P1)

SEBRAE was the institution that offered us support, making possible the survival of our business. If it were not for the partnership with SEBRAE, we would have given up by now. We did need someone to help us in matters related to production, planning, and technical aspects of production to reach at least a breakeven point. (P2)

I received considerable help from SEBRAE through their consultants, speakers, and their workshops. (P3)

SEBRAE has always been present to help in some way either offering training and courses and was the agency credited with having my work recognized nationally and internationally. (P17)

The only entity that has always supported us since the birth of the company was SEBRAE. Their support was vital to us. When we started, the capital we had was little, and what I learned from them helped me develop my business and has made all the difference. (P18)

SEBRAE offices are present in major cities across the country, and currently many are starting to provide sustainability programs to assist small businesses in their sustainability pursuits. Other institutions also provided the support participants needed. They included Agência de Desenvolvimento Sustentável da Amazônia (ADS-AM;

Agência Nacional de Vigilância Sanitária (ANVISA); Universidade Federal do Amazonas (UFAM), and Superintendência de Desenvolvimento da Amazônia (SUFRAMA), and Serviço Nacional da Indústria (SENAI). In addition, Universidade Federal de Goiás (UFG), Associação de Desenvolvimento Sustentável de Macacos e Furnas (ADESMAF), Empresa Brasileira de Pesquisa Agropecuária (EMBRAPA), and Universidade Federal da Paraíba (UFP) all provided business assistance to participants. Financiadora de Estudos e Projetos (FINEP) is an agency that provided financial support to P5. FINEP offers financial support to micro and small business to help reduce the rate of failure.

Participants listed various organizations providing support to small business. However, a survey by GEM (2012a) revealed that over 82% of the entrepreneurs surveyed did not seek advice from business support institutions such as SENAC, SEBRAE, SENAI, SENAR, or SENAT. That raises the question of whether or not the community, in general, is aware of these free services prior to starting a business. Not seeking help from available institutions is a problem that might need further investigation.

Factors Hindering Business Sustainability

Data analysis of multiple sources including interviews produced a set of categories, and subsequently themes. To facilitate participants' answer to the research question, I presented the findings in two distinct groups. The first group contained the strategies participants needed to start and maintain their business; the second group

represented the difficulties they encountered. Resulting from the analysis, these were the six themes identified as obstacles hindering business sustainability:

1. Scarcity of skilled workers
2. Inadequate education
3. Shortage of suppliers
4. Poor financial management skills
5. Inadequate public policies and corrupt practices
6. Gender issues

The scarcity of skilled workers. Seventy-four percent of the participants indicated an overall deficiency of skilled workers and professionals as a large obstacle to sustainability and business continuity. P2, P4, P13, and P19 stated that this shortage of qualified personnel has had a negative impact on their eco-agricultural and manufacturing startups. To mitigate the problem, some of them improvised by bringing workers from related businesses and training them to adapt their knowledge to their business models. In the participants' words:

Our challenge was finding people with expert knowledge. To find skilled workers has been also hard because farm workers are becoming increasingly scarce. (P2)

We are in need of engineers trained in construction projects and sustainable processes, and suppliers that meet the environmental requirements at the local, state, and national levels. (P4)

It takes a while for professionals accustomed to the traditional ways of the trade to understand the new model. To this day, we still do not have universities to train professionals for sustainability. (P13)

One of our biggest problems is finding qualified workers. The work is too specific, and we cannot find good professionals. So, we hire people with related skills and have them adapt to our system. (P19)

Worldwide, the demand for skilled workers to fulfill jobs in sustainability will steadily increase as municipalities must comply with environmental laws and build green infrastructure (Falxa-Raymond, Svendsen, & Campbell, 2013). Existing research confirmed that there is a scarcity of skilled workers and qualified professionals in Brazil. A survey applied to 1,761 companies of different sizes demonstrated that 65% of those companies were unable to find skilled workers to fill employment positions. The scarcity of qualified workers to fulfill jobs positions in manufacturing, technical, administrative, sales, marketing, engineering, and R&D is hindering the sustainable competitiveness of Brazilian companies (CNI, 2013). In many companies, management improvises by bringing workers from similar industries and having them adapt to their sustainability jobs. Brazilian educational establishments offering programs in business management have demonstrated apprehensions toward sustainability issues (Palma et al., 2013). However, most of them have yet to establish policies integrating sustainability education programs in their curricula. Education for sustainability will provide students with the skills they need to fulfill the green jobs positions increasingly available in the labor markets (Palma et al., 2013). Also, unskilled and untrained workers have caused high

rates of workplace accidents (Vilela, Almeida, & Mendes, 2012). Such an occurrence defeats the goal of business sustainability.

Inadequate education. Public unawareness about the sustainability concept was an issue for P1, P2, P3, and P19. They believe that public unfamiliarity about the consequences of abusing ecological resources comes from an inefficient education system and believe schools could help with sustainability education. P1, P2, P3, and P19 voiced that such unawareness of the population has negatively affected their businesses.

The following are the testimonies of P1, P2, P3, P18, and P19:

The people's lack of knowledge and concern for the environment became our biggest problem and has had a negative impact on buyers' acceptance of our products' price with aggregated value. (P1)

Regarding sustainability, people have yet to incorporate changes in their habits. Those practices could include decreasing time in the shower, sorting household garbage, paying more for products with less packaging, and stopping the use of plastic bags in supermarkets. The way of thinking has to change. (P2)

There is a lack of information, and, above all, buyers often show resistance in purchasing our products because we make them from recycled materials. Product acceptance is a big challenge for us. (P3)

Concern for the environment and social issues should start with each person. (P18).

Besides educating our staff and employees about the application of the concept of sustainability, we act as instructors for other companies wishing to achieve sustainable production systems. (P19)

The quoted testimonies of participants indicated that, in tandem with marketing and selling their products, they took upon themselves to educate clients and the community concerning issues of sustainability. P2 and P17 expressed their views, saying:

The way of thinking in business must come from a true, coherent, and legitimate concern for the environment. In Brazil, this way of thinking is currently rare because it requires large adjustments to the old established business practices and even individuals' practices. It calls for change, and change is difficult to come by because it entails educating the people to have a profound transformation in society's way of thinking. (P2)

Being environmentally friendly is very expensive, and people still do not have a mentality to preserve. People still do not value a green product. (P17)

There is no substitute for sustainable development (Nidumolu et al., 2013). The development of technological innovation for sustainability requires education, and a good education counts as a prerequisite for social inclusion and, consequently, social sustainability. However, the Brazilian basic education system is inefficient and ineffective, and historically has been plagued with continuous neglect (Thapliyal, 2013). Results of a survey by GEM (2012a) indicated that schools have been unable to prepare men and women for job positions requiring fundamental basic knowledge. Brazil's current education system must improve to respond to societal and industry pressures. In

this context, sustainability education remains a challenge for the country's public education system. Education for sustainability will provide students with the skills they need to fulfill the green jobs positions increasingly available in the labor markets (Palma et al., 2013). It will require an integrated effort on the part of the business community, government, municipalities, and institutional bodies alike. Sustainability will require investment in secondary education to raise public awareness (Aklin et al., 2013). It is a social travesty requiring fundamental urgent changes. Educational institutions might require upgrading to offer quality programs to prepare Brazilians for the knowledge economy of the 21st century. The skills of teachers and professors might need improvement. Additionally, education and training for sustainability are critical, and will require adequate investment (Aklin et al., 2013).

Shortage of suppliers. The third theme resulting from the analysis pointed to a scarcity of inputs for green industries and a lack of organized information and industry data. Sixty-five percent of the participants stated that they had faced hurdles in finding suppliers of machinery, equipment, and information to expedite the structuring of their startups. Forty-two percent had problems finding inputs, and 30% expressed difficulties with finding information that would facilitate the decision-making process during startup. The following are their statements:

We needed fabrics made out of natural fibers, but were unable to locate certified companies. (P8)

We had no information on where to find suppliers of seeds, pots, and irrigation equipment. (P10)

There is only one industrial supplier of machinery for our product in the country.

(P16)

Besides the challenge of finding people with expert knowledge, we also had problems finding resources and inputs for production. (P18)

As an efficiency-driven economy, the sustainable development of Brazil requires a technological upgrade, which entails complex undertakings and is a difficult challenge for Brazilian policymakers. The United Nations Department of Economic and Social Affairs (UNDESA, 2011) acknowledged the complexity and impact that technological changes might impose in a country's social structure, lifestyles, institutions, and markets. There is the need to conduct research and development prior to establishing environmental technology legislations. A cost-benefits analysis by academia could guide organizations in evaluating sustainability outcomes to include (a) sustainability programs and activities, (b) sustainability in operational performance, (c) stakeholders' feedback, and (d) benefits and costs of implementing the sustainability principles (Epstein & Yuthas, 2012). The developing world can create major improvements, new competencies and applications involving operational changes in production that are vital for achieving sustainability (UNDESA, 2011). Business and government can work together to transform solid waste into sources of revenue. The growing problem of municipal solid waste accumulation forces local public administrators to find a destination for the waste (Carvalho, Rosa, Bufoni, & Oliveira, 2013). However, public administrators lack the knowledge required to estimate the costs of implementing a waste-to-revenue project, and a sustainability education campaign could help (Carvalho, Rosa, Bufoni, & Oliveira,

2013). The dissemination to the population of successful sustainability projects through an education campaign could engage the public and increase participation and collaboration (Carvalho et al. (2013).

As the sustainability concept spread, demand for new products will increase, and suppliers will appear. Barth et al., (2013) argued that industry practitioners recognize that sustainability implementation could be an important component of their activities offering win-win solutions. Academia could help develop sustainability capabilities in graduate students, according to industry needs. Time and again differences remain between academic knowledge and industry needs. Communication between industry representatives and academia must be a constant endeavor to arrive at a framework both can work with (Barth et al., 2013).

Poor financial management skills. Data analysis indicated that the financial management of the business was the toughest challenge for most participants. Fifty-five percent indicated having difficulties with issues of cash flow capital. P1 attributed those issues to their lack of experience and knowledge in dealing with money. P1 and P5 indicated that the economic return from their organizations had never been their priority. P5, who voiced her struggle with managing and improving her business finance, expressed a negative orientation toward profit. Conversely, P10 stated that profit or economic return was what led her to organize the business as a cooperative. For P1, product improvement and diversification could solve cash flow concerns. P1, P2, P5, and P14 commented as follows:

The financial management of our business became one of our biggest problems. We attribute it to the lack of knowledge. We have technical expertise, which we apply in production, but no financial management know-how. We face daily challenges. Within the context of our reality, our focus is not on profit but survival. (P1)

The economic return is not worth it for a producer implementing environmentally friendly and socially responsible practices. This equilibrium is difficult to achieve. I believe it to be the most complicated aspect of the sustainability tripod. However, we are still learning. (P2)

Although economic return has never been my priority, it has been a great challenge for managing and improving business growth. Despite the great publicity about available resources to fund new companies, these funds are almost inaccessible. (P5)

The development banks do not work for us, and we suffer from shortage of working capital to support the purchase of raw materials. (P14)

Financial literacy for micro and small entrepreneurs seems to be a practical strategic solution (Drexler et al., 2014). Good financial management is fundamental to secure business continuity for companies of all sizes. However, small business entrepreneurs, particularly women, often lack the financial literacy required to make informed business decisions (Drexler et al., 2014). P1, P3, P9, P10, P11, and P15 indicated having started their ventures with one idea, few resources, great passion, and lots of courage. No one expressed having borrowed money at the startup phase. P10

offered a detailed account of how her cooperative solved cash flow problems at startup. Participants' business models seemed to be consistent with the concept of sustainability: taking small steps continuously, learning, and applying new ideas with fiscal restraint. Despite their financial challenges P3, P15, and P17 attributed their business continuity and survival to their spirit of perseverance and love for what they do. Good financial management goes hand-in-hand with the economic, social and environmental aspect of the sustainability concept (Nita & Stefea, 2014). Lowering the cost of doing business might result from conscientious consumption of resources, leading to waste decrease (Nita & Stefea, 2014). There is no standardized technique for learning or measuring what goes into the TBL accounting system for implementing sustainability (Slaper & Hall, 2011). Business leaders have adapted the concept to their circumstances and have managed to keep developing new enterprises.

Tonelli and Andreassi (2013) examined the results of an entrepreneurship program at Fundação Getúlio Vargas and the School of Business Management of São Paulo, designed to educate female entrepreneurs in business management. The program offered courses in strategy, marketing, and management of employees, finance, operations management and specialized consulting. An analysis of the first five years of the program demonstrated positive outcomes, including higher self-esteem and confidence of the women participants. The sharing of information amongst the participants often resulted in innovative solutions for their common business issues. Findings also revealed that the entrepreneurship education empowered the women participants in the program, and they became agents of change in their communities. The

women's self-confidence increased, and the business knowledge they acquired spread into networks of solidarity with other women (Tonelli & Andreassi, 2013). The sustainability approach helps improve financial management.

Inadequate public policies and corrupt practices. Forty percent of the participants testified that some of the issues they encountered were due to inadequate government policies, lack of incentives for sustainability, and widespread corruption. P5 and P6, who depended on local government institutions for launching a green/sustainable venture, faced disappointment. P5 and P10 argued that ineffective bureaucratic regulations have caused delays in the processing of the documentation for licensing and formalizing their businesses. P5 and P14 stated:

Our greatest difficulty is with the subject of corruption, which has brought us great difficulties due to the lack of structuring of the solid waste collection. It remains a major challenge. There is the lack of incentives, and the need for the government to do their job of implementing this law, instead of assigning it to private companies. There are clashes between the parties and confusion regarding solid residues legislation in local governments. (P5)

Government policies must advance at the municipal, state and federal levels, and be accountable because all we want is to work, to generate income for ourselves and live with dignity. (P14)

The government has an important role to play in shaping the environment for productivity (Porter & Kramer, 2011). Therefore, environmental and social sustainability measures must be part of government policy (Bilbao-Osorio et al., 2012). Also, the

government needs to support economic sectors in which female entrepreneurs are moving toward greening the economy. As indicated in the literature review, government and business alike have a critical role to play in supporting the development of sustainable companies (Adegbite et al., 2012). However, affluent Brazilians acknowledged that policy failure, and specifically environmental policies are not well enforced in Brazil because of corrupt practices (Aklin, Bayer, Harish, & Urpelainen, 2014). It is the responsibility of the government to respect and enforce the rule of law, which is essential for entrepreneurship growth (Levie and Autio (2011), and sustainable development. There can be no sustainability where corruption abounds, whether in the public or private sector.

Gender issues. While not all participants claimed to have undergone gender discrimination at the workplace as business owners, 25% of them indicated that they had. Participants affirmed that they still faced difficulties working with men simply because they are women. P5, P10, and P13, who experienced the phenomenon, expressed it this way:

It is challenging. I have no other way to describe it. On top of all other difficulties, women also suffer discrimination for being women, especially in my field of activity that requires me to deal with ill-mannered politicians” (P5).

“Prejudices are still a major challenge for women and especially for those who are poor and live in rural areas, but when we cannot face them, we circumvent them.

(P10)

For a woman to keep her business profitable and sustainable is only through dedication, product, and market research, always watchful over customers' satisfaction, ensuring that a new product has potential for growth. However, the biggest challenge is overcoming male prejudice since they have a problem accepting women in a position of management over them. (P13)

As demonstrated in the literature, women entrepreneurship plays a significant role in the regional and national economic development of nations. Women also represent half of the world's population and execute most of the work in the informal sector (Gokus et al., 2013). However, gender bias against women in Brazil takes the form of unequal salaries, poor working conditions, and informal work. Additionally, there are the barriers erected by policymakers who establish public policies that directly affect women's right to equal contribution in the realm of productive capacity (Carrieri et al., 2013).

In recent years, Brazilians have placed a woman in the highest office of the land. Issues of discrimination against women continue to take place in communities across the country. Despite women's gradual rise to executive positions through their merit, women still face issues of discrimination and oppression in the workplace (Sampaio et al., 2013). Some of these female executives tolerate their organization's oppressive system and keep their job because of necessity and survival. They are eager for the day their male counterparts treat them with dignity, respect, and equality (Sampaio et al., 2013). Women's entrepreneurial activities are critical for sustainable development. The world will only achieve an unbiased, sustainable economy through women's active participation

in economic activities (Ki-moon, 2011). Women retain the valuable tacit knowledge of local ecology, society, and politics (Figueiredo & Perkins, 2013). Such awareness is good for sustainability entrepreneurship.

Applications to Professional Practice

Study results offered practical applications for the creation, and sustainable operation of a small business enterprise through sustainability-focused strategies. Outcomes indicated that the average survival rate for participants' small business ventures was nine and a half years with 80% of the enterprises active after the first five critical years. This conclusion led to associate this survival rate to those factors fostering business sustainability including local institutional support, cooperative-structured business models, and perceived opportunities due to ecological concerns, and lifestyle trends.

As awareness around sustainability increases worldwide, small business entrepreneurs might perceive local economic, social, and ecological distresses as opportunities to produce revenue. Some environmental related issues, concerns of health and wellbeing decline, dumping ground overload, and issues of workplace-related accidents and diseases and others social and ecological distresses could become business opportunities. Outcomes of the study indicated that entrepreneurs can solve ecological, societal, economic problems through a well-designed sustainability strategy.

Evidenced by the study and with practical applications are those opportunities related to the scarcity of qualified professionals that 74% of the participants experienced. Participants expressed that not having competent workers was a challenge they attempted

to overcome. This shortage of qualified workers to fill job positions in Brazilian companies has negatively affected the performance of companies of all sizes. This shortage of professionals presents itself as an opportunity for intervention from industry specific professionals offering training. Demand for skilled professionals is gradually increasing in developing nations and is requiring upgrading of education programs to fulfill industry needs. Parizi, Naas, Garcia, Ferragi, and Bernini (2013) found that companies in Brazil are suffering from the lack of qualified professionals, especially for the construction industry. Employing an unskilled workforce in the production industry can be an unsustainable business practice. Unskilled and untrained workers have caused high rates of workplace accidents and deaths in Brazil (Vilela et al., 2012). Such incidents might culminate in lengthy legal actions accompanied by financial losses, which for a small business is unsustainable. As micro and small business, participants found a strategic solution by training their workforce. These findings suggest that empowering employees with the skills they need and paying them fair wages, is a good sustainability practice.

Findings related to the issue of inadequate education that 55% of the participants experienced are issues with potential for practical business solutions. The overall lack of good schools and training programs has precluded public awareness on matters related to sustainability. Unawareness of this topic has negatively affected Brazilian companies. This problem can turn into an opportunity for education experts to create schools for the 21st century with sustainability-focused curricula. Investors might want to capitalize on this need and invest to improve the quality of education in Brazil.

Another outcome of the study with the potential for the development of practical applications was the issue of shortage of green products suppliers. Sixty-five percent of the participants voiced being unable to find the appropriate machinery, equipment, and other resources of information they needed for appropriately developing their enterprises. Shortage of green products suppliers and data availability might be an opportunity for small and large entrepreneurs who might benefit from transforming this into a business enterprise.

Evidenced by the study was participants' lack of expertise in managing the financial aspects of their enterprise. Fifty-five percent of the participants acknowledged their weak skills in managing the financial aspects of their enterprises and sought and received guidance from SEBRAE. Financial literacy is a practical and strategic solution for micro and small business entrepreneurs (Drexler et al., 2014). In the absence of local university courses on entrepreneurship, SEBRAE is the agency that supported 80% of the participants. However, institutions of higher education in Brazil are working to provide entrepreneurship programs to empower novice entrepreneurs, particularly women entrepreneurs. This inference from the study has application for professional practice because it evidenced the urgent need for entrepreneurial education for women.

Evolving from this study was the concern with inadequate government policies, corruption in local government, and unethical practices. Forty percent of the participants reported having faced difficulties because of unethical practices and corruption in local government. In Brazil, the democratically elected government has abused the power entrusted to them for centuries. One of the solutions appointed by Ferraz and Finan

(2011) could be to inform the electorate about the actions of bad politicians through information campaigns. Such actions might force the government to be accountable to their constituency.

The government has a critical role to play in establishing an environment for productivity where business can flourish (Porter & Kramer, 2011). The democratic, free-market nations will increasingly depend on ethical practices such as collaborations, trust, loyalty, justice, and mutual respect for their success and prosperity (Tsalikis, Seaton, & Shepherd, 2014). The BEI found a major issue related to business services ethics in Brazil (Tsalikis et al., 2014). The business ethics index (BEI) is an organization that measures consumers' perceptions of business ethical behavior for Latin America. In professional practice, it is imperative that business leaders conduct activities in a conscientious manner to improve the business environment in Brazil through embodying high standards of ethics that could ultimately increase trust and decrease risk. The same is valid for all levels of government. It is the people's decision to make if they are well-informed.

The general business problem in this study was entrepreneurship failure resulting in business termination. I argue that small business entrepreneurs can prevent the premature death of their business by considering implementing the principles of sustainability as business practices from the very beginning. The essence of strategy is the fundamental strength of a firm's relationship with its environmental context (Ronda-Pupo & Guerras-Martin, 2012). Small business entrepreneurs might want to assess their internal capacities and their external environment to design strategies incorporating

frugality in the use of all resources and smart allocation of human capital. The conscientious consumption of resources helps decrease material waste and lowers the cost of doing business (Nita & Stefea, 2014). I conclude with the argument that small business entrepreneurs might benefit from making sustainability thinking a habit for better business performance.

Implications for Social Change

The implications for positive social change include the potential benefits to small business and particularly to women entrepreneurs. Environmental and social sustainability become tools in business performance and help increase revenue because of savings. Improved business performance results in increased economic performance. Small businesses represent the backbone of the Brazilian economy (SEBRAE, 2011), and initiate over a million new ventures every year. Half of those companies do not survive after five years. Early business termination provokes a negative ripple effect that disturbs segments of the local economy resulting in unrecoverable financial losses.

The women entrepreneurs exemplified business models and strategies to prolong the life of a company. The strategies they employed benefits their companies and members of their communities including suppliers and employees. Evidence from the study demonstrated that the average age of participants' business was nine and a half years, with 80% of them in business over five years. Participants illustrated new business models and strategies in dealing with resources that might help secure the continuity of their companies decreasing the risk of failure. These women entrepreneurs have

exemplified ways to reduce consumption of resources, purchase inputs from local suppliers, recycle and reuse materials, and include members of their local communities.

The study has implications for positive social change for women entrepreneurs in developing nations. It also has positive inferences to improve local economies as evidence showed that sustainability implementation at the local level can help develop a *culture of sustainability*.

Recommendations for Action

In Brazil, small businesses can influence change in all systems because they represent 99% of the country's companies (SEBRAE, 2012). As an efficiency-driven economy attempting to improve the efficiency of its many systems, Brazil has a long way to go before accomplishing the effectiveness and efficiency of a sustainably developed nation. The concept of *sustainable development* opens the doors for the small business community to work on determining long-lasting solutions for Brazil's pressing problems.

Through this study, participants indicated that small business possess the power to bring about the sustainable efficiency of their companies and improve their local economy. The one million new registered businesses starting up every year could have a considerable impact on the country's economy if from the very beginning they employ the sustainability thinking in starting and operating a business. The sustainability thinking requires that these new entrepreneurs enter the competitive arena well prepared for undertaking issues of economic, environmental, and social nature. SEBRAE is one of the many agencies that could provide new entrepreneurs guidance in sustainability implementation strategizing the principles in their business plan.

As the participants in this study exemplified with their sustainability thinking, the *issue of waste* seems to be the number one problem in various organizations. In this case, a careful assessment of sources of waste in the organization and strategies to prevent it might be a practical solution to increase the economic bottom line. Wilts et al. (2013) argued that waste prevention requires that all stakeholders be involved. Waste could be the waste of capital resources inside the company, waste of knowledge capital (from human capital – employees' tacit knowledge), waste due to inefficiency in the use of land and space, and waste of time spent in performing ineffective activities, to name a few. The sum of all these sources of waste could seal the fate of a company. Small business organizations cannot afford to waste.

By implementing this recommendation small business might help lower the cost of doing business, keep the continuous flow of capital inward, and might sustain the financial health of the company. To implement sustainability, small business entrepreneurs might consider acquiring education related to standards for measuring sustainability, such as the ISO 26000 provided by the International Organization for Standardization and the Global Reporting Initiative for evaluating and reporting economic, environmental, and social performance (Hahn, 2012). Small business entrepreneurs can adapt the sustainability concept to their specific realities (Slaper & Hall, 2011), and stay in operation longer.

Upon conclusion, results of this study will be available to participants via a summary of one to two pages. This research project needs review and criticism for possible submission to academic journals. Those journals might include the Journal of

Women's Entrepreneurship, Journal of Social Change, Journal of Small Business and Entrepreneurship, Sustainability Journals, SEBRAE, or Jornal do Empreendedor, as well as local chambers of commerce, industry associations, and NGOs assisting small business entrepreneurs.

Recommendations for Further Research

Further researchers could explore sustainability implementation in different economic sectors and subsectors related to participants' business models. In future studies researchers should investigate factors inhibiting sustainability, such as scarcity of clean technology suppliers, inaccessibility to data pools, scarcity of qualified workers, and insufficient public awareness of the sustainability concept.

As a qualitative phenomenological study, 20 participants was a sample representing the women entrepreneurs in different economic segments of the economy. There was an expectation that participants would understand the interview questions. Through their responses and their business accomplishments, they expressed what they understood as being sustainability. One of my recommendations would be to conduct this type of phenomenological study using face-to-face interviews at participants' business settings.

Because this study encompassed the whole country of Brazil, participants' experiences might have been dissimilar across the regions. I would recommend that future studies explore the sustainability of women entrepreneurs focusing on a particular region. Another recommendation would be a future study with the target group as men entrepreneurs to explore their sustainability implementation as they understand the

concept. Furthermore, in future studies, researchers could use a qualitative inquiry with women entrepreneurs who did not seek free business advice or assistance from available organizations to learn about their reasons. In future studies researchers could use the same qualitative design combined with a different strategy of inquiry, such as case studies. Finally, a last recommendation for future research could be the use of a quantitative method employing these qualitative results or a whole new mixed-methods study (qualitative-quantitative) to measure monetary achievements of sustainability.

Reflections

The communication that took place between participants and I during this research process was inspirational. From the first contact with each of the participants, I felt their willingness and enthusiasm in narrating their entrepreneurial stories. During the interviews process, they were able to express themselves spontaneously. Through their lengthy narratives, they expressed the essence of their experiences, including challenges, frustrations, dreams, hopes for success, and pride. Through participants' lived experiences, I gained much insight and awareness of the strategies they employed to overcome obstacles. As a woman entrepreneur, it was possible to relate to participants' stories.

Results revealed rich characteristics of their enterprises as they strive to make a living through their sustainable business ventures. Although they were of different regions, their struggles were very similar in nature, and so were their solutions. This experience has motivated me to continue learning and pursuing sustainability entrepreneurship research and practice. It is possible that the research process has had

some impact on the participants, as they perceived that there was research interest in the entrepreneurial activities they perform. Additionally, this experience was an eye opener for the realities of women entrepreneurs in Brazil, but it came as a surprise that only 25% of the participants expressed having faced challenges because of gender prejudice.

Summary and Study Conclusions

The purpose of this study was to acquire knowledge of the strategies Brazilian women entrepreneurs needed or employed to develop sustainable business. Through the qualitative phenomenological approach, I explored the lived experiences of 20 women entrepreneurs in Brazil. Data analysis from multiple sources, including interview data, provided an account of the challenges participants faced and the strategies they implemented to overcome those obstacles.

Study outcomes revealed that participants anchored their strategic choices of business models on the principles of sustainability. Evidence showed that participants performed activities in various economic sectors including artisanship, manufacturing, commerce, and services, operating under business structures ranging from a sole proprietorship structure to micro-entrepreneurs and cooperatives. Their main business activities included recycling, reprocessing of discarded products, manufacturing of soil enhancers and substrates, nutritional food supplements, eco-bags and eco-brinks machinery, raw and organic cotton clothing, and environmental management consulting.

Evidence showed that participants faced difficult challenges related to poor financial management skills and consequent problems of working capital. Other issues their companies faced were due to the scarcity of qualified professionals, the shortage of

business suppliers, inadequate government policies along with corrupt practices, and issues related to gender.

Participants illustrated innovative ways of running their enterprises. Their business models and strategies employed have kept their companies in operation. Study findings confirmed that 80% of the participants' business ventures have been in operation past the critical first five years. These findings are important to the academic field because it answered the research question: What strategies do Brazilian women entrepreneurs need to create and sustain their business organizations? Study results have possible implications for positive social change because it contributed to the body of knowledge on sustainability implementation to enhance business practices in the developing world.

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Appendix A: Interview Questions

1. Could you please describe the types of products or services your company offers?
2. How were you able to identify this business opportunity?
3. What strategies did you apply for designing, producing, marketing, and selling your products or services?
4. What is the business structure in place to manage sustainability goals?
5. What difficulties arose for management because of the tripod of sustainability?
[Prompting Financial returns,
Ecofriendly practices,
Socially responsible actions]
6. What obstacles did you come across (if any) when searching for materials, equipment, suppliers, office space or land, workers, information, financial capital?
What about green certification (if any), product demand, infrastructure for the flow of production, and any specific training for your business?
7. What are the most difficult challenges women must overcome to sustain their business ventures?
8. What kind of support did you receive and from which institutions?
9. What is it like for a woman to launch a business organization aiming to be financially profitable, environmentally and socially responsible in a country rapidly mass-producing, and where profit seems to be the only focus?
10. How can business organizations have an impact on the quality of life on the planet?

Appendix B: Interview Questions in Portuguese

Questionário da Entrevista

1. Poderia por favor descrever os tipos de produtos ou serviços que sua empresa oferece?
2. Como a sra. foi capaz de identificar essa oportunidade de negócio?
3. Quais estratégias a sra. utilizou na concepção, produção, comercialização e venda de seus produtos ou serviços?
4. Qual é a estrutura de negócio que a sra. estabeleceu para alcançar os goals da sustentabilidade?
5. Quais dificuldades surgiram quando da tentativa de aplicação do tripé da sustentabilidade?
 - a. Retorno financeiro
 - b. Boas práticas ambientais
 - c. Ações sociais responsáveis
6. Quais desafios a sra. enfrentou (se algum) no início de sua empresa para encontrar materiais, equipamentos, fornecedores, espaço ou terreno para estabelecer a empresa, mão de obra qualificada, informação, capital financeiro, certificado verde (se algum), infraestrutura para o escoamento da produção, aceitação do produto pelo mercado, oficinas de treinamento no seu campo de negócio?
7. Quais dificuldades mais desafiadoras as mulheres empreendedoras devem sobrepujar para manter suas empresas lucrativas e sustentáveis?
8. Que tipo de apoio a senhora recebeu e de quais instituições?

9. Como é a experiência de uma mulher empreendedora lançando um negócio sustentável num país que rapidamente se industrializa?
10. Como as organizações empresariais sustentáveis poderão afetar a qualidade de vida no planeta?

Appendix C: Letter of Invitation

Date: _____

Dear Madam:

My name is Ana Church and I live in Buffalo, NY.

I am a student at Walden University and a candidate to a DBA degree. This email has the purpose of inviting you to participate in a study on Brazilian female entrepreneurs who are building sustainable business ventures.

This study will be a qualitative research. This methodology is a resource used to explore and understand the significance individuals attribute to a human problem or situation, in this case, the meaning that you, the Brazilian female entrepreneurs provide to what you have experienced while building organizations to be economically, socially and environmentally sustainable.

I will be the key instrument of data collection and I will make use of multiple sources of data from interviews, websites' contents, pictures, and information available in the media. After data is collected, I will analyze it inductively in order to form general themes. After that process, I will need to consult with you once again to make sure my analysis and interpretation is in accordance with your reality as you have described it.

This study is very significant to the women of Brazil that are working hard to change the way companies operate in the world.

I appreciate your participation greatly and I look forward to hearing from you.

Ana Church

Appendix D: Letter of Invitation in Portuguese

Carta Convite

Data: _____

Prezada Sra.:

Meu nome é Ana Church e moro em Buffalo, NY.

Sou Brasileira e resido nos Estados Unidos há alguns anos.

Consegui sua informação através do SEBRAE. Essa carta-email tem o objetivo de lhe fazer um convite. Primeiramente explico que sou estudante da Walden University e candidata ao Doutorado em Gestão Empresarial (DBA). Como área de foco para minha pesquisa, optei pela sustentabilidade de negócios e o desenvolvimento sustentável. Neste contexto focarei especificamente no trabalho das empreendedoras Brasileiras desenvolvendo empresas sustentáveis.

Esta pesquisa terá as características de um estudo qualitativo fenomenológico que é um recurso utilizado para explorar e compreender o significado que indivíduos atribuem a uma situação ou problema humano. Neste caso, o significado que você empreendedora Brasileira, atribui à experiência vivida por você no decorrer do desenvolvimento de sua empresa sustentável.

Como pesquisadora, serei o instrumento fundamental de coleta de dados. Para um estudo mais completo, farei uso de múltiplas fontes de coleta de dados como websites,

fotografias e informações disponíveis na mídia online. Depois que coletar os dados estarei fazendo uma análise indutivamente para formar temas gerais. Durante esse processo eu vou precisar consultá-la novamente para ter certeza de que minha análise e interpretação está de acordo com a realidade que você descreveu.

Este estudo será de grande significância para as empreendedoras Brasileiras trabalhando duro para expandir seus negócios com equidade social e respeito pelo meio-ambiente, como também para empreendedoras de todo o mundo.

Agradeceria muito sua participação e ansiosamente aguardo sua resposta.

Atenciosamente,

Appendix E: Consent Form in Portuguese

Formulário de Consentimento

Data_____

Prezada Sra:

Você está sendo convidada a participar de uma pesquisa sobre a sustentabilidade aplicada a micro e pequenas empresas. A razão de a convidarmos para esse estudo é porque, de acordo com informações obtidas do SEBRAE e/ou adquiridas online via YouTube or Google, sua empresa é considerada uma empresa que se esforça em utilizar práticas sustentáveis, que é o critério para essa pesquisa.

Este formulário é parte de um processo chamado "consentimento informado." que lhe dá a oportunidade de entender o fundamento do estudo antes que decida participar. Este estudo será conduzido por mim, Ana Church, candidata ao doutorado pela Walden University. Aqui declaro que não existe nenhum relacionamento meu, a pesquisadora, com a senhora, que é participante na pesquisa.

Informação:

O objetivo deste estudo é explorar as práticas sustentáveis de negócios pelas mulheres empreendedoras que operam micro e pequenas empresas em diversos setores e subsectores da economia Brasileira. O intuito é saber das participantes quais as práticas ou estratégias

sustentáveis utilizadas por elas para gerar renda, não prejudicar o meio-ambiente e nem as pessoas.

Procedimentos:

Se você concordar em participar deste estudo, será pedido que você:

- Responda a um questionário de 10 perguntas que será administrado por telefone ou videoconferência com possível duração de mais ou menos uma hora.

Natureza voluntária do estudo:

Sua participação neste estudo é voluntária. Isto significa que todos respeitamos a sua decisão de participar ou não no estudo. Ninguém da Walden vai lhe tratar diferente se resolver não participar. Contudo, se decidir participar da pesquisa, poderá ainda mudar de idéia durante o estudo. Se sentir estressada poderá se retirar a qualquer momento e se achar que alguma pergunta é de cunho muito pessoal pode deixar de responder.

Riscos e benefícios de participação no estudo:

As mulheres participantes nesse estudo não incorrerão em nenhum risco. Toda informação de cunho profissional ou financeiro que fornecerem durante a pesquisa, será mantida em sigilo. Os benefícios advindos da participação no estudo será o aprendizado pela troca de informações das práticas sustentáveis utilizadas em outras regiões do Brasil; o desenvolvimento de idéias inovativas advindas da experiência de outras empresas sustentáveis; o orgulho do pioneirismo na divulgação de práticas empreendedoras

sustentáveis que poderão ser replicadas de maneira diferente por outras mulheres interessadas em construir um planeta sustentável.

Compensação:

Para esse tipo de estudo a pesquisadora não oferece compensação financeira, mas um presentinho enviado pelo correio no final do estudo como agradecimento por sua participação.

Confidencialidade:

Quaisquer informações fornecidas por você serão mantidas em confidencialidade e sigilo e não serão usadas para quaisquer outros fins que não seja o projeto de pesquisa. Além disso, a pesquisadora não incluirá nos relatórios de estudo, nem seu nome ou quaisquer informações que possam identificá-la.

Contatos e perguntas:

Fique a vontade para fazer quaisquer perguntas que possa ter. Contudo, se mais tarde tiver perguntas poderá entrar em contato com a pesquisadora através do telefone xx(xxx) xxx-xxxx ou por email: xx@xxxx.com. Se quiser conversar em particular sobre seus direitos como participante, também poderá ligar para a Dra. Leilani Endicott. Ela é representante da Walden University que poderá lhe explicar melhor. O telefone dela é: 1-800-xxx-xxxx, extensão xxxx. O número de aprovação da Walden University para esse

estudo é **IRB will enter approval number here** e esse número expirará em **IRB will enter expiration date**.

A pesquisadora vai lhe dar uma cópia deste formulário para que possa guardar.

Termo de Anuência:

Eu li as informações contidas acima e sinto que entendo o estudo suficientemente bem para tomar uma decisão sobre o meu envolvimento. Assinando abaixo ou clicando aqui (para estudos online), estou concordando com os termos descritos acima.

Nome impresso da participante _____

Data do consentimento _____

Assinatura Eletrônica ou Escrita da Participante _____

Assinatura Eletrônica ou Escrita da Pesquisadora _____

Assinaturas electrónicas são regulamentadas pela Lei Uniforme de Transações Eletrônica.

Legalmente uma "assinatura eletrônica." pode ser nome digitado da pessoa, seu e-mail endereço, ou qualquer outro marcador de identificação. Uma assinatura eletrônica é tão válida quanto uma assinatura por escrito, desde que ambas as partes concordaram em realizar transações eletronicamente.

Appendix F: NIH Certificate of Completion

The National Institute of Health (NIH) Office of Extramural Research certifies that M. Ana Church successfully completed the NIH Web-based training course “Protecting Human Research Participants”.

Date of completion: 01/12/2010

Certification Number: 360070

Appendix G: Interview Protocol

Interview: Brazilian Female Entrepreneurs: Exploring Strategies for Building Sustainable Business Organizations

1. The interview session transpired over long-distance phone communications and began with greetings. After introducing myself to the research participant, I explained what the topic was about and made sure the participant became acquainted with its significance.
2. Subsequently, I expressed appreciation to the participant for accepting to contribute to the study and for devoting some of her time to respond to my request.
3. Next, I invited the participant to examine the consent form, and to feel free to ask for clarification about any matter of concern she might have had prior to accepting and signing the consent form.
4. Then, I assured to the participant that she could keep a copy of the consent form for her records.
5. On the consent form, each participant's name was sequentially replaced by a code as P1, P2, P3, and so on. With a copy of their signed consent form in front of me

I turned on the audio recorder and began the interview by addressing each participant as P1 or P2, and then began the process.

6. On the interview questionnaire form I registered the date, time and participant's location, plus a picture of participant found online, and the name of the city she was from.
7. Each interview comprised 10 open-ended questions and required around 60 minutes including extra time for follow-up questions, and additional clarification phone calls.
8. Upon beginning each interview I made sure to restate to participant the purpose of the study, which was to explore and gain knowledge of the strategies female entrepreneurs in Brazil needed to develop sustainable business organizations.
9. Once each interview ended, I explained to the participant that she would be receiving via email, a copy of the interview transcript as soon as it became available.
10. At the end of the interview process, I showed appreciation to the research participant for investing her time in participating in a study of great significance to the female entrepreneurs of Brazil.