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Barriers for Small Businesses to Adopt Sustainable Practices in the Sioux Falls Area

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BARRIERS FOR SMALL BUSINESSES TO ADOPT SUSTAINABLE PRACTICES

IN THE SIOUX FALLS AREA

by

Meredith King

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ABSTRACT

Barriers for Small Businesses to Adopt Sustainable Practices in the Sioux Falls Area

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Sustainability is a broad concept that encompasses environmental, social, and economic factors to meet current and future needs. Many individuals and large businesses are becoming conscious of the effects they have on the planet and the people around them. However, despite the financial benefits and positive publicity of environmentalism, many businesses are not adopting sustainable practices. This study interviewed local business owners to answer the question "What are the main reasons that small businesses in the Sioux Falls area of South Dakota do or do not adopt sustainable practices that benefit the environment and the community?" Five business owners were interviewed over Zoom. Their responses were analyzed using thematic inductive coding to categorize themes and patterns. Results identified eight themes that both encouraged and challenged businesses with economic reasons acting as the strongest force. This information adds greater depth to the research on the topic of sustainability in businesses which will allow sustainability-minded advocates to better engage this sector. Based on these findings, cities should offer more education and resources to entrepreneurs and improve infrastructure so that the community can easily engage in sustainability.

KEYWORDS: sustainability, business, challenges, corporate social responsibility (CSR), South Dakota, economic.

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Chapter 1: Background- What is Sustainability?

Sustainability must be a crucial part of all operations and decisions, both individually and corporately, because it addresses a wide array of concerns. The future of the planet depends on incorporating sustainability into large-and-small-scale processes. To do so, however, requires a background understanding of the concept and an appreciation for its benefits.

Defining Sustainability

In order to analyze sustainability in different contexts, such as small businesses, it must first be defined. However, this task poses a challenge as sustainability is a broad term with a contested definition. It has morphed over the years, but the concept of humans and nature living in harmony remains at the core (Washington, must2015).

Although the word sustainability has not always existed in common vernacular, the idea of sustainability has been practiced for millennia by Indigenous communities. Hayden Washington describes "old sustainability" in his book *Demystifying Sustainability Towards Real Solutions*. It is much broader than how sustainability is usually thought of today, for it encompasses a spiritual aspect and holds the environment at a sacred level (Washington, 2015). There is great reverence and intrinsic value found in nature that contributes to a balance between humans' needs and the longevity of the environment. It views humans as *a part* of nature, not *apart* from it which makes humans more invested in its well-being (Washington, 2015).

Over time, society's relationship to nature has become detached and individualistic. The rise of modernism during the Renaissance led to an economic, rather than spiritual, lens through which to view nature. The Romantics revolted against this

notion, however, and advocated for a philosophical approach that saw the environment alive with meaning that reached beyond dollar signs (Washington, 2015).

Today, sustainability is commonly defined as using resources to meet both current and future needs. To do so, there are three main areas to address: environmental, social, and economic. For a society to be fully sustainable, it must conserve its natural resources, support its people, and have a strong economy. Oftentimes, when one is missing, the other two cannot be fulfilled in the long-term. These three pillars are frequently displayed in a Venn diagram representing that they are separate spheres but are all connected and affect one another. This concept was used in the interview process as the phrase "sustainable practices" was described as "conserving resources, protecting the environment, and building a strong community."
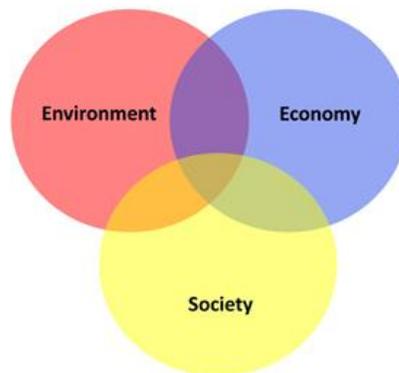
Figure 1- Sustainability encompasses economic, societal, and environmental concerns. These areas are all connected and build off of each other. ("What is Sustainability?," 2013).

Washington points out that there is a weak and strong version of this sustainability. Weak sustainability has a stronger economic emphasis (Ruggerio, 2021) because it justifies passing a degraded earth onto future generations as long as money and assets are also gifted (Washington, 2015). It is a short-term strategy that uses cost-benefit

analysis to reduce ecosystem services to a monetary value, and, in doing so, ignores the fact that humans are dependent on nature and thrive when it thrives (Washington, 2015). Strong sustainability, on the other hand, differentiates natural capital from human capital and has high ethical standards (Washington, 2015). It considers future generations by arguing that no matter how large the profit, the means to get there are important and should not damage the ecosystem (Washington, 2015).

Sustainability has come to mean many things over the years, but it remains an important topic today to preserve the environment for its own sake and the sake of future generations. Many definitions are amorphous and abstract, but it is essential to have a precise definition when conducting a study. For the purposes of this research, the idea of strong sustainability will be used with a particular focus on the environmental and social pillars.

The History of Environmentalism

The history of environmentalism helps explain the evolution of sustainability as a modern-day principle. During the first wave of environmentalism in the US, humans operated out of the "frontier ethic" which assumes nature exists for the benefit of mankind and has infinite resources to meet their needs (Fisher, 2018). This was evident in the Homestead Act of 1862 where the United States government allowed anyone to buy and settle land as long as they developed it (Wesner, 2021). The focus was expansion and extraction for short-term gain instead of conservation and respect. One of the first recognitions of conservation in policy was the 1873 Timber Culture Act which promised 160 acres to anyone that vowed to plant trees on at least twenty-five percent of the land.

This requirement helped prevent soil erosion, but it still upheld the "frontier ethic" as the trees and resources were ultimately used to pioneer dominion over the land.

The second wave of environmentalism can be characterized by an emphasis on conservation when people began to question the treatment of the earth in the 1960s and 70s (Washington, 2015). As the counterculture challenged the status quo (Washington, 2015), public perception and policy shifted to laws that mitigated the problems caused by Westward expansion and the "frontier ethic" (Wesner, 2021). They embraced the ecocentric "sustainable ethic" instead and advocated for the realization that the earth's resources are limited and must be preserved (Wesner, 2021). This era was largely anti-development and anti-business which made it difficult for governments to administer policies (Washington, 2015).

Extensive environmental literature was published during this time such as Rachel Carson's book *Silent Spring* in 1962 ("The Story," 2015). It exposed the effects of the pesticide DDT in a way that common people could understand and acted as a catalyst for awareness and change ("The Story," 2015). Ten years later in 1972, the book *Limits to Growth* examined population, industrialization, pollution, food production, and resource depletion to claim the earth would exceed planetary limits by the middle of the 21st century (Washington, 2015). Although there were many skeptics to this prediction, the authors have been very accurate to date and made others consider the consequences of their actions (Washington, 2015).

This attention on humans' relationship to the environment led to the first world environment conference hosted by the United Nations in 1972. Each country reported on its current environmental situation and proposed measures to solve the problems

(Washington, 2015). It also revealed that the global North was mainly concerned about

pollution and the environmental pillar of sustainability, whereas the South focused on the

social pillar and issues of poverty, disease, and hunger (Washington, 2015). The South,

therefore, valued economic development as the solution which caused clashing

approaches because development often means exploiting natural resources. The bridge

connecting these conflicting concerns between developed and developing countries was

found in the 1987 Brundtland Report also known as *Our Common Future* (Washington,

2015). It provided the most commonly quoted definition of sustainable development as

"development that meets the needs of the present without compromising the ability of

future generations to meet their own needs" ("Our Common Future," 1987*)*. The idea of

sustainable development allows room for economic and social advancement as long as it

avoids over-exploitation and sets the stage for the current, third wave of

environmentalism (Washington, 2015).

   The third, and most recent, wave places an emphasis on businesses as some

corporations see themselves as part of the whole society which functions within the

environment (Washington, 2015). These businesses are value-driven and are sticking out

from the crowd by making sustainability a core priority (Washington, 2015). This wave

embraces the idea of sustainable development because it considers businesses' interests

and does not threaten the structure of industrial societies (Washington, 20215).

   It is worth noting that Washington is actually skeptical of the popular idea of

sustainable development, or "green growth" as described in *Our Common Future.*

Growth seems to be antithetical to sustainability as many of society's environmental

problems have been fueled by the endless drive to expand, update, and innovate (Brown,

2015). Sustainable development is tied to weak sustainability and disproportionately focuses on the economic pillar (Ruggerio, 2021). Economic growth is an infinite process, but the earth has finite resources (Ruggerio, 2021). This oxymoron (Brown, 2015) may show just how far the world is from accurately understanding the essence of sustainability. However, since modern culture does not look like it will slow down any time soon, perhaps the next best thing is to reduce its impact.

Many businesses today are striving to reduce their footprint by operating out of the "land ethic" which views humans as part of the ecosystem which has value regardless of its utility (Fisher, 2018). Aldo Leopold is famous for coining this term and advocating for a "mutually beneficial relationship between civilized men and a civilized landscape" (2004). Humans are not conquerors of the land, but rather have an obligation to it beyond self-interest (Leopold et al., 1989). One business that is adopting the land ethic into its business model is the international home improvement chain Kingfisher. They have goals to responsibly source all their wood products and become forest positive by 2025 ("Planet," 2019). By committing to plant more trees than they cut down, Kingfisher sees the value in nature and honors that while still supporting their business.

These elements from the third wave have bled into the fourth and most recent wave. In this movement, many young activists have also taken a stand against climate change and are demanding action from governments. For instance, Swedish youth environmentalist, Greta Thunberg, started the "Fridays for Future" campaign where students rallied in the streets to demand drastic changes in governments' climate plans. Social media has become a powerful tool to educate and mobilize the masses all over the

world. These influencers are building off of years of impactful environmentalism and getting individuals and businesses more involved.

<center>*<u>Corporate Social Responsibility</u>*</center>

As individuals and businesses pay more attention to sustainability, the term "corporate social responsibility," or CSR, has arisen. CSR is meant to promote sustainability by focusing on each pillar, as explained earlier, to create a well-rounded organization that positively contributes to the future (Bux et al., 2020). It encourages companies to aim higher and think beyond the traditional bottom-line profit by addressing topics such as human rights, community development, conservation, employment, and waste reduction (Bux et al., 2020). It also encourages a company to consider its ethics, transparency, and stakeholder satisfaction (Bux et al., 2020). Organizations accomplish these things through a variety of ways such as volunteering, supporting green initiatives, donating, fundraising for non-profits, and using ethically sourced raw materials.

CSR has become an important focus for many businesses because it is reported to increase profitability and reputation (Bux et al., 2020). In fact, according to a study done to identify the drivers and barriers to green business practices, there are internal and external benefits (Purwandani & Michaud, 2021). Benefits of adopting green practices to internal operations include improved working conditions, cost savings, and improved employee ethical behavior (Purwandani & Michaud, 2021). Gaining a competitive advantage, reducing pollution, and maintaining a positive public image are all considered external benefits (Purwandani & Michaud, 2021).

<center>7</center>

With all of these benefits, the choice to embrace CSR and sustainable action seems obvious, but why are so many companies still engaging in behaviors that degrade environmental resources and disrespect the people they serve? Several studies have tried to answer this question. For example, one study conducted by a group of Chinese professors analyzed the barriers to implementing CSR in the Pakistani manufacturing industry. They concluded that the most critical obstacles were a lack of resources, regulations, standards, and policy incentives (Bux et al., 2020). Additionally, within the textile industry, the major barriers were a lack of knowledge, inadequate training on how to implement green practices, and an overall deficiency of CSR reputation (Bux et al., 2020). Another study specifically examining small businesses also identified that owners viewed it as an extra cost or work burden and were unaware of the potential financial benefits (Purwandani & Michaud, 2021).

Bux et al. propose that the government should play a larger role in reducing these barriers. The government should enforce stronger regulations and standards for CSR to motivate managers toward greener practices (Bux et al., 2020). This may contradict some of the underlying values of CSR, though, as it tends to be voluntary. These researchers view the government as the main stakeholder, however, that should offer companies subsidies and tax breaks so they can contribute to the planet and community's future well-being (Bux et al., 2020). In fact, Bux et al. state, "The government should substantially strengthen the enforcement of regulations and standards and frame policies for the promotion of CSR to create an enabling environment for responsible business behavior" (2020).

However, the results from this study cannot necessarily be applied to other industries or countries, especially developed countries. In addition, most of the literature and media attention has been on large corporations, such as Kingfisher, which have more noticeable impacts on the environment. These reasons highlight how this study in South Dakota is important to identify barriers that small businesses face. Small businesses are the backbone of America as they comprise 99.9% of all firms in the US ("Frequently," 2021). However, they are often overlooked and underrated. The specific question addressed in the study is "What are the main reasons businesses in the Sioux Falls, South Dakota area do or do not adopt sustainable practices that benefit the environment and community?" It is hypothesized that money will be the biggest reason as profit is usually the main goal of any company and small businesses in small towns have a tight profit margin. The answer to this question will help fill the gaps in existing literature and be useful to community members.

Chapter 2: Methods

Recruitment

The first step in the project was applying for approval from the university's Institutional Review Board (IRB). This required specifying information such as the study's purpose, criteria for participant involvement, confidentiality practices, and data collection methods. Once the approval came through, participants could start being contacted and recruited. To be included, participants had to be eighteen years or older, but they were not discriminated by gender, religion, race, or beliefs. They also had to be an owner or manager of a small business in the Vermillion or Sioux Falls area of South

Dakota because those higher in the chain of command typically have more information about the business's functions. The definition of a small business used came, in part, from the US Department of State. They define a small business as an independently owned and operated company in the US that is not dominant in its field ("What is," 2019). The specific size and number of employees vary by industry, but this study determined that the businesses must have no more than thirty employees and one location.

After receiving IRB approval, participants were first contacted by the researcher either via phone or email to schedule an interview. The study and their role in it were briefly described so as not to reveal too much information that would have influenced their answers. The description explained the study's aim to identify the challenges, values, and decisions of small businesses. A consent form (see Appendix B) was also attached to the initial email for further detail, and the researcher verbally went through the form with the participant during each interview.

In total, the researcher performed five interviews with a range of businesses including a coffee shop, bakery, pharmacy, bookstore, and soap store. One interview was with a manager, and the rest were with the company owner. The number of interviews was limited by time constraints and participant availability since many of the small businesses were short-staffed. The names of the businesses and owners are not listed in this paper for confidentiality reasons. The researcher had access to this study population because it was geographically close and contact information was available online.

Data Collection

  An interview was chosen to collect qualitative data since the variables being studied (main barriers to sustainability) are difficult to quantify. It also allowed for deeper discussion and clarification compared to a survey. The interview started with basic "warm-up" questions about the company to make the interviewees comfortable. The questions then moved into open-ended responses about the businesses' operations and environmental concerns with one multiple choice question (see Appendix A for interview questions). A pilot interview was conducted first with an owner of a local coffee shop to test the comprehensibility of the questions, and then, after minor changes, was distributed to the research participants.

  The interviews took place over Zoom and lasted 15-30 minutes. Each one was recorded on the researcher's computer along with the auto-produced transcript. The recordings were stored on a password-protected computer and labeled with a code so the interviewee could not be identified by outsiders. To further protect participants' privacy, all records were deleted after the study concluded.

Data Analysis

  After all the interviews were completed, coding was used to analyze the information. Johnny Saldaña from the University of Arizona defines a code as "a word or short phrase that symbolically assigns a summative, salient, essence-capturing… attribute for a portion of language-based or visual data" (2021). Coding is meant to summarize or condense data into meaningful patterns or themes instead of reducing them (Saldana, 2021). Patterns can be based on similarities, differences, frequency, sequence,

correspondence, or causation (Saldana, 2021). One word or phrase is chosen to represent an entire excerpt which makes the abundance of text more manageable to categorize and aggregate. This method is especially useful when dealing with interview transcripts to draw meaningful conclusions from a wide array of answers.

Specifically, thematic analysis was utilized because it identifies patterns and derives themes through inductive coding ("Deductive," 2021). Inductive coding, compared to deductive coding, is a bottom-up approach that allows for the discovery of new theories as it lets the data speak for itself ("Deductive," 2021). Rather than starting with predetermined codes and finding quotes that fit those parameters, inductive coding groups the data into themes and develops codes from the themes ("Deductive," 2021). Although the researcher began with a hypothesis, it was not used to frame the codes beforehand. Instead, the codes that emerged from the inductive thematic analysis were used to assess the hypothesis.
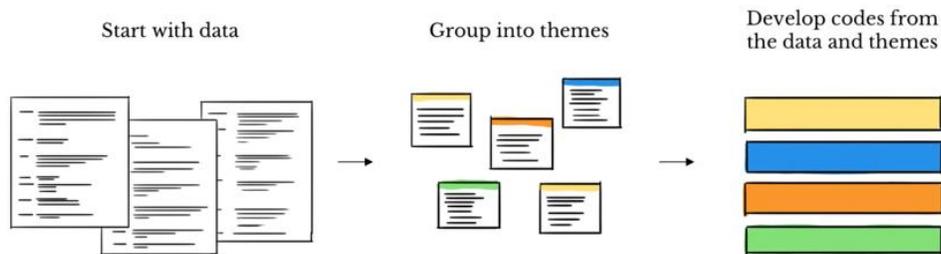
Figure 2- Inductive coding is a bottom-up method that groups the data into themes and then develops codes ("Deductive," 2021).

To ensure accuracy, several cycles of coding were performed. The researcher started with precoding which involves highlighting important phrases from the transcript and making notes of possible themes through the comments feature on a Word document.

However, because the first round of coding is rarely comprehensive or precise, another

cycle was done to create final codes. The codes were compiled in a codebook (see

Appendix C) which grouped similar pieces of text into primary codes to easily analyze

the data. The primary codes were broad categories that were disaggregated into

secondary codes to provide more detail. For example, the "Customer Demand" primary

code had six secondary codes within it including "unreceptive" and "people are

inattentive." There is also a column in the codebook for a brief description and exemplary

quotes. One of the businesses selected was actually a non-profit which does not meet the

definition of a small business, so those responses were not included in the codebook but

are mentioned in the results as a useful comparison.

Chapter 3: Results

Primary Codes

From the four main business owners interviewed, there are eight primary codes

identified that offer insight into why small businesses make the decisions that they do.

They include industry requirements, resource conservation, economic reasons, ignorance,

small business structure, customer demand, accessibility, and environmental reasons.

There was overlap between these themes in almost all the interviews, but the topic

discussed the most was economic reasons which supports the hypothesis. The codes

describe reasons both why companies did *and* did not make sustainable choices

depending on if there was a presence or absence of pressure.

To begin, a prominent barrier that many of the businesses were unable to avoid

was "Industry Requirements." When selling products to the public, each field has legal

demands it must meet. For instance, the bakery interviewed mentioned Food and Drug

Administration (FDA) policies that prevent it from reusing plastic materials for fear of

contamination. In addition, the pharmacy clearly stated that it is illegal for it to reuse

plastic pill bottles out of safety concerns. It also mentioned personal health information

(PHI) and HIPPA prevented it from recycling health forms. Instead, they must be

shredded by a professional service to protect private patient information. Furthermore, it

cannot use smaller pill vials for small prescriptions because there is a certain amount of

information required to fit on every bottle. According to these codes, environmental

considerations were often trumped by legal regulations to ensure customer safety, and

there did not seem to be any sustainability regulations that would have acted as a positive

pressure toward eco-friendly actions.

Another primary theme identified was "Resource Conservation." As a small

business, it is often important to minimize waste to maximize efficiency and stretch one's

capital. The secondary codes in this theme were "Saving Materials," which assesses how

materials are used in innovative ways, and "Energy Efficiency," which mentions changes

made to save energy. The bakery reported switching the way it wrapped its cakes in the

freezer, so instead of wrapping each one individually, they are stacked together to save

plastic wrap. The soap shop also mentioned that it allows customers to buy several

products in bulk which eliminates the need for excessive packaging. Every business

owner interviewed referenced energy efficiency in some manner as well. For example,

the bookstore owner inserted a drop ceiling to reduce the area heated and cooled. The

pharmacy also switched to energy efficient lights several years ago in partnership with

the city. In both these instances, there were underlying motivations, such as saving

money, but it can be concluded that conserving resources is a reason why some small businesses make climate-friendly decisions.

The next major barrier is "Economic Reasons" which was the most consistent theme discussed by every owner. Results confirm the initial hypothesis because seven secondary codes were extracted and referenced over thirteen times. Furthermore, when asked the multiple-choice question of "What would motivate you to add solar panels to the roof of your business?" every interviewee answered with option A: "a grant from the Chamber of Commerce/it would cut your energy bill in half." Every business was acutely concerned about profit and staying open which explains how this theme specifically provided reasons why businesses adopted sustainable practices and why they did not.

To explain, the secondary code, "Price," assesses the extent to which price is important for business decisions. If the price was too high, businesses were deterred from the eco-friendly option. One owner even stated, "I think a lot of times environmental changes come with an added price increase." "Cost-Prohibitive" was a similar code that explained how cost often hinders certain actions. The pharmacy commented that environmental initiatives are not tough for them unless "something was cost-prohibitive." Even if a small business wanted to become more sustainable and saw the intrinsic value in it, the expenses associated with it prevent them from doing so.

On the other hand, when an environmental decision saves a company money, they are more inclined to adopt it, and economic reasoning, therefore, acts as a positive pressure encouraging businesses to be more sustainable. If a sustainable action is free or reduces a cost, businesses are more inclined to practice it. The phrase "Costs Nothing" was quoted by the soap store in reference to reusing boxes. Since saving the inventory

boxes and reusing them to ship products to customers eliminates the need to purchase new shipping materials, it was an easy decision that saves money and helps the planet. The code "Balance of Monetary Factors" expands upon this idea as owners mentioned that environmental actions must have a positive financial impact as well to be considered. This was echoed in the twelfth interview question as two of the four businesses reported they had not made any decisions solely for the sake of the environment. Environmental benefits are usually not a strong enough push. There must also be economic perks in order to be considered.

Another barrier for small businesses that influences economic reasoning is "Customer Demand." If sustainability is not a priority for customers and they are not pressuring companies to become more sustainable, then businesses have little incentive to make costly changes. The lack of customer demand is especially prevalent in the small, rural towns interviewed such as Vermillion and Beresford, South Dakota. "Inattentive" and "Unreceptive" are two secondary codes that describe shoppers' attitudes toward sustainability and make it difficult to establish environmentally conscious business models. For instance, the owner of the soap shop was willing to fully implement a bulk shopping method, but people in her town were unreceptive to the idea and reported that they "don't really focus on that around here." That mindset can persist through generations and make it challenging to try new things as people tend to be set in their ways. The type of industry also seemed to influence customer demand as the owner of the pharmacy thought that environmental publicity for certain business types was insignificant and negligible. This was categorized with the secondary code "Trivial

Publicity" which assesses the perceived unimportance of marketing environmental practices since customers consider other factors more.

"Customer Demand" was found to also act as a positive pressure that encouraged businesses to respond by changing their operations. In Vermillion, citizens inquired about recycling the vials that prescriptions came in. When the pharmacy discovered the bottles could not be recycled in the area, it switched to different ones even though they were more expensive. In this case, pleasing customers and aligning its business values with those of its clients was enough reason to make sustainable choices.

It is important to note that the reason the pharmacy's vials could not be recycled initially was due to the town's recycling program which rejects certain types of plastic. This issue of "Accessibility" was prevalent in multiple interviews and is considered another primary code. The example in Vermillion represents a "Lack of Infrastructure" which highlights how an area's foundations can block sustainable initiatives despite best intentions. This also shows how the premanufactured capital goods that businesses use to produce their own consumer goods are limiting. If they do not have options in the size or material of available products, it makes it difficult to pass along sustainable choices to their customers.

Another central theme that emerged alongside accessibility was "Small Business Structure" which describes the limitations of a small organization within the marketplace. For example, "A Lone Entity" was coded to assess the deficiency of a community of like businesses that can offer support and advice. The owner of the bakery expressed experiencing a lack of network within the food industry to share ideas with. This was also prevalent when the interviewees described their short chain of command. They only have

one or two leaders make decisions due to their small staff size which limits their interaction with someone who may be more knowledgeable in sustainability. The small workforce and time constraints made the owners feel limited and were identified with the code "Capacity." Many owners felt stretched, and one stated, "For me that the time aspect of learning how to do more of those things and in what ways they can apply to our business is probably one of the bigger obstacles." Their capacity is also limited by renting, rather than owning, a storefront. This restricts their decision-making power and can prevent them from implementing sustainable designs because they do not have control over the building. Capacity is also limited by the traditions of an industry as norms and practices that have been passed down can block change. They can prevent new and better operating methods from being used as employees stick to the way they have always done things.

Not all aspects of the "Small Business Structure" acted as barriers to sustainable practices though. Within this theme, the "Impact of Small Businesses" was a code that described the importance of small businesses in affecting the environment, but it also acknowledged their lesser ability compared to large companies. When reflecting on the impact that small businesses can have on the environment, all interviewees discussed the role small businesses play and how individual actions accumulate. For example, one owner recognized the sheer amount of commerce small businesses are responsible for across the country, but it was also mentioned that "the ability to actually impact environmental options, environmental concerns are not nearly as great" compared to multi-national brands. Surprisingly, the supply chain was found to be a positive force toward sustainable swaps in some instances. The mass shortages and delays from the

COVID pandemic made some plastic products unavailable which prompted owners to reuse materials or encourage customers to bring their own reusable cups.

The structure of the small businesses, which forces owners to prioritize their operations, coupled with a lack of customer demand can lead to "Ignorance" which was identified as another primary code. The bakery owner confessed she had not looked into many sustainable practices like using recycled packaging and felt that there was a lack of information about her options. Two of the interviewees admitted a deficiency in sustainability knowledge and cited it as their biggest obstacle. However, they also expressed a desire to learn and even recommended an informational booklet that cities could give to new businesses detailing recycling options or creative recommendations.

The last primary code was titled "Environmental Concerns" which highlighted the value businesses placed on the environment. The soap shop explicitly cited sustainability as one of its main values stating, "Sustainability is big for us." It also explained multiple times that the sustainable choice was the logical choice and was more practical. To illustrate, the shop saved packaging from its suppliers to ship its own goods in rather than purchasing new materials. This saves time and money while reducing waste.

All of these codes combine to present a clear picture of the motivating factors for small businesses in the Sioux Falls area to adopt each pillar of sustainability while providing insight into the challenges that make adoption difficult.

Non-profit Comparison

The above themes were also evident in the interview with the 501(c) non-profit. Economic reasons were even more of a pressing matter with its tight margin as summed up articulately here:

"I think our biggest thing, because we are a nonprofit and where we are, we don't get the same amount of business like that a Starbucks or other places would get. And so, we are limited as far as what we can pay for services. We have to manage pretty tightly because we don't have a huge profit margin and that's not why we're here. We're here to serve the community and as long as we're breaking even or a little above that, that's where we are probably going to be. So, I guess I'm open to doing things as long as there's not a huge cost associated with it because we can't handle that."

The owner was open to energy-efficient appliances and increased recycling, but only if it was a manageable price. This economic constraint was extended to the town the business operated in, as the interviewee described the difference in capacity between a small town and a megalopolis which relates to accessibility and lack of infrastructure. The owner's town was unable to provide curbside recycling, so residents had to drive forty minutes to the recycling center which was time-consuming and burdensome. This was difficult for the non-profit due to its strains on capacity in terms of time availability and staff size.

The non-profit did experience some factors that pushed it toward sustainable action too. For example, their lack of storage space meant they used ingredients in multiple recipes and did not overbuy so food was not wasted. It also used its coffee grounds as a fertilizer to reduce waste and environmental impact. One of the only

differences between this non-profit and the other businesses interviewed was the topic of

morality. The non-profit revealed that it is hard to see their trash bin fill up constantly and

said, "that doesn't make you feel good as a person." This ethical tension shows the non-

profit's concern for sustainability and acts as a motivating factor.

Social Sustainability

All owners/managers interviewed, including that of the non-profit, also referenced

the social pillar of sustainability multiple times. They all cared about the community they

served and emphasized putting their customers first. In small businesses, there is a

heightened sense of commitment to the people that walk in and out of the stores. The

interviewees reported their businesses make donations, source products locally, value

representation, increase accessibility, and celebrate their clients. All of these actions

contribute to a strong and equal society that enhances overall sustainability.

Overall, the primary codes indicate that it is not only difficult to adopt sustainable

practices in a small business, but it is even more difficult to do so in a small town where

there may not be the demand or necessary resources. Several factors that encourage

owners to care about the environment, but money is the biggest barrier to building a

sustainable business model on all three pillars.

Chapter 4: Discussion

Relevance of Results

The findings above were in line with existing literature such as the studies by Bux

et al. and Purwandani and Michaud referenced at the beginning of this paper. A lack of

resources was a similar obstacle found in the research in Pakistan and South Dakota as CSR is an evolving framework that has not yet percolated through the entire marketplace. Specifically for small businesses, as the proprietor of the bookstore noted, owners have many new things to figure out, and the lack of educational materials can make sustainability a frustrating far-off fantasy. Economic reasoning was another similarity between studies, for CSR was viewed as an extra cost. All of the other codes, however, were unique and provided novel insight into a specific area of the economy. For instance, the theme of "industry requirements" reveals there can be distinct complications in each business sector and a tailored solution is required. Furthermore, the secondary codes that describe "small business structure" are specific to small companies which bolsters the existing literature.

Financial reasoning being the most important factor indicates that businesses are pursuing weak sustainability as described earlier as having an economic emphasis that neglects humans' reliance on nature. Monetary cost provided the biggest push and pull showing how profit was the main concern for the small businesses interviewed. Furthermore, none of the owners discussed looking ahead to future generations, which is crucial to the definition of sustainability, and exhibited a short-term focus on staying afloat financially. Although the main goal of any sized business is to make money, environmental impacts cannot be overlooked. The current climate crisis calls for a new triple-bottom-line that incorporates the three pillars of sustainability.

The conversations may have aligned with the land ethic as owners expressed value in the environment regardless of its utility, but the barriers prevented them from fully living that out and participating in the third wave of environmentalism. The soap

store and book shop are pursuing aspects of CSR by making donations, sourcing

responsibly made products, and hosting community events; however, if those are done

only to pursue internal benefits of CSR, like cost-saving, rather than external benefits,

like reducing pollution, the actions are hollow, and the impacts are weak.

<p style="text-align:center">*<u>Recommendations</u>*</p>

These results are meaningful because the first step to solving a problem is to

identify the root causes. There is no more time for band-aid fixes given the state of the

planet today. Rather, there must be bottom-up solutions that make impactful changes

across the world. The barriers to adopting sustainable operations revealed in this study

help narrow the focus on what needs to change to encourage sustainable development.

City governments need to take more ownership in this regard because small businesses

are at the heart of every community. They create a community's culture and can have a

large impact cooperatively. Cities should harness this power and support small

businesses' endeavors toward sustainability by offering more education, infrastructure,

and resources that remove barriers.

Becoming more sustainable is a significant undertaking and can seem

overwhelming, but these themes provide a starting point for cities to focus on. Towns in

the Sioux Falls area can use the information to offer seminars, trainings, and new policies

that make sustainability attainable. They can develop educational materials that

communicate the benefits and importance of sustainability to increase customer demand.

In addition, facilitating a network of local businesses with similar values and ambitions

would be useful to share strategies and feel supported. If grassroots movements arise, companies will have to adapt to satisfy wants and remain competitive.

Cities should also invest in more infrastructure that makes sustainable living accessible. Small, rural towns such as Beresford and Centerville, South Dakota have inadequate recycling programs that make individual environmentalism burdensome. Even if every citizen had the desire to practice sustainability, the structures in place make it impossible. If there was curbside pickup that accepted a wider variety of materials, it would be easier for citizens and businesses alike to engage in sustainable practices.

As mentioned in one interview, the Chamber of Commerce in each city should develop a packet of information and sustainable recommendations to be given to new businesses that open. The packet could include available recycling services, renewable energy providers, energy-saving tips, and a description of the benefits of sustainable operations and CSR. This would combat the "ignorance" barrier as many ordinary citizens starting a business do not come from a sustainability background. It is easy for experts in the sustainability field to assume the knowledge they have is commonplace, but many studies show that is not the case. A booklet that shares this valuable information can assist entrepreneurs in building a sustainable business that avoids the common barriers from day one.

Since economic reasons were the most prevalent barrier, it would make sense for city or state governments to offer economic incentives or subsidies that make sustainability cheaper. For example, corporate taxes could be reduced if the business meets certain standards or achieves a sustainability certification. However, this could become problematic by pushing businesses toward weak, rather than strong,

sustainability. If companies are still making profit the most important factor, then the pillars become uneven and it is not truly sustainable in the long-run.

Limitations

Although this study reaped useful results, there are several limitations and weaknesses to be aware of. Firstly, there was a small pool of participants, so the amount of data examined was restricted. Additional interviews would have provided a comprehensive result and either reinforced the findings or identified additional codes that further explained the rationale behind small business decisions. In addition, the sample was not representative, so it cannot be applied to a wider area such as the state of South Dakota or the United States at large. Certain industries and locations were unintentionally overlooked due to researcher capacity which, therefore, limits the transferability of the results.

Another weakness of the study was the repetitious nature of the interview questions which may have influenced the participants' responses. In several questions, the researcher provided examples of possible sustainable practices such as using recycled packaging and increasing the amount of recycling on site. These examples were given to help spark ideas, especially since the interviewees' knowledge of sustainability was unknown; however, despite best intentions, the examples might have prevented original thought from the interviewees. The researcher also asked different follow-up questions in each meeting to clarify responses and promote a relaxed experience. This meant that all control variables were not held constant and may have also skewed results.

Moreover, the thematic coding method of these results is a highly subjective technique. Coding is an effective way to analyze and aggregate qualitative data, but it is not immune to the researcher's discretion or bias. Two researchers could code the same data and determine different themes for instance. If there was more time for this study, the researcher would have cross-examined the codes with other researchers and received additional feedback to verify the results.

Future Research

This project is just the launch point for countless future research paths. Once these errors are remedied, the new information gleaned from offshoot research can improve CSR and guide a wide array of business leaders to a more sustainable future. For instance, this project did not include any businesses in the service industry. All the owners interviewed offered a tangible product, like a book, rather than a tire change or tax review. Furthermore, it would be useful to distinguish between urban and rural areas since only one business in this research actually resided in the city of Sioux Falls. All the other businesses were in suburban or rural towns outside of Sioux Falls where the citizens may have different values that influenced their decisions. It would be interesting to compare the results to service businesses to see if they adopt more sustainable practices or have different standards since they do more than sell a physical product.

It would also be beneficial to ask the same interview questions to large, wealthy franchises in the state. All the small business owners indicated in the multiple-choice question that they would need economic assistance or benefit to install solar panels. Since large, successful corporations are typically already financially stable, it would be

insightful to hear their answers. Are economic reasons always the main concern no matter how rich a company is? If so, then there is no reason for a business to wait until it is wealthier to start making sustainable choices.

Overall, this study was successful in identifying the main reasons why small businesses do or do not act sustainably despite existing in, what seems to be, a growing environmental movement. Although profit will always be a major concern for businesses, other barriers can be removed with city governments offering more education, resources, and infrastructure. It is hoped that all businesses, big or small, will turn from the traditional bottom-line and adopt CSR strategies that are built on the three pillars of sustainability because that will determine the future.

APPENDECIES

Appendix A: Interview Questions

1. How long have you been in business?

2. How did you start the business/working for the business?

3. What are your business's values?

4. Where would you like this business to be in five years?

5. Who makes the decisions and what does your chain of command look like?

6. What are the day-to-day activities/operations in the company?

    a. How do environmental considerations/recycling fit into that?

7. Do you ever look to increase the amount of recycling or other ways to reduce waste in your business? Why or why not?

8. What factors do you think customers consider the most when choosing your type of business (e.g. coffee shop, restaurant, printing shop)?

9. What would motivate you to add solar panels to the roof of your business?

    a. Grant from the Chamber of Commerce/it would cut your energy bill in half

    b. Customers signing a petition for your business to get panels

    c. If the benefits of renewable energy were clearly explained

    d. If it resulted in positive publicity for the company

10. How likely would it be for your company to make energy-efficient appliance updates or use recycled packaging? (If you already have them, what made you decide to do so?)

11. What are the biggest obstacles to adopting sustainable practices in your business? By sustainable I mean conserving resources, protecting the environment, and building a strong community.

12. Has your business done anything solely for the sake of the environment?

13. What could you do to reduce the environmental impact of your company?

    a. Why haven't you done that yet?

14. Do you think the responsibility to sustainability of small businesses is the same as large corporations? Why?

Appendix B: Consent Form

UNIVERSITY OF SOUTH DAKOTA
Institutional Review Board
Informed Consent Statement

Title of Project: Decision Making by Small Businesses

Principal Investigator: Joseph Kantenbacher, 201C Akeley Lawrence, Vermillion, SD
57069

                        (605) 677-5649 Joseph.Kantenbacher@usd.edu

Other Investigators: Meredith King, Vermillion, SD 57069

Invitation to be Part of a Research Study

You are invited to participate in a research study. In order to participate, you must be at least 18 years old, speak English, and be an owner or manager of a small business. Taking part in this research project is voluntary. Please take time to read this entire form and ask questions before deciding whether to take part in this research project.

What is the study about and why are we doing it?

The purpose of the study is to understand how small businesses in the Vermillion, Sioux Falls area make decisions and what factors influence those decisions the most. It also aims to identify the businesses' main priorities. About 15 people will take part in this research.

What will happen if you take part in this study?

If you agree to take part in this study, you will be asked to conduct a 30-minute interview with the researcher over Zoom or in-person. You may be contacted by the researcher after the interview for follow up questions if needed. The interview will be digitally recorded so the researcher can transcribe and analyze it later, you have the option to keep your camera off during the interview.

What risks might result from being in this study?

There are no risks in participating in this research beyond those experienced in everyday life. For instance, you may become frustrated when completing an interview, but you may stop at any time or chose not to answer a question.

How could you benefit from this study?

Although there are no direct benefits, you might benefit by reflecting on your business's practices which can lead to positive changes for your employees, customers, and operations. If you do not directly benefit from being in this study, others may benefit because they will see what is preventing or encouraging small businesses from making certain decisions. This information could help the university or community support local businesses and work together.

How will we protect your information?

The records of this study will be kept confidential to the extent permitted by law. Any report published with the results of this study will remain confidential and will be disclosed only with your permission or as required by law. To protect your privacy, we will not include any information that could identify you. We will protect the confidentiality of the research data by storing audio files on a password protected computer that is only accessible to the researcher. The files will be labeled with a letter, such as X or Y, instead of the individual's or company's name. There will be a document that lists which letter corresponds to which interview, but that will also be password protected. All recordings will be deleted after the study is complete. If quotes are used in the research, you will not be identified.

It is possible that other people may need to see the information we collect about you. These people work for the University of South Dakota, such as, Joseph Kantenbacher and other agencies as required by law or allowed by federal regulations.

Your Participation in this Study is Voluntary

It is completely up to you to decide to be in this research study. Participating in this study is voluntary. Even if you decide to be part of the study now, you may change your mind and stop at any time. You do not have to answer any questions you do not want to answer.

Contact Information for the Study Team and Questions about the Research

The researchers conducting this study are Meredith King and Joseph Kantenbacher. You may ask any questions you have now. If you have questions, concerns, or complaints about the research, please contact Meredith King at Meredith.King@coyotes.usd.edu during the day.

If you have questions regarding your rights as a research subject, you may contact The University of South Dakota- Office of Human Subjects Protection at (605) 658-3743. You may also call this number with problems, complaints, or concerns about the research. Please call this number if you cannot reach research staff, or you wish to talk with someone who is an informed individual who is independent of the research team.

Your Consent

Before agreeing to be part of the research, please be sure that you understand what the study is about. Keep this copy of this document for your records. If you have any questions about the study later, you can contact the study team using the information provided above.

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Appendix C: Codebook

Primary Code	Secondary Code	Quote/Description
Industry Requirements		
	FDA Policies	Assesses regulations that food service must meet for consumer safety. "… the food service industry is I would say notoriously terrible at environmental concerns. Part of that I would say like, is how stringent like FDA policies and how we want our food to be prepared right…"
	Illegal	"But that is not allowed. That's illegal for us to do that actually and it that's just safety concerns…"
	Personal Health Information	Assesses measures that must be taken to protect PHI.
	HIPPA	Mentions HIPPA as legal barrier to recycling health documents
	Required Labels	Business was unable to use smaller packages due to required labeling. "But it has to be something that can still be very well and clearly labeled. There's a lot of things that are required to go on a prescription to be able to be given to someone."
	Customer Safety	"I definitely recycle, and we try to reuse as much as we can, while also keeping my customer safety at hand and like regulations that we have to follow."
Resource Conservation		
	Saving Materials	Assesses using materials in innovative ways.

		"I've switched the way that I wrap those so it's not each individual one, but you can stack them up so using less plastic every time." "There's not really as big of a need for packaging right which is why I really, really like the bulk model."
	Energy Efficiency	Mentions making changes to save energy. "We're replacing with more energy efficient lighting options."
Economic Reasons		
	Money as Motivation	Assesses how money makes owners more likely to add solar panels to roof. "I think money would be the first thing that would get me to do it."
	Price	Assesses extent to which price is important for business decisions. "I think a lot of times environmental changes come with an added price increase."
	Cost Prohibitive	Mentions how cost often prohibits certain actions. "I really don't feel like it's that tough for us unless something was cost prohibitive."
	Tight Margin	Assesses the lack of disposable profit a small business has. "A lot of small businesses run on a very tight margin, and you know there's kind of a limit to, you know what decisions you can handle I guess what you can absorb into your business."
	Financially Stable	Assesses the goal to stay in business.

		"I'd like to be financially stable, you know, we just started I still don't know if this is an idea that's going to, you know, still be around in five years."
	Costs Nothing	Sustainable actions are often adopted if they are free. "It's easy for me to do the recycling with the boxes and the shipping and right that cost me nothing."
	Balance of monetary factors	Mentions necessity of environmental actions to have positive financial impact.
Ignorance		
	Have not thought about sustainability	"I honestly I haven't looked into that." "And then I would also say that there's like, lack of information on what options are."
	Trying to learn	Mentions lack of proficiency in sustainability knowledge and desire to learn.
	Unsure of third-party processing	Mentions uncertainty of how materials are processed outside their business. "Now, what happened with it at that point, I guess I'm not entirely sure I'm we use a large company that a lot of other entities around here."
Small Business Structure		
	A Lone Entity	Assesses deficiency in a community of similar businesses for advice and support. "I don't know that I have the community of other restaurant owners that like I think sometimes helps to bounce around ideas."

| | Tradition | Assesses how norms in the industry can block change.

"Some of it is just the way that I've learned to do it." |
|---|---|---|
| | Impact of Small Businesses | Mentions how small businesses have a role to play and how individual actions add up, but those may not be as great as large corporations.

"I think as small businesses we still do compose a lot of business that goes on in the US."

"We all live here. This is all of our problems. This is all of our responsibility."

"The ability to actually impact environmental options, environmental concerns is not nearly as great." |
| | Supply Chain | Plastic material shortages incentivize using reusable items. |
| | New Company | Assess the other pressing issues a new business must address first.

"I'm still brand new as a business owner and entirely businesses is brand new. So, there are so many things I'm still trying to learn." |
| | Capacity | Mentions limits in time and staff size for a small business to address all issues.

"I mean those are thousands of dollars and I there's there seems to be hotter fires, you know."

"I know that there are some things that you can't do it."

"For me that the time aspect of learning how to do more of those things and in what ways |

		they can apply our business is probably one of the bigger obstacles."
	Renting Business Space	Renting limits a business proprietor's decision making power. "I don't own the building, so I really don't have any control over that."
Customer Demand		
	Customers asking about recycling	"Recycling and that sort of stuff is important to the people in Vermillion and to a lot of our customers and so we thought, you know, we decided that that that was important for us to."
	People are Inattentive	Many people in the location of the study do not focus on sustainability. "I think that people don't really focus on that around here."
	Unreceptive	Assesses the difficulty in establishing an environmentally conscious business model because locals are unreceptive. "I would go all in if people were receptive to it but that doesn't seem to be a thing."
	Want Pretty Packaging	Mentions need to nicely package gift items to fulfill customer desire. "They want stuff kind of bundled up nicer."
	Trivial Publicity	Assesses the perceived unimportance of environmental PR for certain business types and customers. "In the type of business that we have, I don't know that any amount of publicity regarding that sort of thing would do a whole lot for us. I think for a ----- I mean I feel like the factors

		of people choosing a ------- are greater than that."
	People like what they are used to	Mentions customers' comfort level and apprehension to change. "I don't know, and like people like what they're used to."
Accessibility		
	Lack of Infrastructure	Mentions locations do not have necessary structures. "It turned out they couldn't be used by those here in Vermillion."
	Manufactured Products	Mentions how size or material of available products prevent sustainable switches. "So maybe someday a manufactured product that is better in those aspects."
Environmental Reasons		
	For the sake of the environment	Mentions decision had no financial benefit but was just for the environment.
	Sustainability	Mentions sustainability as an important business value. "Sustainability is big for us."
	Logical Choice	Mentions how the sustainable choice is the most practical. "We've been really intentional about that just because it just makes sense."

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