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Strategies Small Restaurant Owners Use to Reduce Food Waste and Increase Profits

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Walden University

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Walden University

College of Management and Technology

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Fabian Makani

has been found to be complete and satisfactory in all respects,
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Walden University
2016

Abstract

Strategies Small Restaurant Owners Use to Reduce Food Waste and Increase Profits

by

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MS, University of Maryland, 2012

BS, Southeastern University, 2001

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

Walden University

January 2017

Abstract

There were 133 billion pounds of food that went to waste in the United States in 2014, leading to \$161.6 billion in economic loss. Of this waste, 89 billion pounds occurred in restaurants and other food service facilities. A case study was used to explore the strategies small, independent, family-owned restaurants owners used to reduce food waste. Four small independent, family-owned restaurants owners located in the Washington, DC, metro area participated in the study. These owners were selected based on their revenue and years of survival. Stakeholders theory was the conceptual framework in which the study was grounded. Face-to-face interviews with participants and company financial documents comprised the data. Interview transcripts, member checking results, and financial documents were analyzed for emergent themes. The 3 themes that emerged from this study are employee training, communication among stakeholders, and customer loyalty. The implications for social change include the potential to provide new strategies that can help small, independent, family-owned restaurants reduce food waste, increase profits, and improve the economic conditions of communities in the Washington, DC metro area.

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Dedication

I thank the Almighty, through whom all things are possible, for guiding and blessing me throughout this doctoral study project. I dedicate this dissertation to my sons Osca and Ronald who have been inspirational along the way. Boys, thank you for your patience, love, support, and encouragement. I could not have done it without you. I trust that this achievement will inspire you to create your own educational greatness in life.

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Section 1: Foundation of the Study

Food waste in the U.S. restaurant industry has increased exponentially in the past few years. Up to 10% of food purchased by restaurants does not reach the customer because of waste at different stages of the food chain (Buzby & Hyman, 2012; Gunders, 2012). Researchers have focused on food waste in homes, but studies on restaurant food waste are lacking, even though the restaurant industry is critically important to the U.S. economy, as it is the largest private sector employer with an estimated 14 million employees, which is equivalent to 10% of the U.S. workforce (SBA, 2014). In 2015, researchers at the U.S. Small Business Administration (SBA) reported that there are 1 million restaurants in the United States and, together with other food service facilities, they generated close to \$907.2 billion in annual sales. Meanwhile, researchers have found that 67% of new restaurants go out of business within the first 3 years (Parsa, Self, Njite, & King, 2005).

Background of the Problem

Food waste has attracted the attention of researchers, the media, politicians, and others, largely because of its far-reaching effects on the economy and the environment (Buzby, Farah-Wells, & Hyman, 2014). In 2014, researchers at the U.S. Department of Agriculture's (USDA's) Economic Research Service (ERS) announced that 31%, or 133 billion pounds of the 430 billion pounds of food available in the United States, end up as waste (Buzby et al., 2014). The estimated cost for this waste was \$161.6 billion. Of the food wasted, 89 billion pounds occurred in restaurants and other food service facilities (Buzby et al., 2014; Gunders, 2012). Baseline strategies to identify and understand the

effects of food waste and ultimately reduce food waste in restaurants are lacking largely because past research efforts have focused mostly on household food waste (Buzby et al., 2014; Buzby & Hyman, 2012; Buzby, Wells, & Bentley, 2013; Evans, Campbell, & Murcott, 2012; Gunders, 2012; Kantor, Lipton, Manchester, & Oliveira, 1997; Lipinski et al., 2013). Wasting food is tantamount to wasting the resources such as water, energy, and land used to produce the food in the first place (Lipinski et al., 2013).

Problem Statement

Food waste in U.S. restaurants has been increasing steadily since 1974 (USDA, 2014). In 2011, an estimated 89 billion pounds of food waste occurred in restaurants and other food service facilities in the United States (Buzby et al., 2014). In 2014, the restaurant industry employed 10% of the U.S. workforce and generated \$680.2 billion in revenue from sales, which accounted for 4% of the U.S. gross national product (SBA, 2015). The general business problem is that food waste negatively affects some small, independent, family-owned restaurant owners resulting in loss of profitability (SBA, 2015). The specific business problem is that some small, independent, family-owned restaurant owners in Washington DC metro area lack strategies to reduce food waste to increase profits.

Purpose Statement

The purpose of this qualitative multiple-case study was to explore strategies that small, independent, family-owned restaurant owners use to reduce food waste and increase profits. The research population for this study consisted of four small, independent, family-owned restaurants that generate no more than \$500,000 in annual

revenue with a maximum of four employees and have been in business for five years or more in the Washington, DC, metropolitan area. The implications for positive social change include an increase in profits, job creation, and environmental improvement for residents of the Washington, DC, metropolitan area.

Nature of the Study

The three most commonly used scholarly research methods are quantitative, mixed method, and qualitative method (Myers, 2013). Quantitative researchers use statistics involving numbers, facts, and figures collected through a survey system to produce quantifiable and generalizable conclusions (Mertens, 2014; Myers, 2013). Mixed method researchers combine both qualitative and quantitative in the same study to capture the strengths and perspectives of each method (Mertens, 2014). Qualitative study researchers collect data from face-to-face interviews, documents, and artifacts; analyze and interpret the data; and draw conclusions (Myers, 2013; Yin, 2014). I used a qualitative method for this study to interview four carefully selected small, independent, family-owned restaurant owners to learn the strategies they use to reduce food waste in their restaurants. As I did not intend to conduct surveys or generalize the findings to all restaurants in the United States, I did not use quantitative or mixed methods to conduct this study. Only the qualitative inquiry was appropriate.

Within the qualitative study construct, notable research design methods include narrative, ethnographical, phenomenological, grounded theory, and case studies (Myers, 2013; Yin, 2014). Narrative research involves collecting and documenting stories of individual experiences in the historical context (Paschen & Ison, 2014). I was not

interested in collecting stories about participants' experiences. Therefore, the narrative design was not ideal for this inquiry. Ethnographical researchers observe people's experiences through cultural or racial prisms (Hohmann, & Shear, 2014). Inquiry about food waste in small restaurants does not entail an ethnic, cultural, or racial dimension. Hence, ethnographical design was not suitable for this research. Phenomenological research involves studying a small group of participants' experience regarding the social events or shared experiences that a researcher needs to understand and explain (Blum, 2015). This research was about a business problem and not a social problem.

Phenomenological design could not address the business problem raised in the research question. Researchers use grounded theory to construct, interpret, and formulate theories (Charmaz, 2014; Corbin & Strauss, 2014; Myers, 2013). I was not seeking to construct theories or mysteries. Hence, the grounded theory was not the best design for this study. Case study research involves the flexibility for researchers to interview participants in detail to understand a phenomenon. Since I sought to identify the strategies that family-owned restaurant owners use to reduce food waste, survive, and thrive in business beyond the first five years by answering the research question, case study design was the most appropriate design.

Research Question

The overarching research question for this study was as follows: What strategies do small, independent, family-owned restaurant owners use to reduce food waste and increase profits?

Interview Questions

I interviewed participants to explore the strategies they use to reduce food waste. I posed the following semistructured interview questions to the restaurant owners:

1. What food waste reduction strategies do you use in this restaurant to increase profits?
2. What challenges do you face when you apply the food waste reduction strategies designed to enhance profitability?
3. What time, money, and other resources do you allocate to food waste reduction strategies that help increase profits?
4. What business activities do you engage in that demonstrate your commitment and support to reduce food waste and increase profits?
5. What strategies have you used to retrieve edible food that would otherwise go to waste and distribute it to those in need and in what ways do such strategies affect profitability?
6. Please describe and explain your thoughts on any new food waste reduction strategies that you plan to use in the future to increase profitability.
7. What additional information can you provide to help me understand the strategies you use to reduce food waste and increase profits?

Conceptual Framework

Stakeholder theory is a business framework leaders use to identify values, relationships, and practices within an organizational setting (Schlierer et al., 2012). The stakeholder theory dates back to the Strategic management: A stakeholder approach

seminal work of Edward Freeman in 1984. Freeman contended that firm leaders must address the interests of individuals or groups of shareholders affiliated with the organization (Fernandez-Feijo, Romero, & Ruiz, 2014). Freeman used the stakeholder theory to explain the relationship between business entities and their internal and external stakeholders based on the premise that business owners who pay attention to the interests of shareholders tend to thrive (Harrison & Wicks, 2012). The earlier work of Freeman underwent expansion by Donaldson and Preston (1995).

Small, independent, family-owned restaurant owners use stakeholder theory to manage the strategic interests of their operations (Demirel & Öner, 2015). On a macro scale, business owners must identify who the critical stakeholders are and understand their influence. They also need to manage stakeholders' interests to determine immediate strategic goals and future profitability prospects. Finally, they need to develop strategies to handle powerful stakeholders who can influence the direction of the company and understand the effect of such stakeholder dynamics based on interactions between stakeholders and prospective stakeholders (Ackermann & Eden, 2011). Stakeholder theory fits this study since it is instrumental in mobilizing resources to reduce food waste and generate profits. Through stakeholders theory, small, independent, family-owned restaurant owners create accountability matrices they can use to distribute and balance resources for profitable outcome.

Operational Definitions

Food supply chain: Food supply chain represents the processes, inputs, outputs, and stakeholders that take food from the farm to the plate for consumption (Hawkes et al., 2013).

Food value chain: The food value chain is the system of organizations, people, and activities involved in moving food from the farm to the consumer, including the consumption process and the losses that occur at the end of the chain (Gómez & Ricketts, 2013).

Food waste: Food waste refers to the end products in the food supply chain converted, discarded, lost, degraded or consumed by pests or whose economic value is less than the cost of collection and recovery for use (Lin et al., 2013).

Green: Green refers to actions such as eco-purchasing or recycling used by practitioners to reduce or eliminate environmental degradation (Namkung & Jang, 2013).

Stakeholder: Stakeholders are internal and external people or entities who have an interest in an organization and who suffer the consequences or enjoy the benefits of the actions and decisions the leaders of the organization make. They include investors, customers, the community, workers, residents, and the government (Fassin, 2012).

Sustainability: Sustainability refers to the business programs, products, and practices that require good environmental and social practices to ensure resource continuity (Markard, Raven, & Truffer, 2012).

Assumptions, Limitations, and Delimitations

The following is an explanation of the assumptions, limitations, and delimitations. Assumptions are facts beyond the control of the researcher. Limitations represent the potential weaknesses of the study. Delimitations are boundaries used to control the scope of the research.

Assumptions

Assumptions are ideas, theories, and principles that researchers recognize to be true and factual and are not subject to further inquiries (Jansson, 2013). For this study, my first assumption was that participants were willing to discuss, openly and honestly, their strategies for success in reducing food waste in a one-on-one interview and that participants would answer questions in detail without bias, prejudice, or deception. My second assumption was that case study was the best design approach to explore the strategies that restaurant owners in the Washington, DC, metropolitan area use to generate profits and survive in business beyond the first five years of operations (Da Mota Perosa, Naslund, & Jasmand, 2012). The third assumption was that stakeholder theory was the appropriate framework in which to ground this research (De Lange, Busch, & Delgado-Ceballos, 2012).

Limitations

Limitations in qualitative research encompass weaknesses that potentially affect the outcome of the study (Brutus, Aguinis, & Wassmer, 2013). First, the sample size of four owners of small, independent, family-owned restaurants may not be fully representative of every restaurant in the Washington, DC, area; second, participants may

not be truthful and open when answering interview questions. Any level of dishonesty could have affected the findings of a study (Shalvi & De Dreu, 2014; Smith & Noble, 2014). Third, the interview process could intimidate participants. Fourth, participants may fear that I will not keep their identities and responses confidential. Fifth, researcher bias, the tone of voice, or appearance could affect participants' perception of the interview questions leading to biased responses (Smith & Noble, 2014).

Delimitations

Bartoska and Subert (2012) described delimitations as boundaries that researchers establish to narrow the scope of the study. The delimitations of this study included the participant sample size, geographical region, business type, and number of years in business. These delimitations were suitable in an exploration of a population of four small, independent, family-owned restaurants with a specific focus on the useful strategies to reduce food waste. I sought to gain an understanding of the phenomenon from a detailed study. A study purporting to explore the strategies owners use to minimize food waste from a broader geographical area with dissimilar experiences would have diluted the value of information collected (Al-Rimawi, Odeh, Bisher, Abbadi, & Qabbajeh, 2014). In the context of a case study design, a sample size of four small, independent, family-owned restaurants was adequate for isolating the strategies small family-owned restaurant owners in the Washington, DC, metropolitan area use to minimize waste, increase profits, and protect the environment. The delimitations of this study support a detailed inquiry on the four family-owned restaurants, as I did not seek to generalize the results of this research to all restaurants in the United States.

Significance of the Study

The restaurant industry is the largest private-sector employer in the United States, with an estimated 14 million people, or 10% of the U.S. workforce, on the payroll (SBA, 2015). Studying and learning the strategies successful small, independent, family-owned restaurant owners use to reduce food waste and to increase profits is important. New restaurant owners might use the findings to increase the prospects for survival in an industry where the rate of business failure is relatively high. There are 1 million restaurants in the United States, which together with other food service facilities generated approximately \$907.2 billion in annual sales (SBA, 2015). Small independent, family-owned restaurant owners might use the results of this study to look at how they procure, store, refrigerate, and rotate their inventories and to learn ways to reduce food waste, earn better profits, and increase the prospects for survival in the business. If small, independent, family-owned restaurant owners can minimize food waste, they will increase profit margins and create more employment in the communities where they operate. They will save money, prosper in business, and eventually reduce the prices of food and help improve the environment (Besser, 2012). Reducing food waste in area restaurants will decrease the amount of waste shipped to area landfills, reduce the carbon footprint generated, and improve the quality of life for area residents.

A Review of the Professional and Academic Literature

The purpose of this study was to explore the strategies that small, independent, family-owned restaurant owners use to reduce food waste, increase profits, and survive in business beyond 5 years. I used this professional and academic literature review to

analyze, compare, and contrast existing research literature on restaurant food waste.

Through literature reviews, researchers identify prior studies that contribute to the current research, establish a conceptual framework in which to ground the current research, identify reference sources, analyze results, and draw conclusions (Rowley, 2012). By conducting a literature review, researchers avoid duplicating research and contribute to existing literature (Rowley, 2012).

I searched the business and management databases from the Walden University Library database for related literature. I reviewed and synthesized peer-reviewed articles, most of which were within 5 years of the anticipated date of approval by the chief academic officer. Specific databases for this study included ABI/INFORM Complete and Google Scholar. Other sources included Science Direct; Hospitality and Tourism Complete; EBSCOhost; ProQuest; Emerald Management Journal; Sage Premier; government databases such as SBA, USDA, U.S. Census Bureau, and U.S. Environmental Protection Agency; books, seminal works, the World Bank, and the United Nations. I focused on the relevance of stakeholder theory to businesses in general and the restaurant industry in particular. I explored discussions on stakeholder theory in several categories. To underscore the role of stakeholders in the restaurant industry and to justify the appropriateness of stakeholder theory to this study, I tailored the search on the importance of reducing food waste in area restaurants to increase profits and improve the odds for restaurant survival in business beyond 5 years. I have 210 references for this study; 88% have a publication date within 5 years of my anticipated approval date and 89% are from peer-reviewed journals.

The keywords in this study are: *Food waste, food chains, restaurant, stakeholders, sustainability, food loss, corporate social responsibility, fine dining, chain restaurants, and entrepreneurs.*

Stakeholder Theory

The foundation for this study was grounded in the stakeholder theory. Stakeholder theory is not a recent phenomenon, as it dates back to the *Strategic management: A stakeholder approach* seminal work of Edward Freeman published in 1984. Freeman outlined the premise of stakeholder theory in relation to the decisions that managers make when responding to stakeholders who can affect firms. Freeman argued that business leaders were under obligation to make decisions that reflected only the wishes of shareholders. Researchers have since advanced opposing views that leaders of corporations must accommodate a wide spectrum of stakeholders. Support for this view came from Madsen and Bingham (2014), who suggested that leaders of corporations must establish networks in communities where the organizations operate for social good and for profitability. Almost all organizations have internal and external stakeholders that influence the decision-making process (Madsen & Bingham, 2014; Tang & Tang, 2012). Internal stakeholders are mainly employees and managers, whereas external stakeholders include customers, suppliers, the community, the government, and others (Tang & Tang, 2012). By contrast, some researchers have referred to stakeholders as groups that support and maintain organizations in the marketplace (Ackermann & Eden, 2011). Support from these groups is critical, as recipient organizations would not survive without it. Leaders of firms sometimes fail to capture the opportunities to establish working relationships

with stakeholders when managers make decisions that do not align with their expectations. Tang and Tang contended that one way managers establish credibility with stakeholders is to encourage their input. By allowing stakeholder input, managers can improve the corporate decision-making process and expose companies to greater pools of ideas. Some companies even encourage networking with stakeholders to address corporate issues. Tang and Tang (2012) insisted that building networks with stakeholders enable company leaders to explore all sorts of business possibilities. Zanjirchi and Moradi (2012) noted that the application of stakeholder theory has expanded, and researchers apply it in corporate social responsibility (CSR) studies, business ethics, and project management. In the 21st century, it is common to see companies, governments, and other stakeholders bringing together different perspectives, values, and cultures to solve complex problems. Ng and Sears (2012) pointed out that working with stakeholder theory enables actors to assess the impact of organizations on its stakeholders. Ng and Sears observed that the notion that corporations have rights and responsibilities and qualify as citizens in the jurisdictions where they operate raised questions about democracy and accountability to stakeholders.

Meanwhile, Fassin (2012) contended that key applications of stakeholder theory, notably descriptive, instrumental, and normative, are critical for establishing cordial relationships among stakeholders. From a normative point of view, company leaders take into account the rights and expectations of the stakeholders. Normative perspectives reflect on the moral and ethical values of the company based on the premise that all stakeholders have intrinsic value, and it is imperative that organizational leaders address

the interests of stakeholders that create value for them (Brower & Mahajan, 2013; Fernandez-Feijo et al., 2014; Garcia-Castro & Aguilera, 2015). Although most scholars of stakeholder theory focus on economic value, Harrison and Wicks (2013) introduced moral perspectives involving stakeholders' rights, privileges, and freedoms. Harrison and Wicks argued that in addition to economic value, the freedom for stakeholders to decide where to live and work and what to buy and under what terms deserves further exploration as part of the value package. As such, the push toward individual freedoms among stakeholders continues to define the relationships between companies and stakeholders (Harrison & Wicks, 2013).

Garrod et al. (2013) advanced the argument that involving stakeholders in the planning process generates better understanding among stakeholders. Researchers consider planning as a forward-looking strategy used by corporations to achieve goals. Consequently, some stakeholders are critical to the corporate decision-making process and often act as agents of change. Brower and Mahajan (2013) noted that the central characteristic of stakeholder theory is that for an organization to thrive, leaders must pay attention to stakeholders to create and distribute value to them. Managers must also understand the stakeholders' mind-set to protect and balance the competing interests of stakeholders. In their support of Freeman's stakeholder theory, Jensen and Sandstrom (2013) indicated that stakeholders do not think monolithically and that what may be ethical and acceptable to one stakeholder may be unethical to another stakeholder. Stakeholders have been pushing for corporate ethical auditing in the past few decades, and many organizational leaders are undertaking ethical auditing in response to

stakeholder demands. The auditing process is simply the flow of information from companies to stakeholders in which companies try to justify their actions to stakeholders.

Stakeholder theory can serve as a framework to highlight the events and decisions that business owners make and the implications of such decisions on stakeholders and the economy (Garcés-Ayerbe, Rivera-Torres, & Murillo-Luna, 2012; Girard & Sobczak, 2012). Within the restaurant industry, leaders often rely on stakeholder theory to formulate and execute strategic goals and objectives from a diverse set of stakeholders and to identify ways to manage critical stakeholders' interests to safeguard prospects and opportunities (Demirel & Öner, 2015). Brower and Mahajan (2013) found that stakeholders are increasingly applying pressure to organizations with demands and challenges unknown only a few years ago. For example, until recently, restaurant managers counted food waste as part of the cost of doing business, but vocal stakeholders are quick to point out the damage that food waste inflicts on the environment. Trenberth and Fasullo (2013) contended that food wastage is more than the cost of doing business, as it directly affects restaurant profitability. Increases in food prices have bolstered this argument, especially since researchers have shown a decrease in profit margins in the industry and continued wastage is likely to receive increased attention from industry stakeholders (Berkowitz, Marquart, Reicks, Mykerezzi, & Degeneffe, 2014).

Freeman explained the stakeholder theory as the relationship between business entities and internal as well as external stakeholders based on the premise that business owners who pay attention to the interests of stakeholders have the potential to succeed in business (Harrison & Wicks, 2012). Donaldson and Preston (1995) disagreed with earlier

work by Freeman in which Freeman contended that little evidence showed that stakeholder principles translated into superior business performance. However, recent studies have shown that firms operating with strong stakeholder connections perform better. Ackermann and Eden (2011) outlined four major management themes related to stakeholders, notably, the identification of critical stakeholders, mapping out the stakeholder influence, managing stakeholders' interests, and determining strategic goals for future profitability. Ackermann and Eden added that developing strategies to determine stakeholder power could drive the future direction of a company, affect the stakeholder dynamics of the company, and influence interactions between stakeholders and prospective stakeholders.

Stakeholders' Influence

Stakeholders' influence in companies has increased in the early 21st century as customers, employees, communities, and others have taken the responsibilities of decision-making and other activities in companies. Verbeke and Tung (2013) noted that stakeholders have the capacity to influence the direction of a company by controlling access to resources. Stakeholders can determine what resources to make available and thereby determine organizational altitude. Similarly, Wolf (2014) identified two types of strategies available to stakeholders who provide resources to an organization. First, stakeholders can dictate whether company owners receive resources. The ability to withhold resources is a form of stakeholder influence. Second, stakeholders may decide to continue supplying resource, but with strings attached. The premise of stakeholder theory has gained prominence in the business community since the mid-1990s.

Stakeholders are individuals or entities that can affect the activities of an organization (Garcés-Ayerbe et al., 2012). They come up with business ideas, provide business funding, operate businesses, and close businesses down. Consequently, stakeholders are part of corporate life, and they increasingly use a variety of methods to influence actions (Darškuvienė & Bendoraitienė, 2015). Darškuvienė and Bendoraitienė (2015) explored the type of the relationships between company management and its stakeholders to determine how well companies respond to competitive pressure in the marketplace, keep up with changing global environment, build a reputation, and gain acceptance. Because of the increasing nature of interdependence among organizations or sections of the economy that normally operate separately, stakeholders are taking center stage in organizations as litigants or special interest groups and influencing the concepts of effective management (Darškuvienė & Bendoraitienė, 2015).

Restaurant owners need to determine each stakeholder's capacity to threaten or to cooperate with the organization's strategic goals. They must identify stakeholders who are supportive or nonsupportive, a mixed blessing, or marginal stakeholders and allocate resources to try to change stakeholders from being nonsupportive to a more desirable position (Savage, Nix, Whitehead, & Blair, 1991). Tang and Tang (2012) contended that stakeholders are capable of influencing organizations in positive or negative ways. Examples of negative stakeholder influence include damage to company reputation, negative press coverage, boycotts or protests, and shareholder resolutions that can potentially affect company stock price and lead to higher operating costs and legal fees. As for small restaurants, negative campaigns can keep customers away and lead to

massive food and resource waste, while positive stakeholders' influence on firms includes value creation, good corporate image, and the achievement of sustainability goals, among others (Darškuvienė & Bendoraitienė, 2015).

As in other businesses, it is not enough for small restaurant owners to focus exclusively on activities that generate profits. Girard and Sobczak (2012) noted that instead, owners should also find ways to operate in a socially responsible manner and address stakeholder demands. Two notable categories of stakeholders that managers deal with regularly are primary and secondary stakeholders. Primary stakeholders have a direct or contractual connection with a company and are immediate beneficiaries of the organization. Secondary stakeholders have no direct economic dealings with the organization, but they have influence and can easily affect the activities of the organization (Garcés-Ayerbe et al., 2012; Savage et al., 1991). Restaurant executives cannot arbitrarily conclude that certain stakeholders will be supportive or nonsupportive on a given issue since stakeholder interests tend to be dynamic. Instead, management should evaluate stakeholder preferences, interests, capabilities, and attitudes to determine which ones to trust with key responsibilities, which ones to train and to promote, which ones to use marginally, and which are the nonsupportive ones to eliminate. Brower and Mahajan (2013) added that managers who fail to act on nonsupportive stakeholders lose money, reduce profits, and risk winding down their businesses prematurely.

Managing Stakeholders' Loyalty

Stakeholder loyalty is crucial to the economic viability of any restaurant establishment. However, restaurant owners must consider loyalty. Employees who leave

a company may not be an indication of disloyalty. Fassin (2012) contended that loyal employees may leave a company in search of better employment prospects elsewhere, or leaders can change suppliers to consolidate operations or take advantage of economies of scale. Alternatively, shareholders may sell their shares in the company or sell the company itself because of other financial considerations. Such actions may not amount to disloyalty. Girard and Sobczak (2012) indicated that unlike traditional stakeholder management techniques that include an exclusive focus on fulfilling stakeholder needs and wants, partnership activities between stakeholders and management build bridges for common goals.

Impact of Stakeholder Dynamics

In addition to the obligation that stakeholders have to act fairly and be responsible for the company, stakeholders have an equivalent obligation to treat other stakeholders fairly (Fassin, 2012). For example, stake watchers such as union advocates who mobilize restaurant workers to go on strike over wage issues should be mindful of the disruption and inconvenience they cause to other stakeholders such as customers, suppliers, and even employees who may be the intended beneficiary of the strike. One set of stakeholders' well-intended actions can sometimes cause harm to another set of stakeholders. Closing a factory could benefit a section of investors but harm employees from the community (Darškuvienė & Bendoraitienė, 2015).

Stakeholders and Value Creation

The main objective of stakeholder theory is for business owners to create value to satisfy key stakeholder interests. For this to happen, all stakeholders must combine efforts

and collaborate with managers (Schlierer et al., 2012). For example, a restaurant owner procures raw material from distributors and transforms such resources into food products and services to sell to patrons. Garcia-Castro and Aguilera (2015) contended that clients capture greater value when they agree to pay a higher price for goods or services after a price increase or pay a lower price following a price decrease. Schlierer et al. (2012) observed that distributors enjoy value when opportunity costs decline or through price hikes, but companies generate value when they hike their prices or when their production costs decrease. In this respect, the ability to generate indefinite value in small family-owned restaurants depends on the kind of relationship it has with its stakeholders.

Garriga (2014) defined stakeholders as individuals, groups, or organizations that contribute directly or indirectly to the wealth creation activities of a restaurant and stand to benefit in various ways but also assume any inherent risks. One set of stakeholders includes employable individuals capable of setting goals, responding to demands and requests, resolving organizational conflicts, and embracing green initiatives (Rossem & Fassin, 2012). Another set of stakeholders includes innovative customers and suppliers with an entrepreneurial outlook capable of living a green lifestyle (Garriga, 2014).

The design of stakeholder theory was to address the needs and demands of the constituencies that sustain the restaurant industry. The ideal framework is to unravel food waste in the food service industry (Hörisch, Freeman, & Schaltegger, 2014). If restaurant owners can learn to reduce food waste, their profit margins are likely to improve, and they will create better-paying jobs for stakeholders, protect the environment, and thrive in business beyond the first 5 years. The underlying principles of stakeholder theory are

critical to restaurant owners who value and practice CSR. Embracing CSR is the quickest and shortest route to corporate profitability and competitive advantage within the food service industry (Demirel & Öner, 2015; Fernandez-Feijo et al., 2014). Baird, Geylani, and Roberts (2012) contended that restaurant owners can use stakeholder theory principles to address business, social, and environmental problems and manage stakeholder interests and concerns. By adopting an environmentally friendly approach, restaurant owners can buy biodegradable products that use very little energy and natural resources. They can recycle to protect the environment and in the process cultivate a positive image among shareholders (Namkung & Jang, 2014; Tan & Yeap, 2012).

Stakeholder Theory and Sustainability

Researchers have established links between stakeholder theory and corporate sustainability. The theory provides the background for researchers to explore the dynamics between companies and their surroundings (Donaldson & Preston, 1995). The leaders of many organizations, including restaurants, have taken an interest in sustainability in last two decades. Sustainability refers to the desire for organizations to address environmental concerns given the stringent regulations and growing pressures from a wide range of stakeholders. According to the researchers of an Environmental Protection Agency (2012) report, sustainability relates to the prudent use of resources to support present and future generations. In 1970, President Nixon, in collaboration with the U.S. Congress, established the Environmental Protection Agency to protect the environment after years of indiscriminate pollution of the environment (Lazarus, 2014). Decades later, sustainability became the platform for environmental advocacy. The

leaders of the United Nations Environment Program and the Coalition for Environmentally Responsible Economics (CERES), a U.S. federal agency, collaborated to establish channels of communication to improve the manner in which they prepared and disseminated sustainability reports (Girard & Sobczak, 2012; Singh, Murty, Gupta, & Dikshit, 2012). Sustainability principles have a significant role in protecting global ecosystems. Corporate sustainability involves using current resources in a prudent fashion in consideration of future generations. Global policy makers created the index for a sustainable society to enable them to measure sustainability across different countries and propose remedies where necessary. Within the restaurant industry, stakeholders insist on the sustainable use of limited resources, particularly on food waste, water waste, and energy waste (Singh et al., 2012). Some of the sustainability-related issues often discussed among scholars involve overconsumption of vital resources such as food, water, and energy; improper land use; emission of toxic chemicals in the environment; food waste in the food supply chain; and climate change (Burns, 2012). Researchers have proposed a range of approaches, including limiting the emission of greenhouse gasses, minimizing resource exploitation, protecting endangered species, and improving relations with stakeholders. All these issues directly or indirectly affect food waste in one way or another across the food value chain (Gupta, 2011; Singh et al., 2012).

In a study of environmentally sustainable practices, Nyheim (2012) found that the restaurant industry is gradually adopting sustainability practices, although research on sustainability practices in the restaurant industry is lacking. Scholars do not dispute that the restaurant industry contributes to the carbon footprint, especially since most of the

food wasted in restaurants ends up in landfills where it decomposes to produce methane gas. Some scientists have argued that greenhouse gasses are directly responsible for global warming (Shakun et al., 2012). The term greenhouse gas comes from actual greenhouses that farmers use to trap gas to generate heat to keep the greenhouses warm. Other scientists have argued that recent observed global warming trends are significantly less than previous estimates, and that scientists have overestimated the global warming phenomenon (Fyfe, Gillett, & Zwiers, 2013). The difference in perception is probably a combination of errors by external forces, model response, and internal climate variability (Fyfe et al., 2013).

Researchers have argued that global warming is causing the melting of polar ice, rising sea levels that threaten to swallow islands located below sea level, increased frequency of storms, and changes in ocean currents (Dai, 2013). Farley (2008) indicated that global warming takes place when the sun's rays hit the earth, and the earth emits infrared radiation. Water vapor in the atmosphere absorbs the radiations, which leads to warming of the earth. Without water vapor in the atmosphere, the earth's surface would be below the freezing point. The global warming argument has a direct link to food waste.

Stakeholder Theory and Corporate Social Responsibility

The concept of Corporate Social Responsibility (CSR) has prompted company executives to focus on balancing corporate profits with social and environmental responsibilities. Some leaders in companies are preserving the environment and practicing social responsibility at the same time because of increasing pressure from

internal and external stakeholders. Corporate social responsibility means that company executives should not intentionally or knowingly inflict harm to stakeholders but should instead operate responsibly, protect the communities, and the environment (Chan, 2013). Tang and Tang (2012) also noted that business owners should interact with stakeholders on an ongoing basis to promote a better working relationship between owners and all stakeholders. A spirited discussion about corporations taking responsibility for the impact of their actions on the social and ecological environment has been ongoing for several decades. Kechiche and Soparnot (2012) observed that in corporate dealings, firm leaders are increasingly under pressure to focus their CSR efforts on sustainable development beyond shareholders. Company leaders must consider factors that can potentially affect operations even as they conduct their business activities. Kechiche and Soparnot (2012) indicated that the leaders of many socially responsible firms are implementing business practices that meet the expectations of individuals or groups who can affect the firms' actions as defined by Freeman's initial definition of the stakeholder theory. Accordingly, researchers continue to focus on the decisions that firm leaders take to satisfy various stakeholders. Multiple researchers have contended that a strong CSR record may generate a better relationship between a company and its stakeholders (Fassin, 2012; Lii & Lee, 2012). Brower and Mahajan (2013) found that, in turn, stakeholders commit to organizations through loyalty and investments, and Aguinis and Glavas (2012) concluded that stakeholders bring different expectations, take on different roles, and engage in different activities while trying to convince company executives to practice CSR. Some stakeholders have a tendency to pressure firms to participate in CSR for self-interest

reasons, for group dynamics, or for ethical or moral considerations (B. Cheng, Ioannou, & Serafeim, 2014). B. Cheng et al. (2014) observed that stakeholders may sometimes be the necessary catalyst for better access to resources such as attracting quality employees, capturing uncontested blue ocean opportunities, or contributing socially to the communities where they operate (Kim & Mauborgne, 2014).

Incentives for Restaurants to Reduce Food Waste

Lee, Conklin, Cranage, and Lee (2014) observed that as obesity has overtaken smoking as the greatest health concern in the United States, more stakeholders are becoming increasingly aware of the benefits associated with healthy eating and paying attention to the nutritional content of the food they consume. At the same time, the culture of overeating, which is another form of food waste, has been increasing in both developed and developing countries (Lee et al., 2014). Availability of a cheap food supply is one of the leading drivers of overconsumption that leads to weight gain. This phenomenon explains the increasing cases of obesity in developed countries. Torres et al. (2012) noted that restaurant owners are showing interest in customer concern for healthy eating by promoting healthy eating habits in diverse ways. For example, some fast food restaurant owners have taken the initiative to increase healthy awareness and are providing nutritional information on their menus and napkins to educate consumers as one way of acting in socially responsible ways in the communities where they operate. McDonald's, the world's leading food service outlet with 36,000 units operating in over 100 countries and 69 million daily customers, has improved the size and content of its kids menu (McDonald's Corporation, 2015). The menu includes more fruits and

vegetables and reduced size of products such as French fries to reflect healthy customer concerns (Lee et al., 2014). This shift represented more than 85% of McDonald's global sales in 2014. In 2014, McDonald Corporation executives made a commitment to reduce sodium, sugar, saturated fat, or calories in some of its markets in response to consumer demand. For the fiscal year 2016, McDonald's owners committed to purchasing a substantial amount of beef from verified sustainable sources in line with its stated vision to source beef from farmers who create value through verifiable production systems.

McDonald's franchise owners learn to operate in an environmentally efficient manner to deliver value to stakeholders. These owners go through training to learn to uphold the heritage of being good neighbors to other businesses and to the communities they serve. At inception, McDonald's policies included an emphasis to do less harm to the environment, but the focus of the fast food chain has changed to do more good (McDonald Corporation 2015). The corporation leaders are constantly disrupting old ways of doing things and finding new ways to improve efficiency, manage costs, recycle waste, save water and energy to sustain profits, generate employment, and protect the environment (McDonalds Corporation, 2015). Robles (2015) contended that the corporation is likely to be part of the disruptive technology actors that will likely transform human life, businesses, and the world economy. Manyika et al. (2013) estimated that the application of technologies spearheaded by innovative companies such as McDonald's could add between \$14 trillion and \$33 trillion per year to the global economy by 2025.

The State of Food Waste

The world population is facing food-related challenges. Global statistics on food waste are increasing at a time when researchers are predicting a spike in demand for food in the next few decades given the projected population and socioeconomic growth (Tschamtker et al., 2012). The 20th-century agricultural productivity has sustained the global food requirements mainly because of technological improvements. Unfortunately, harvests continue to be mismanaged, which leads to lots of waste. In 1997, Kantor et al. conducted a study for the USDA's ERS on food waste and generated new estimates of food loss by food retailers mainly in U.S. supermarkets, households, and other food service establishments. The report included an estimate that approximately 96 billion pounds of food, or 27% of the 356 billion pounds of edible food available for human consumption in the United States at the time, did not reach the consumer (Kantor et al., 1997). In 2010, ERS researchers used the same format and estimated that 31%, or 133 billion pounds of the 430 billion pounds of food available in the United States, went to waste (Buzby et al., 2014). This waste and loss of food may be equivalent to \$161.6 billion, and the calorie loss with this waste was approximately 141 trillion total calories per year or 1,249 calories per capita per day (Buzby et al., 2014).

The Food Service Industry Role in Food Waste

The restaurant industry is a key player in food handling in the United States. The researchers of an SBA (2015) report showed that there are 1 million restaurants and cafeterias throughout the United States. With an estimated 14 million employees or 10% of the U.S. workforce, the industry is the second largest employer. Gunders (2012)

observed that the process of getting food from the farm to the plate uses up to 10% of U.S. energy budget, 50% of the land, and 80% of all water used in the United States. Forty percent of food available in the United States goes uneaten. The wasted food ends up in landfills, where it accounts for a significant portion of methane gas emission.

The food and drink industry is also the second largest employer in the European Union, with a workforce of 4.8 million employed in 310,000 companies that generated \$1.2 trillion in 2011 (Reisch, Eberle, & Lorek, 2013). More specifically, Reisch et al. (2013) reported that British consumers wasted 7.2 million tons, or 33%, of food and drinks purchased in 2010, of which 4.4 million tons or 61% of wastage was perfectly good food. In Germany, 61% of food waste occurs in homes, two-thirds of which was good for human consumption (Schneider, 2013). Schneider (2013) noted that waste occurs because of poor planning, lack of knowledge of freshness, poor buying habits, and discounts issued by suppliers in large quantities. Buzby and Hayman (2012) reported that food waste is a major environmental, social, and economic problem in all countries and noted that some of the environmental problems associated with food waste include climate change, water loss, loss of biodiversity, and the generation of greenhouse gasses. From a social perspective, increasing global population and rising economic prosperity will increase the demand for food and water, and such increased demand could compromise the sustainable use of natural resources and could escalate global tensions (Tschamtko et al., 2012). However, Reisch et al. (2013) posited that even as large quantities of food go to waste every day, about 800 million people globally go without sufficient food and have no access to safe drinking water. By contrast, Popkin and Slining

(2013) noted that 1 to 1.5 billion people around the globe are overweight, with 300 to 500 million being obese, largely due to dietary shifts to more sugar, meats, and fats.

Researchers consider this overconsumption of resources as a form of waste. Health problems associated with diet and lifestyle, such as cardiovascular diseases and diabetes, are increasing and putting social stability at risk, as good health is central to socio-economic growth.

Researchers should take an interest in food waste for three major reasons (Buzby & Hayman, 2012). Because of the increasing global population, food production will need to increase by 70 to 100% to sustain the projected population growth to 9 billion people by 2050. Buzby and Hyman also noted that food waste also wastes a large amount of money and other resources used to produce, transport, store, and distribute food products that eventually become worthless. The resources used in food production include land, labor, energy, water, fertilizer, and pesticides. Buzby and Hayman (2012) quantified the annual use of these resources as 25% of freshwater used in the United States and approximately 300 million barrels of oil.

Buzby and Hayman (2012) outlined the inherent externalities in the food production processes and pointed out that food production increases pressure on limited resources. For example, raising cattle increases the emission of greenhouse gasses that contribute to air pollution in the atmosphere. It is a double tragedy to waste the meat from cattle after the cattle have emitted greenhouse gasses into the atmosphere. It takes resources to raise cattle, and such resources go down the drain when consumers waste meat carelessly. Developed countries use farm machinery and trucks in farming and

transportation activities related to food production. Buzby and Hayman concluded that machinery uses energy and other resources and emits smoke that pollutes the environment. At the same time, some of the chemicals used in farming activities ends up in rivers and streams and threatens marine life.

Lanfranchi, Giannetto, and De Pascale (2014) introduced a new dimension to the food waste argument. Bernstad (2014) contended that global demand for food is increasing due to the population growth and changes in dietary patterns favoring livestock products, Nahman and de Lange (2013) reported that food production and food consumption processes are moving further apart as nations increase international trade. A common trend has become harvesting food products in Mexico, shipping them to China for processing, and making them available to consumers in New York. Papargyropoulou, Lozano, Steinberger, Wright, and Ujang (2014) expressed surprise at how quickly food waste has become a global phenomenon and a social concern, even among underdeveloped countries. Causes of food waste vary, depending on the stages within the food chain and the country where the waste is occurring. Among developed countries, food waste occurs at the end of the chain, mostly at the consumption stage. In the United States, for instance, most of the food waste occurs during preparation or at the dinner table where consumers throw out perfectly good food for various reasons. Consumers in developed countries buy more food than they need or prepare more than they can use. Some American restaurants and supermarkets discard perfectly good food rather than give it to the hungry for fear of litigation. In poor countries, food waste occurs at the

beginning of the chain due to factors such as lack of harvesting equipment, poor transportation networks, and inadequate storage facilities.

A few years ago, members of the European Parliament decided to address food waste problems by declaring 2014 as the European year of food waste and passing a resolution to reduce food waste by 50% by 2050 (Halloran, Clement, Kornum, Bucatariu, & Magid, 2014). Food waste issues exist around the world. Researchers at Japan's Ministry of Agriculture, Forestry, and Fisheries (2012) showed that Japanese consumers and retailers waste approximately 17 million metric tons, or 30% of available food, every year. Venkat (2012) reported that in India, almost 30% of fruits, vegetables, and grains go to waste every year due to improper storage facilities or poor transportation and distribution systems. The problem of food waste in China has increased significantly to almost 70%, mainly from households and commercial establishments (Xin, Kaihao, & Anqi, 2012).

Most of the food wasted by restaurants ends up in landfills where it decomposes and produces methane gas, which is 22% more potent than carbon dioxide (Venkat, 2012). In the United States, wasted beef is the biggest contributor to methane emissions and responsible for 16% of total emissions, even though the total amount of beef wasted is less than 2% of the aggregate waste by weight (Venkat, 2012). Food waste products from livestock have a greater impact on the environment due to their high emissions footprints. Animal waste products weigh just 30% of all wasted food, yet they contribute 57% of the emissions to the atmosphere, whereas grains, fruits, and vegetables weigh

56% of the total waste but contribute only 31% of the total gas emissions footprint (Venkat, 2012).

Determinants of Restaurant Food Waste

In the 1980s, about 32% of food expenditures in the United States occurred outside the home. By 2010, the figure had increased to nearly 44% (Ellison, Lusk, & Davis, 2013). This increase in dining away from home has led to an explosion in food varieties and menus available to consumers. Such a wide variety of food choices makes it difficult to manage inventory, as many menu items require large inventories of raw material to be available at all times. Unexpected customer fluctuations make menu planning difficult, especially in buffet restaurants, which are not able to reuse or donate leftover food for fear of lawsuits in case recipients were to suffer from food poisoning.

Gunders (2012) estimated that 4% to 10% of foods that restaurant managers purchase do not reach the customers. Most of it is lost in the kitchen either as edible or inedible food. Gunders further observed that food served as accompaniments to customers goes uneaten, which translates into 17% of served but uneaten meals, 55% of which customers leave behind in restaurants. Young and Nestle (2012) noted that restaurant food portions have increased since the 1980s, as the calories in a slice of pizza have increased by 70% while calories in chocolate chip cookies have quadrupled. As such, most Americans are not only eating too many calories, but also wasting a whole lot more (Lesser, Cohen, & Brook, 2012).

Larger food portions translate into more waste. Robinson, Harris, Thomas, Aveyard and Higgs (2013) found that chain restaurants in the United States had

approximately 147 new oversized food portions in the first decade of the 21st century. For instance, McDonald's restaurant had an Angus Third Pounder while Wendy's had the Triple Baconator. Burger King pioneered the Quad Stacker, the 42-oz soda, the Steakhouse Burger, and the omelet sandwich while Subway added Foot-long sandwiches. Hardees had the Monster Thickburger that featured a pound of beef, and restaurant chains such as Cheesecake Factory, Denny's, and Ruby Tuesday had larger portions on their menus too. Larger portions have conditioned consumers in the United States to expect giant portions when dining in restaurants. Consequently, restaurant owners hesitate to serve smaller food portions because customers might feel they are not getting value for their money.

Most chain restaurants have software to plan and manage inventory, but their operating protocol lacks the flexibility for individual managers to repackage and reuse excess food in ways that can reduce or prevent waste. Fast food restaurants operate within a defined time limit. For instance, McDonald's cooked French fries have a shelf life of 7 minutes, while their burgers can last 20 minutes on the shelf. After 7 minutes, employees throw the French fries in the trash. This limited food shelf life accounts for about 10% of all fast food waste (Robinson et al., 2013).

Post, Haven, and Maniscalco (2012) noted that in 2011, First Lady Obama and USDA Secretary Vilsack launched the MyPlate campaign to recommend healthy eating habits that involve finishing the food served and eliminating food waste. Cohen and Story (2014) conducted a study in which they found that growing food and raising livestock contribute significantly to global warming. Cohen and Story noted that livestock proteins

are responsible for approximately 18% of all greenhouse gasses emitted into the atmosphere and added that the livestock protein production process require over 11 times more fuel and 100 times more water than vegetable proteins. Cohen and Story noted that of the 40% of wasted food, 97% ends up in landfills and produces methane gas that is 22 times more potent than carbon dioxide. Methane gas contributes significantly to global warming. Researchers have examined plate sizes to establish a correlation between the size of the plate and the amount of food wasted. DiSantis et al. (2013) concluded that when given bigger plates, children have a tendency to serve themselves larger portions of food and risk wasting some of it. DiSantis et al. observed that food waste occurs in U.S. society for different reasons. DiSantis et al. noted that food represents a small portion of many Americans' budgets, which makes the financial cost of wasting food too low to outweigh the convenience of it. The more food consumers waste, the more those in the food industry can sell. This proposition is inherent throughout the supply chain, where waste downstream translates to higher sales for anyone upstream. Overcoming these challenges as well as the other drivers of food waste discussed in this study will require concerted efforts from the U.S. government to consumers to business. Overcoming these challenges will also require raising the priority of reducing food waste to the significance level it merits. Gunders (2012) noted that business leaders should seize the opportunities to streamline their operations, reduce food losses, and save money. Americans can help reduce waste by learning when food goes bad, buying imperfect produce, and storing and cooking food to reduce waste.

Samples of U.S. Restaurants

As the U.S. minority populations continue to grow, and cultural and ethnic diversity continues to increase, Americans will be able to experience different kinds of foods from all over the world. Ryu, Lee, and Kim (2012) revealed that Chinese food has become popular in the United States. An estimated 46,000 Chinese restaurants exist in the United States, which is more than all the domestic McDonald's, Wendy's, and Burger King put together. Chinese restaurants in the United States generate an estimated \$17.5 billion annually in gross revenue. Ryu et al. (2012) contended that the owners of Chinese restaurants gained a foothold in the United States by serving tasty food and generous portions on a budget. Chinese buffet-style restaurants with 250 menu items have taken over the U.S. buffet market but face a challenge as American consumers show a preference for healthy food.

Customers tend to be indecisive when dining at buffet restaurants (Wansink & van Ittersum, 2013). Most patrons rely on consumption standards at each restaurant to regulate individual serving size that determines how much to consume. The amount of food to consume should be equivalent to how much one usually consumes under normal circumstances, but the ambiance, culture, and surroundings at buffet setups influence patrons' consumption. Cohen and Story (2014) established that the size of plates available for customer use determines how much food customers take each time they visit the buffet line and, correspondingly, how much food patrons leave on the plate as waste. Wansink and van Ittersum (2013) observed that most buffet restaurants have a set culture that requires patrons to use a clean plate when making subsequent trips to the buffet line.

Despite the health and sanitation considerations involved, the practice allows customers to waste food indiscriminately. Holding a new plate is a symbol of innocence from the waste in buffet restaurants. Upstream food waste involving resources, such as water and energy, and downstream waste have serious economic, social, and environmental consequences (Kummu et al., 2012).

Fine Dining Restaurants

Fine dining restaurants, also known as full-service restaurants, are the hallmark of quality in the food service industry. Jin, Goh, Huffman, and Yuan (2015) noted that customers go to fine restaurants to satisfy varying needs and wants beyond hunger and thirst. Employees in fine dining restaurants should be competent as patrons tend to associate competence with fine dining. Employee competence corresponds closely with what consumers seek at fine dining restaurants. Customers expect excellent food and efficient customer service (Njite, Dunn, & Kim, 2008; Parsa et al., 2012). The relationship between customers and employees is critical in fine dining restaurants. Customers spend approximately 1.5 to 3 hours finding a seat, ordering a meal, consuming the meal, paying the bill, and exiting a fine dining restaurant (Njite et al., 2008). During this time, the patron continuously interacts with various employees, including managers, hosts, bus persons, and servers. Workers in fine dining restaurants must have a pleasant personality and create a lasting positive impression (Njite et al., 2008).

Marketers create the atmosphere or control the environment to produce certain emotional effects that inspire customers to buy using channels such as sound, sight, accent, and touch. Managers at fine restaurants continually plan, change, and control the

surroundings to influence consumer actions. Customers expect convenience at every stage of the fine dining restaurant experience. Business owners calculate convenience in terms of time or service. Two known types of conveniences are the pre-benefits that include making decisions, gaining access, conducting the transactions, and taking possession of the benefits. Post-benefit conveniences encompass the steps that customers go through to acquire the benefits. Price includes the money costs as well as opportunity costs. In fine dining facilities, price involves quality and value, and patrons who visit fine dining restaurants know they are paying for more than just the food.

Green Restaurants

Given the competitive atmosphere in the restaurant industry and changing customer demands, consumers are becoming environmentally conscious, and most are increasingly choosing green restaurants (DiPietro & Gregory, 2012; DiPietro, Gregory, & Jackson, 2013). Global warming and changing weather patterns have led to a shift in consumers' behavior towards the environment (Cherian & Jacob, 2012). Most consumers have adopted a green lifestyle and are trying to reduce their carbon footprint by avoiding restaurants that waste food and harm the environment. Some consumers are willing to pay extra money for environmentally friendly food places (Marette, Messéan, & Millet, 2012). These green consumers avoid products that may harm the environment, use unethical testing of animals or human beings, or patronize manufacturing processes that consume a lot of energy.

Leaders at green restaurants have adopted green strategies to improve stakeholder satisfaction, increase customer loyalty, and reduce cost (Nguyen, Leclerc, & LeBlanc,

2013). The hallmark of the green restaurant concept is minimizing the use of natural resources when providing goods and services and reducing the impact on the environment. In contrast, Vernez et al. (2013) found that owners of traditional restaurants pay little attention to green initiatives. They waste resources when they use non-recyclable materials, old equipment that generates excessive heat, and harmful chemicals that increase carbon footprints. Additionally, Vernez et al. (2013) concluded that some Chinese restaurants use excessive water and deplete resources when thawing frozen food. Restaurant owners should focus on strategies that reduce, reuse, or recycle resources and improve the use of energy (Chen, Cheng, & Hsu, 2015). Some of the benchmarks for green restaurant status include using water efficiently, participating in waste reduction, using eco-friendly furnishings, serving sustainable food, lowering energy consumption, and reducing all forms of pollution (Wang, Chen, Lee, & Tsai, 2013). Additionally, owners of green restaurants must serve green food such as organic or locally grown food on their menus. As part of the green initiative, restaurant operators should serve more vegetables than meat and should provide fewer animal products in the food chain to maintain biodiversity to reduce the amount of food wasted.

Sell By and Use by Dates

Food labeling is a major instrument of food policy that provides consumers with the information they need to make better buying choices. Governed by the 1938 Food, Drug, and Cosmetic Act, the labeling system has changed from an internal stock control tool to a consumer protection mechanism to a food safety instrument, and food labeling has taken center stage for food waste. Stakeholders accuse the labeling system as being

the cause of food waste in developed countries (Milne, 2012). Nassauer (2012) explored the expiration dates and the sell-by dates commonly used in the retail industry in the United States and discovered that food manufacturers, not the government, usually set the use-by or sell-by dates, except for baby formula. The labels should inform retailers and customers about the freshness and not safety of food products. Nassauer noted that after the date on the label expires, the food may still be safe to eat if consumers store the food at temperatures no higher than 40°.

The European Commission leaders identified ways to reduce food waste, including mandating full disclosure of food waste, setting targets for food waste prevention, raising public awareness, and clarifying the sell-by or best-by labeling systems used in many developed countries (Buzby & Hyman, 2012). The British government recently instructed grocery stores to stop using labels, as they do not indicate food safety (Nassauer, 2012). Bloom (2011) discouraged consumers from relying on labels as a sign of safety and suggested, instead, that customers look at the food, smell it, and even taste it before deciding whether to eat it or waste it.

Strategies for Business Success

Trends, economic cycles, and seasonality are part of the business cycle. The economic crisis that started in 2007 and affected consumers and businesses around the world, including restaurants, led business owners to take some unprecedented actions to ensure the survival of their business (Bronner & De Hoog, 2012). The unstable environment influenced business owners to use tough strategies to survive (Köseoglu, Topaloglu, Parnell, & Lester, 2013). Some restaurant owners resorted to reactive

strategies such as cost or asset reduction to defend the status quo and to provide breathing space during the crisis (Alonso-Almeida & Bremser, 2013). This strategy could help struggling owners and managers learn from successful restaurant operators and survive during hard times (Alonso-Almeida & Bremser, 2013). Owners seek strategies to acquire new markets or new customers or add value to consider reducing food waste as part of the strategy to maintain income (Alonso-Almeida & Bremser, 2013). Palmer, Wright, and Powers (2015) found that some expense reduction strategies such as tight internal control, less emphasis on customer service, and marginal advertising campaigns might yield the opposite results, particularly if such strategies affect the quality of service. The main reasons business leaders employ reactive strategies are to comply with the law and to protect the business (Schaltegger, Lüdeke-Freund, & Hansen, 2012). In contrast, inclusive strategies involving the integration of internal stakeholders can result in better company performance and less employee turnover (Bal, Kooij, & De Jong, 2013). When owners apply reactive strategies in industries such as the restaurant industry, known for its high employee turnover and low morale issues among employees, the impact can be significant. Conversely, Yang, Wan, and Fu (2012) conducted research in Taiwan with hospitality workers and discovered that more than 80% of participants had left one job to pursue better career prospects elsewhere while 70% had received job offers at one time or another from competitors. Yang et al. found that turnover in the foodservice industry may relate to the differences between expectations and reality among employees. Yang et al. suggested that managers pay attention to employee needs and introduce training

programs for career enhancement. Yang et al. also added that executives should employ proactive strategies to seek market leadership and to improve company efficiency.

Strategies used for rapid company expansion flatten hierarchies and in the process produces positive results (Kukanja & Planinc, 2013). Kukanja and Planinc researched restaurants in Slovenia following the 2007 financial crisis and concluded that cost-cutting strategies increased competitive advantage. Alonso-Almeida and Llach (2013) contended that implementing new technologies increases efficiency. On the other hand, technology reduces or eliminates human contact with customers. Alonso-Almeida and Bremser (2013) noted that proactive strategies incorporate environmental or social issues as part of their sustainable business solutions to economic and social development.

Tavitiyaman, Hanqin, and Qu (2012) reported that understanding competition and setting up competitive strategies are critical elements for achieving success in the restaurant industry. To improve performance, managers must identify strengths, weaknesses, opportunities, and threats from their surroundings and design appropriate strategies to take advantage of opportunities, reduce threats, and creatively apply resources to support selected strategies (Bocken & Allwood, 2012). Marketing activities in the restaurant industry affect performance. Advertising or event promotions create strong community bonds and set up the stage for continuous patronage from loyal customers, thereby benefiting the entity over time. Owners use marketing campaigns to create brand identity or value and to enhance brand recognition (Morgan, 2012).

Lee, Conklin, Cranage, and Lee (2014) pointed out that small, independent, family-owned restaurants experience profitability loss when food inventory expires

before reaching the customer. However, Nassauer (2012) argued that not all expired food is bad for human consumption especially since food labels commonly used in the retail industry only indicate quality and not safety food. Nassauer noted that after the date on the label expires, the food might still be safe to eat if consumers store the food at temperatures no higher than 40°. Lee, et al. (2014) argued that the common practice in restaurants is for employees to dispose of expired food, yet there are hungry people who can use the expired food to meet their nutritional needs. For example, McDonalds French fries have a shelf life of 7 minutes after which the fries end up in trash (McDonald Corporation, 2015). To date, however, most restaurants focus on food recovery programs for recycling purposes but not for donations or consumption for fear of lawsuits.

Perceived Restaurant Failure Factors

Around 2006, a television infomercial claimed that 90% of start-up restaurants go out of business in the first year of operations. Researchers have found no evidence to support such a claim. Parsa et al. (2005) conducted a study on the rate at which restaurants go out of business and found it to be lower than 30% in the first year. Stakeholders believe restaurants are risky because of their labor-intense nature, extensive inventory with a short shelf life, and large overheads, among other factors (Fields, 2014). Although these factors contribute to the high failure rate in the industry, researchers often single out location as the most important strategic decision restaurant owners make (Prayag, Landré, & Ryan, 2012).

A suitable location attracts customers, offers conveniences to customers, enhances customer loyalty, and increases market share and profitability (Chen & Tsai, 2016;

Prayag et al., 2012). Luo and Stark (2014) agreed that location is critical in the restaurant business, but other factors such as a growth curve, differentiation, management competency, and the macro environment determine if a restaurant will survive or fail in the marketplace. In contrast, Self, Jones, and Botieff (2015) insisted that restaurant success or failure depends on the kind and style of leadership. Self et al. added that internal factors such as poor food, organizational culture, and marketing choices and external factors such as changes in the consumer market, changes in customers' disposable income, and competition contributed to the survival or demise of new restaurants. Self et al. indicated that managers develop strategies to cope with these factors. Parsa et al. (2005) noted that many restaurants fail because owners are not able to understand or anticipate market trends. To succeed, restaurant owners must develop strategies to adapt to changing circumstances. Parsa et al. contended that taxation, regulations, politics, and market trends are key contributing factors to restaurant failure. Cao, Chen, Liang, and Lo (2013) found that liquidity helps restaurant owners pay debts as they mature. Bad liquidity management can affect the performance and prevent growth. In a study focusing on revenue management, Heo, Lee, Mattila, and Hu (2013) concluded that when managers handle revenue management processes efficiently, the restaurants generate cash flow and profits and such actions prevent restaurants from closing prematurely. Pinnuck and Shekhar (2013) illustrated the significance of restaurants being able to turn revenue into profit as a survival strategy. Leaders use higher profit margins to pursue growth opportunities, spur stakeholder confidence, and

raise the stock price of the company, and in the process, firms gain a competitive advantage in the market.

Restaurant owners with cash flow can avoid the financial risks and unexpected economic twists and turns. Having cash is critical for restaurants, as owners can use cash to make good investments (Sheu & Lee, 2012). Hua, Xiao, and Yost (2013) explored financial sourcing for restaurants as a risk, as almost 30% of new restaurants go out of business in the first year of operation (Fields, 2014; Parsa et al., 2005). Ramos-Rodríguez, Medina-Garrido, and Ruiz-Navarro (2012) concluded that fear of failure among restaurant owners has something to do with their aversion to risk. The greater the owners' aversion to risk, the higher the chances they will fear failure. Ramos-Rodríguez et al. established that risk management is increasingly becoming critical in the hospitality industry. Understanding business risk is the first step toward survival, particularly during challenging financial periods.

Entrepreneurship

Entrepreneurship is the fabric that holds the U.S. economy together by creating jobs and generating wealth (Ramos-Rodríguez et al., 2012). The restaurant industry is the largest private-sector employer in the United States, and almost all restaurants are entrepreneurial adventures (SBA, 2015). Entrepreneurship plays an important role in the lives of people in the United States. Dining out in restaurants is a long-standing American tradition. In 2010, the revenue of the U.S. restaurant industry was \$580 billion (SBA, 2014). By contrast, the Chinese restaurant industry generated \$527 billion within the same period (China Catering Trade Association, 2011). Entrepreneurs who go into the

restaurant business are willing to assume the risks in exchange for ownership and profit. Such entrepreneurs have the capacity to discover, change, or create something. The most common form of entrepreneurship is starting a business (Oncioiu, 2012). Entrepreneurs with intellectual capital see the risk of starting businesses rather differently than other people do. They can handle risks with confidence, skill, and knowledge. Skilled entrepreneurs combine services to generate utilities of value for customers. They procure goods and services; pay salaries, interests, and rents; and use these resources to produce and market the goods and services demanded in the market (Oncioiu, 2012). An entrepreneur is essentially a creative person with business sense who can produce profits and drive growth (Oncioiu, 2012).

Entrepreneurs form social groups and leverage such groups to collect ideas and assemble relevant information to exploit entrepreneurial opportunities (Hoang & Yi, 2015). Carland, Carland, and Carland (2015) described entrepreneurs as individuals seeking the financial freedom to pursue hobbies. Branstetter, Lima, Taylor, and Venâncio (2014) discussed challenges such as government regulations that deter entrepreneurs from starting businesses. The hierarchy of needs serves to motivate individuals to go from basic needs such as food, shelter, and comfort to higher levels of needs such as social acceptance, self-esteem, and self-actualization (Maslow, 1943). Carland et al. noted that differences in motivation could explain some of the unique characteristics and behaviors witnessed among entrepreneurs. Entrepreneurs start businesses to provide for basic human needs. With time, an entrepreneur can use a business to move through the hierarchy of needs to a point of social acceptance and to the opportunity to realize self-

actualization by creating successful economic institutions. In that sense, a business can be not only a means to an end but also the end in itself.

Oncioiu (2012) observed that leaders of established large companies must invest in technological expertise to thrive. Entrepreneurs have no such investment limitations. Entrepreneurs may be investors or capitalists, but they are rarely inventors. Schumpeter (1949) characterized an entrepreneur as an individual capable of introducing new production methods or market segments or capable of finding sources of raw materials that meet the needs of new enterprises. Schumpeter added that entrepreneurs have a high sense of need for personal achievement, security, prestige, and the power to maximize profit.

Global entrepreneurial activities have increased exponentially since the 1960s. Restaurants, which are one of the best drivers of the entrepreneurial philosophy, are the fastest growing segment. The United States had 1 million restaurants in 2015 (SBA, 2015), but the restaurant failure rate of 30% in the first year is high enough to generate concern (Fields, 2014). The failure rate for new businesses across all segments is 60% in the first 5 years of operation (Carree & Verheul, 2012). Businesses are dynamic, and businesses come and go (Hathaway & Litan, 2014). They start up, some expand, and others fail; some transform and others close for varying reasons. Decker, Haltiwanger, Jarmi, and Miranda (2014) indicated that at the height of the 2009 recession when the U.S. economy recorded a net loss of employment, new entrepreneurs added 12.4% of total jobs created in that year. Schumpeter (1934) claimed that business dynamism is healthy and necessary to create value for stakeholders and to keep the economy moving

forward. Entrepreneurs in the restaurant industry contributed approximately 4% to the U.S. gross domestic product while new restaurant ventures added 14 million jobs in the United States in 2015 (SBA, 2014). However, the incentives for entrepreneurs to start new firms in the United States have diminished, which has led to a steady decline in job creation (Pethokoukis, 2014).

The Restaurant Industry's Impact on Global Tourism

Restaurants cater to residents and tourists, and when one or both market segments are experiencing circumstances that decrease disposable income, demand for restaurant goods and services decline (Eugenio-Martin & Campos-Soria, 2014). To respond to declining demand for goods and services, owners and managers adjust their operating strategies to remain competitive (Bronner & de Hoog, 2014). In times of financial crisis, owners and managers may decide to employ strategies or decisions that go from long term to short term or switch between reactive and proactive strategies to keep their doors open. The global tourism industry, which includes the restaurant industry, experienced continuous growth since the 1950s and were the fastest growing sector in the world. International tourism grew from 25 million travelers in 1950 to 278 million in 1980 to 527 million in 1995, and 1.133 billion in 2014 (United Nations World Tourism Organization, 2015). Revenue collection from worldwide tourism activities went up correspondingly from \$2 billion in 1950 to \$104 billion in 1980 to \$415 billion in 1995, and \$1.245 trillion in 2014. Researchers at UNWTO projected an increase in worldwide tourism by 3.3% each year between 2010 and 2030, reaching 1.8 billion tourists by 2030.

Continuous worldwide growth in the tourism sector underscores the importance of the restaurant industry to the world economy in general and the United States in particular.

The U.S. restaurant industry has grown 2-4% per year since the 1980s. The industry is critical to the U.S. economy, as it is the largest private-sector employer, with an estimated 14 million employees, which is equivalent to 10% of the U.S. workforce (SBA, 2015). In 2015, the SBA officials announced the existence of 1 million restaurants in the United States, which, together with other food service facilities, generated close to \$907.2 billion in annual sales. For the Washington DC., metro area the restaurant industry plays a central role in economic and social well-being. For example, Maryland had 10,577 restaurants with 188,100 employees that generated \$10.3 billion in sales in 2011. The Commonwealth of Virginia reported 13,934 restaurants in the same year, with a workforce of 271,900 that generated \$13.9 billion in revenue in the same period, and Washington DC had 2,106 restaurant locations that generated \$2.8 billion in sales and 45,400 workers (National Restaurant Association, 2015).

In addition to international tourists who fill local restaurants, Americans are eating away from their homes more than ever before. Cohen and Bhatia (2012) found that spending on food away from home in the United States increased from 27% in 1962 to 46% in 2002. Cohen and Bhatia listed factors that make eating out of home unavoidable for most people as time constraints, demanding schedules, parental responsibilities, and others. The fact that people hold meetings, events, gatherings, and social activities in restaurants underscores the importance of the restaurant industry. Cohen and Bhatia added that citizens rely on restaurant food when traveling, and many more have personal

reasons why they do not cook their meals at home, including a lack of cooking skills. Fields (2014) noted that Americans are cooking less at home and dining in restaurants more, for convenience, economic, and social reasons.

Fields (2014) reported that spending in restaurants has increased significantly since 2009, with consumers spending almost 4.5% of their salaries dining out, even as commodity prices have gone up and supermarket food pricing has been increasing 6% per year. The findings of a National Restaurant Association (2015) study indicated that two out of five consumers reported that they are not eating out as often as they would like. The National Restaurant Association report also indicated that the restaurant industry commanded a 47% value of food dollars in the United States. In 2010, the average family expenditure on food consumed outside the home was \$2,505. The 2007-2012 economic turmoil led to a slower growth of 3% per year, unlike in the 1970s when the industry grew by an average of 6.6% per year. The restaurant growth trajectory is increasing again, and as economic conditions improve and household disposable incomes increase, restaurant sales will likely increase (Fields, 2014).

Transition

At the start of Section 1, I provided the problem statement and purpose statement, and I discussed the nature of the study, touching briefly on the method and design. I provided the interview questions and outlined the conceptual framework for the study. I reviewed the assumptions, limitations, and delimitations and discussed the significance of the study. I concluded Section 1 with a review of the professional and academic literature. In Section 2, I addressed the restaurant study purpose, role of the researcher, participants,

research method and design, population and sampling, ethical research, data collection instruments and technique, data organization technique, data analysis, and reliability and validity methods. Section 3 begun with an introduction, followed by the presentation of the findings. I also discussed the application to professional practice, implications for social change, recommendations for action and further study, and a conclusion.

Section 2: The Project

The restaurant industry is critical to the Washington, DC, area economy, as it creates jobs, contributes to the revenue base, and provides a relaxing and entertaining environment for stakeholders (SBA, 2015). New small, independent, family-owned restaurant owners must learn the strategies that successful restaurant owners have used over the years to reduce food waste and survive in business beyond the first 5 critical years of operation. Leaders may use the findings from this study to sustain their businesses and improve quality for stakeholder who reside in the Washington, DC, metropolitan area.

Purpose Statement

The purpose of this qualitative multiple-case study was to explore strategies that small, independent, family-owned restaurant owners use to reduce food waste and increase profits. The research population for this study consisted of four small, independent, family-owned restaurants that generate no more than \$500,000 in annual revenue with a maximum of four employees and have been in business for five years or more in the Washington, DC, metropolitan area. The implications for positive social change include an increase in profits, job creation, and environmental improvement for residents of the Washington, DC, metropolitan area.

Role of the Researcher

As the sole instrument of data collection for this research, my role was to choose a suitable research method and design, recruit participants, and collect and analyze the data (Leedy & Ormrod, 2013). The data collection process involved conducting

semistructured interviews and gathering financial documents from participating restaurant owners. Researchers who conduct semistructured interviews have the flexibility to pose predetermined questions and ask follow-up questions as needed. I conducted one-on-one interviews largely to understand the in-depth complexities of the subject under study (Doody & Noonan, 2013; Rowley, 2012). To capture all the details of the interview, I recorded the interview statements from participants and later transcribed the recordings for analysis. Sample interview questions appear in Appendix B.

I collected financial statements that outlined a range of annual revenues and expenditures from which I was able to estimate net annual profits for each unit restaurant. Researchers conduct qualitative research because it has the flexibility to conduct interviews and choose the techniques with which to analyze data (Bansal & Corley, 2012).

I do not own a restaurant, but I briefly worked in restaurants in the Washington, DC, metropolitan area. I have friends who own restaurants. I regularly dine at area restaurants, and sometimes I see the kinds of issues restaurant owners confront every day. In 2013, I came very close to opening a restaurant, but the funding I sought for the project did not go through. I am still interested in owning a restaurant one day.

Researchers must observe the 1979 *Belmont Report* written by the National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research. In the spirit of the report, I intended to keep the information I gathered during the research process confidential in solidarity with participants and in observance of the ethical principles that protect human subjects in research (Brakewood & Poldrack, 2013).

The *Belmont Report* indicated that a distinction exists between ethical principles and the application of these principles. The principles involve a level of respect for humans, beneficence, and justice. During the interview process, I made every effort to remain objective, minimize errors, and avoid bias that might obstruct my judgment. A biased mindset can influence the design of the research question and skew the data collection and analysis procedures that can lead to inaccurate or misleading findings (Leedy & Ormrod, 2013; Lomangino, 2015). I used the interview protocol often used by researchers conducting case study research, to conduct the interviews with participants, take notes, make observations, and record participant statements. Jacob and Furgerson (2012) noted that a good interview protocol must include a script to use particularly at the beginning and toward the end of the interview to ensure participants address all interview questions and to highlight the ethical aspects and the rights of the participants. I ensured that I followed the same protocol with each participant.

Participants

In this study, I interviewed a purposive sample of participants until I achieved data saturation. Researchers reach saturation when interview responses do not yield any new information (Walker, 2012). The criteria for selecting participants included people who are older than 18 years of age and who have owned small, family owned restaurant in the Washington DC area for five years or more. I sought approval from Walden University Institutional Review Board (IRB) and adhered to the ethical standards stipulated in the IRB code of conduct to avoid violating participant human rights, as

outlined by Marsolo (2012). My Walden IRB approval number is 05-23-16-0499924 and expires on My 22, 2017.

I obtained a list of eight names, addresses, and phone numbers of small, independent, family-owned restaurant owners from the Dun and Bradstreet database for the Washington, DC, area to participate in the study. From this list, I ensured that I selected prospective participants that were at least 18 years of age. I made sure that prospects are from different zip codes within the Washington, DC, metro area. I selected an equal number of male and female prospects whose small restaurants generated annual revenue of no more than \$500,000 with four employees or less, who were willing to share the strategies they have used to reduce food waste, increase profits, and thrive in business for the past five years or more.

I conducted the eight prospective participants by phone and then emailed them the organizational permission form asking each one to take part in the study (see Appendix B). The organizational permission outlined the purpose of the study. Along with the organizational permission, I included the participant consent form (see Appendix D). From the consent form, participants got an idea of the privacy and voluntary nature of the study. I asked the participants to review and email the consent form with the words “I Consent;” back to me. I selected the first four prospects to respond on a first come first served basis, that is, the first two men and the first two women, and they became participants in the study. I placed two prospects who responded later on a standby list in case a participant dropped out or was unable to continue for one reason or another. Two prospective participants did not respond. I called the four selected participants and went

over the research procedures, content, answer questions, and concerns from participant, and after that, I scheduled interview appointments on dates and times suitable for each participant. During the phone call, I explained that participation in the study was voluntary and that anyone was free to withdraw from the research at any time without any penalty.

From the time that I made the initial contact with participants until the time I conducted the interviews and through the end of the study, I displayed a high level of integrity when dealing with participants to earn their trust and respect. I demonstrated a high level of knowledge of the subject matter, showed respect for the participants' time, and I carried myself in a professional manner. Paxton and Glanville (2015) reported that researchers who earn participants' respect and trust are likely to produce reliable findings. I conducted the study in a timely and efficient manner.

Research Method and Design

I selected a qualitative inquiry for this study. Quantitative, mixed, and qualitative methods are the three distinct research methods available to scholars wishing to conduct research (Myers, 2013). Quantitative research involves collecting numerical data to explain a specific phenomenon. Researchers use quantitative methods to answer how many or what percentage, especially when they are searching for quantities in something (Allwood, 2012). The study I conducted did not require quantitative data to establish the strategies that restaurant owners use to reduce food waste in the Washington, DC, area. Therefore, a quantitative method was not suitable for this study. A mixed method that combines both qualitative and quantitative research was also not suited for this study. The

qualitative research method with its qualitative aspects, such as recordings, financial statements, interview protocols, semistructured interviews, video recordings, and face-to-face interviews, among other factors, was suitable to answer the research question. Qualitative researchers provide a detailed accounting of data sources and perform subjective analysis of participants' experiences (Leedy & Ormrod, 2013).

Research Method

I chose the qualitative method for this research. Other researchers may select quantitative or mixed method platforms as appropriate methods for their inquiry. For this study, a qualitative inquiry involving in-depth, face-to-face interviews featuring open-ended, semistructured questions administered to a carefully selected number of participants was the most logical method. Qualitative researchers use speech, sight, observations, diaries, artifacts, photos, and videos to collect, analyze, and interpret data (Arendt, Matic, & Zhu, 2012). Quantitative inquirers typically use statistical data with numbers, facts, and figures collected through a survey or questionnaire system to produce quantifiable and generalizable conclusions (Myers, 2013). I had no plans to use surveys or questionnaires, and I did not seek to generalize findings from this study to a wider population. The quantitative method was, as such, unsuitable for this research. Mixed methods research combines qualitative and quantitative processes, concepts, or language into a single study (Mertens, 2014; Venkatesh, Brown, & Bala, 2013). Incentives are lacking for a mixed method study, as a researcher can exhaustively explore the issue of food waste by conducting extensive interviews with carefully selected food practitioners who deal with this problem every day. Mixed-method research was therefore not

appropriate for this study. Since the aim of this study was to identify strategies that small, independent, family-owned restaurant owners in the Washington DC area use to reduce food waste, generate profits, and survive in business beyond the first five years of operation, I conducted an in-depth study with participants to capture and document their lessons learned and experiences with food waste. Thus, qualitative inquiry was the most suitable method to address the objectives of this study.

Research Design

I selected an exploratory multiple case study design for this qualitative research. Researchers use case study design to explore research questions, draw conclusions, and write reports based on the findings (Leedy & Ormrod, 2013). Within the qualitative study construct, notable research designs include narrative, ethnography, phenomenology, grounded theory, and case studies (Lewis, 2015). Narrative research involves collecting and documenting stories of participants' experiences and the historical context of the experiences (Paschen & Ison, 2014). I eliminated narrative research because I was not seeking stories of any kind, and the narrative design did not align with the research question. The focus of ethnography research is observing people's experiences, interactions, behaviors, and perceptions through their cultural or racial prisms (Reeves, Peller, Goldman, & Kitto, 2013). I was not conducting research on race, culture, or communities. Hence, ethnography design was not suitable for this study. Phenomenology research involves studying a small group of participants' experience of an event that needs an understanding and explanation (Tuohy, Cooney, Dowling, Murphy, & Sixsmith, 2013). I did not use the phenomenology design, as I was not interested in social, cultural,

and political implications of food waste. Researchers use grounded theory to construct, interpret, and formulate theories through comparisons from data collected from interviews with the aim of creating a theory of a phenomenon (Charmaz, 2014; Corbin & Strauss, 2014; Myers, 2013). I did not choose grounded theory for this study, as I was not seeking to draft theories of any kind.

Yin (2014) noted that researchers use case studies to explore participant experiences and to explore how business owners formulate decisions. In that sense, the case study design fits the research objective of this study. There are three types of case study designs: descriptive, explanatory, and exploratory (Yin, 2014). Researchers use descriptive case studies to illustrate events in proper context. Explanatory case studies are investigative, as they are instrumental in linking events to effects, whereas researchers primarily select an exploratory case study design to define research questions. The case study approach involves using interviews to gain an understanding of insights into experiences, attitudes, behaviors, and opinions of a small sample of participants (Rowley, 2012). Scholars use case studies for a current phenomenon to answer how or why questions (Kanyimba, Hamunyela, & Kasanda, 2014; Yin, 2014). In addition to documenting the experiences of the participants through interviews, I gathered relevant company financial statements from participants to support the interview process in the analysis, triangulation, and data saturation stages. Researchers achieve data saturation benchmarks after they reach a point where no new data are emerging (O'Reilly & Parker, 2012). A lack of data saturation in qualitative research can affect the quality of research and potentially compromise validity (Fusch & Ness, 2015).

Population and Sampling

The population that I used in this qualitative study included four small independent, family-owned restaurant businesses that have been in operation for five years or more in the Washington, DC, metro area. I used the purposive sampling method to conduct the study. In purposive sampling, the researcher judgment is instrumental when selecting the population for the study (O'Reilly & Parker, 2012). Researchers use purposive sampling to identify the features of a population that best answers the research question. When conducting qualitative research it is impractical and unnecessary to study the whole population (Rowley, 2012). O'Reilly and Parker (2012) proposed a population sample size of two to four participants for case study research. Through purposive sampling, researchers select a diverse set of participants with relevant experience and knowledge about the phenomenon under study (Zheng, Cai, & Pepe, 2013).

The sample size for this research included four small, independent, family-owned restaurant owners in the Washington, DC, metro area. The aim was to learn the strategies these owners have used to reduce or prevent food waste, increase profits and survive in business beyond the first five years of operation. The criteria for participation included owning a thriving restaurant for no less than five years, being 18 years old, and being located in the Washington, DC, metro area. Upon completing my first round of initial interviews, I personally transcribed and interpreted the interview data. After that, I went back to each participant with interpreted interview data and asked the participants to verify the accuracy of my interpretation of their statements and to ask further questions and obtain any additional comments from them. Additionally, I called each participant for

another member checking session. The participants started repeating themselves with no new information at which point I knew that I had reached data saturation. Saturation is the benchmark for quality in research as it enhances validity (Walker, 2012). After achieving data saturation, I cleansed the data and then used methodological triangulation to converge data assembled from interviews, financial statements, and member checking data and performed extensive data analysis.

It is critical that the researcher conducts interviews in a safe and comfortable environment. Gagnon, Jacob, and McCabe (2014) pointed out that space and place are critical elements of the of the interview process. Interview time and location play an important role in shaping the perceptions of prospective participants and their willingness to take part in the study (Gagnon et al., 2014). Interviews conducted in a small or poorly ventilated room can make it difficult to engage participants in lengthy interviews. It is with this consideration that I allowed the participants choose a private room at their place of work from where I conducted the interviews with the door closed to ensure privacy and to provide a comfortable and convenient setting for participants to share personal experiences in confidence.

Ethical Research

I applied to the Walden University's IRB for approval to conduct research as part of my obligation to protect participants, ensure confidentiality, maintain participant anonymity, and secure participant informed consent (Rogers & Lange, 2013). Because participants were going out of their way to assist me to conduct this study, it was and my responsibility to protect their well-being throughout the research process (Mandal &

Parija, 2014; Guta, Nixon, & Wilson, 2013). I adhered to the ethical standards of research commonly used on participants: the principles of respect for persons, beneficence, and the *Belmont Report* (Moulton, Collins, Burns-Cox, & Coulter, 2013). I completed the National Institutes of Health (NIH) training on the protection of human research on September 11, 2014. My certificate number is 1554724. I emailed the organizational permission to prospective participants inviting them to participate in the study. In the e-mail, I explained the objectives of the study. I attached a participant consent form, located in Appendix C, for participants to read and email back to me with the words “I Consent” as their way of agreeing to participate in the study. I included a sample of interview questions with the consent form, and I explained in the e-mail that I would be recording the interviews. I also informed the participants that I would be collecting company financial documents that will assist me in the research. I advised participants that participation in the study was voluntary and that any participant was free to withdraw from the study at any time without any penalty whatsoever. I further advised participants that they can withdraw by calling me on the phone listed on the form to let me know or they can send an email, text message or regular mail to notify me if they decide to withdraw from the study. I assured participants that they are free to withdraw from the research even after the research is under way at the beginning, in the middle or towards the end of the research or any other time without suffering any consequences of any kind. I explained that there are no payments or incentives of any kind for participation. However, I let participants know that they will have access to the research findings. After I received the e-mail response with the words I Consent, I called participants to reiterate

the information on the consent form and to schedule interview appointments based on their availability.

Researchers must observe basic ethical standards such as honesty and objectivity, build rapport, and establish trust with participants. Nothing is more important than the welfare of participants during a study (Rogers & Lange, 2013). Observing research protocol during the data gathering, storage, and analysis process is critical for protecting participants' privacy and rights and safeguarding the integrity of the study (Yin, 2012). I have stored the data on a password-protected external hard drive along with hard copies of documents and findings in a locked cabinet for 5 years. After that, I will delete all the data from the hard drive. I will also shred all hard copy documents after 5 years to protect the confidentiality of the participants. During the interview phase, I labelled participants as P1, P2, P3, and P4 to conceal their identity and protect their confidentiality (Brakewood & Poldrack, 2013). I also labelled the restaurants in this study as R1, R2, R3, and R4 to maintain organizational confidentiality and research integrity.

Data Collection Instruments

In this qualitative multiple case study, I was the primary instrument for data collection. The chief research instrument must introduce skill, knowledge, balance, and competency to produce meaningful knowledge (Rowley, 2012). I had full control over the interview process, although participants may make secondary contributions such as suggesting interview venues and schedules. Consequently, the success or failure of the research depended on the kinds of decisions I made, the environment surrounding the interviews process, and the knowledge and skills I brought to the process. To collect data,

I posed semistructured, open-ended interview questions to encourage dialogue and to allow for follow-up questions (Myers, 2013). I also collected financial documents as part of the data collection process. During the interview process, I listened attentively to participant responses. Paying attention to participant responses is a good lead-in to the data analysis process. When researchers interview participants and listen attentively at the same time, they save time and avoid collecting unnecessarily large volumes of data that will require extra time to analyze. Researchers conducting case studies use data collection methods such as archival records, observations, documentation, interviews, site visits, and artifacts (Yin, 2012). Rowley (2012) noted that researcher tone, attitude, mood, and demeanor at the time of the interview could influence participant actions and reactions. Hence, I set a friendly and favorable tone and a welcoming atmosphere at the beginning of the interview. I reviewed my interview script to remove any jargon or inappropriate language. Interview questions should not lead participants or have built-in assumptions (Rowley, 2012). Yin (2012) listed numerous ways to collect data when using case study design, including interviews, direct observation, business archives, records, documents, physical artifacts, and fieldwork, and recommended that a researcher apply at least two of these methods in a single study. I collected data by using in-depth, face-to-face, open-ended, semistructured questions and follow-up questions to develop a rich and lively dialogue (Myers, 2013). I also collected financial statements that reflected revenues and expenditures, to get a sense of the company financial position. Lastly, I performed member checking to converge data collected from multiple sources, to crosscheck data,

and obtained additional information by performing member checking to enhance the validity and the trustworthiness of the study.

I followed the interview protocol available in Appendix A when conducting interviews to ensure I did not skip any questions. The interview protocol is instrumental in research, as it helps keep researchers on track in the data collection process and increases research reliability (Yin, 2014). After the data collection process was complete, I began to cleanse data to detect and correct errors and inconsistencies and to eliminate duplicate data to enhance quality. Then I transcribed and interpreted the data and took the interpreted data back to the participants for member checking so the participants can verify the accuracy of my interpretation of their statements. Researchers use member checking to reach data saturation (Harper & Cole, 2012). Research that does not achieve data saturation raises serious validity questions (Fusch & Ness, 2015). I met with participants individually and asked each participant to review my interpreted data to identify and correct any misrepresentations. The process took place in a safe and private environment to maintain the privacy of participants. At the same time, I performed member checking with participants gain information that may not have come up during the interviews. Finally, I placed a phone call to participants to find out if they had any other information relevant to my study. When no new information was forthcoming from participants, I knew I had reached data saturation. After I completed member checking, I triangulated data and entered it into NVivo software package to generate codes. The coding process helped me generate themes from the data.

Data Collection Technique

The research question for this study was as follows: What strategies do small, independent, family-owned restaurant owners use to reduce food waste, increase profits, and survive in business beyond the first 5 years? The data collection techniques that I used for this research was face-to-face interviews and company financial statements. I adhered to the interview protocol as outlined in Appendix A when conducting the face-to-face interviews. The interview involved a predetermined set of questions, but I asked follow-up questions to explore the food waste phenomenon in greater depth. Semistructured interviews were the best option to address the participants' experiences with food waste. The interview questions are located in Appendix B. I scheduled a convenient day, time, and venue to meet with the participants and conduct the interviews. I allocated maximum of 60 minutes for each participant.

Twenty-four hours before the scheduled interviews, I called each participant to remind them about the scheduled interview appointment. On the interview day, I arrived at the venue 15 minutes early and noted the date and time of my arrival in my notebook. I also recorded the type of room, where it was located and how private the room was. Private room ensured participants were relaxed and free to express themselves without fear. Before I commenced with the interviews, I gave each participant a printed copy of the consent form with the words "I consent" (see Appendix D) they had earlier emailed back to me and engaged the participants in small talk to build rapport. I set up and tested the audio recorder, and once I was ready, I started the audio recording instrument and commenced the interviews almost at the same time. I conducted the interviews with the

door closed and with only the participant present to ensure confidentiality. During the interview, I asked follow-up questions to increase the depth and breadth of the data.

The interviews last approximately 60 minutes. Immediately after each interview, I collect financial statements from each participant. After that, I sorted, organized, and prepared the data, transcribed and interpreted the data. Then I made the data available to participants for member checking. Member checking is the process where the researcher goes back to participants with transcribed and interpreted data so that participants can verify researcher interpretation of interview statements. Member checking helps eliminate researcher misinterpretations and misrepresentations and addresses the validity, reliability, and trustworthiness of the research (Thomas & Magilvy, 2011). After that, I performed data triangulation to integrate member-checking data, interview data, and financial documents data collected from participants and then performed data analysis.

Data Organization Technique

As the instrument of research, I was be responsible for collecting, securing, analyzing, processing, and storing data according to Walden University IRB guidelines. I recorded interviews using an electronic voice recorder. The recorder had a red light that indicated that the recording was underway. I also had a time counter to track time. I carried an additional audio recorder as a backup. I tested both devices to ensure they were working properly. I checked the volume settings to ensure each device was loud and clear enough for me to transcribe the interviews later. I used a pen and notebook to record the date, time, and place of the interview. I also wrote down follow up questions or issues that I wanted participants to clarify or expand on. After I finished each interview, I

requested and collected company financial statements as part of the data collection protocol. I personally transcribed, organized, and interpreted the data and transferred the data to a portable, password-protected flash drive. I made the transcribed data available to each participant for review. Participants were encouraged to point out mistakes in the transcribed data and to add new information that was not previously included in the interview. Finally, I entered the data into NVivo software for coding purposes. I adhered to IRB stipulations on the collection and storage of research data. I stored the transcripts and the flash drives in a locked cabinet in my bedroom where I will be the only person with access to stored data. I will store all the raw data in a locked cabinet for 5 years, after which I will shred, destroy, and delete all the information to ensure participant confidentiality.

Data Analysis

Qualitative researchers rely mostly on triangulation for data analysis.

Triangulation is the process of assembling data obtained from different sources to establish consistency (Yin, 2014). Denzin (2012) posited that combining multiple methods in a single study adds rigor, depth, and richness to a study and helps capture specific portrayal of the research question or a business problem. Hence, qualitative researchers employ triangulation when they want to explore research questions from different points of view (Myers, 2013). Researchers use triangulation to integrate data collected from multiple sources to cross check for validity (Fielding, 2012). Triangulation does not guarantee that research findings will be valid, but researchers use the method to identify weaknesses. Researchers assemble data in one location through the process of

triangulation and crosscheck the data for consistency (Fielding, 2012). Researchers also use the triangulation method in qualitative studies to determine data completeness and cohesiveness to recognize strengths and overcome any weaknesses and biases (Archibald, 2015). For other scholars to evaluate the strengths of a case study method used in a study, a researcher must explain in detail how the study progressed from data to results and the process of analyzing the collected data. Since a single study method is not likely to produce valid or credible results, researchers use triangulation methods to combine different sources to increase validity (Bekhet & Zauszniewski, 2012). Qualitative researchers focus on the big picture and minimize blind spots to collect data without bias or other preconceived notions (Wiseman & Harris, 2015).

In addition to interview transcripts, I visually analyzed data from financial statements, wrote down relevant information to this research as it emerged and interpreted meaning from the data. I used NVivo 10 software to sort, organize, and analyze data to identify and capture recurring elements to answer the research question. I coded the interpreted data for the organization and analysis, after which I reviewed the codes in detail to identify themes, incorporated the stakeholder theory, and linked the theory to the research question for a cogent analysis. I used NVivo software, along with human analysis, as software cannot replace the human mind, especially since the study design incorporates secondary data in a tangible form. I also used a pen and paper to analyze data and to make a supplementary review of computer-analyzed data. After that, I categorized coded data and subsequently identified emerging patterns to develop

themes. Coding helps categorize and reassemble data to identify emerging themes and assist in eliminating repetitive information.

To triangulate the data, I used responses from the interview questions and financial statements from participants. Researchers use the triangulation method to verify patterns of information from at least two different sources of data (Yin, 2012).

Triangulation involves combining different methodologies or theoretical perspectives (Flick, 2014). In this study, I used interview responses and financial statements from the participants to triangulate data.

Researchers use member checking as a quality control tool to improve the accuracy, credibility, and validity of collected data (Harper & Cole, 2012). Member checking involves a process whereby participants review interpreted data to make sure the researcher captured their statements clearly and accurately. I acquired data for this study from participant interview data, member checking data, and company financial statements. By combining interviews and financial documents, I worked to overcome research bias (Smith & Noble, 2014). I continuously reviewed the stakeholder theory framework and keep abreast with new research development or emerging scholarly trends that may influence the research question or the purpose of this study. I continued to iterate this study as new research material on the food waste phenomenon become available to keep it current, valid, and relevant. To ensure participant privacy and confidentiality, I assigned the following labels to participants: P1, P2, P3, and P4. I will store flash disks containing interviews, transcripts, and documents gathered and used in

the study in a locked cabinet for 5 years. After 5 years, I will erase data from all flash drives and shred hard copies in accordance with IRB policy.

Reliability and Validity

Researchers use validity and reliability constructs to provide details of consistency and of the ability to replicate the study with other research samples. Before researchers can submit their findings from a qualitative inquiry, they must ask themselves if they have reported the reliability and validity measurement methods and the instrument used to collect and analyze data (Ham, Huggins-Hoyt, & Petus, 2015). Reliability and validity measurements related to issues of trust and quality (Knight & Cross, 2012). As qualitative researchers do not generate numbers, figures, or statistics, researchers must document the procedures or steps they use in the research process to ensure validity and reliability. Scholars employ reliability to measure research uniformity and determine validity to measure the extent to which they have answered the research question.

Reliability

Reliability, as employed in qualitative research circles, is the measure that scholars use to determine research consistency. Researchers conducting qualitative case studies document the steps and procedures they use so that, if another scholar decides to conduct a similar case study following the procedures or steps described in the initial research, the scholar would obtain the same findings and conclusions (Yin, 2014). Researchers using a case study protocol should cover all steps in the interview process and thereby increase reliability (Yin, 2014). The reliability protocol involves examining research instruments and data collected to establish accuracy and prevent research bias.

Qualitative researchers often define reliability as a factor of consistency and dependability, where consistency involves examining raw data or reducing data as a verification mechanism. Dependability refers to a systematic description of the changes that may occur after the research starts, what impact the changes may have on the scope of the research, and how researchers handle such changes (Venkatesh et al., 2013). Since I started working on this study, scholars have published new studies. I set up several electronic alert systems relating to the food waste phenomenon, so every time scholars publish a new study, I receive an e-mail notification. I have received some e-mail notifications about newly published research that I reviewed and incorporated in this research. I will continue to receive e-mail alerts to gain new knowledge related to this study, to update this research to reflect current trends, and to integrate recent food waste reduction strategies available on the market.

For this study, I used member checking to establish data reliability and consistency with participants. After I completed the interview process with participants, I transcribed and interpreted data and then made interpreted data available to participants for member checking. Member checking involves going back to the participants with interpreted data from interview transcripts and allowing participants to review the interpreted data to confirm the accuracy of interpretation (Marshall & Rossman, 2014). Researchers use member checking to establish trust with participants and other scholars.

Validity

Credibility, confirmability, and transferability are the three main criteria for evaluating the validity of qualitative research (Thomas & Magilvy, 2011). Validity is a

protocol that researchers use to establish whether research has achieved its goals as defined in the research question. Validity is critical to qualitative research, and researchers achieve validity through research methods, research designs, findings, data collection, and data analysis. Document accuracy and trustworthiness are key drivers of validity (Yin, 2014). Researchers divide validity into two categories: internal and external validities. Internal validity refers to the realities of the outcomes and the control of the variables throughout the study period. When applied in an appropriate manner, validity methods can reduce misunderstanding among scholars and confirm acceptable knowledge. Scholars examine internal validity through prisms of credibility and apply credibility standards to validate the results of the qualitative study (Venkatesh et al., 2013). In this study, I demonstrated validity by going back to participants to perform member checking. Member checking is a process in which participants review interpreted data to ensure accuracy and consistency. I also performed data triangulation to converge participants' interview data, member-checking data, and data from financial statements into a valid research report.

Researchers use a confirmability process to explore to what extent other scholars can verify or corroborate the results of a study (Venkatesh et al., 2013). Researchers validate qualitative studies by triangulating data gathered and through member checking. To ensure transferability in qualitative study, researchers describe a study's environment, participants, and processes in detail, such that scholars have sufficient information to establish how well the study can address future research questions (Brysiewicz & Erlingsson, 2013). Transferability is up to the reader to decide if the results of one study

are transferable or generalizable elsewhere (Cambon, Minary, Ridde, & Alla, 2012). Scientists use triangulation in qualitative research to test validity when results from different methods or designs converge to corroborate results from other methods and designs used in studying the same problem (Carter, Bryant-Lukosius, DiCenso, Blythe, & Neville, 2014).

In qualitative research, researchers achieve data saturation after they gather sufficient data to replicate the study or when attempts to obtain new information lead to the same repetitive information (O'Reilly & Parker, 2012). Researchers determine data saturation not only by the number of interviews conducted or by exploring all the research options available but also by the richness of data collected (Fusch & Ness, 2015). When ignored, a lack of data saturation can compromise the validity and influence the outcome of the research.

Summary and Transition

In Section 2, I presented the purpose statement, the role of the researcher, the participants, and the research methodology and design. I also described the population and sampling method; ways to ensure research is ethical; the data collection instruments, technique, and organization; data analysis techniques; and reliability and validity methods. Section 3 included a brief overview and a detailed analysis of the results of the study. I have presented recommendations for professional practice and discussed implications for social change. I have also made suggestions for future research and provided research conclusions.

Section 3: Application to Professional Practice and Implications for Change

Introduction

The purpose of this qualitative multiple case study was to explore strategies that small, independent, family-owned restaurant owners use to reduce food waste and increase profits. Section 3 of this study contains a detailed summary of the findings of a qualitative multi-case study in which I explored, in depth, the strategies small, independent, family-owned restaurant owners in the Washington, DC, metro area use to reduce food waste and generate profits and survive in business beyond 5 years. Section 3 highlights the validity of the key themes: employee training, communication among stakeholders, and customer loyalty as resources for profitability. The study results confirmed the existence of a relationship between the themes identified from the data and the stakeholders theory in which I grounded this study. Section 3 comprises the introduction, the study findings, and the application of study's findings for professional practice. I also explore the implication for social change, make recommendations for action, and suggest recommendations for further study. I offer reflections on the research process; and provide study conclusions. During the face-to-face interviews, participants responded to interview questions listed in Appendix A and the following themes emerged from the four interviews: employee training, communication among stakeholders, and customer loyalty as key resources for small, independent, family-owned restaurant profitability.

Presentation of the Findings

In the following subsections, I describe the three themes that emerged. The proposed central research question was as follows: What strategies do small, independent, family-owned restaurant owners use to reduce food waste and increase profits? I selected the stakeholders theory as the framework for this study and explored the interview questions to ensure that I collected rich data from the owners of small, independent, family restaurants.

Themes

Through semistructured interviews, financial documents, and member checking data, I was able to learn about the issues related to food waste and profitability in small, family-owned restaurants. After careful review of research material and an in-depth analysis of data, I isolated three major themes related to the phenomenon. The following is a description of the themes.

Employee training. In this theme, participants emphasized the need for employee training to reduce food waste and increase profits to sustain the business beyond five years. Based on the study by Lee and Park (2016), small independent, family-owned restaurant owners should invest in employee training to capture new customers and increase the odds of surviving in the restaurant business beyond 5 years. Implementing employee training may help small restaurant owners retain customers and capture new ones. Participants noted that employee training might draw awareness to the gravity of the problem, mobilize stakeholders to seek solutions, and help create of new business opportunities. With employee training initiatives, small, independent, family-owned

restaurant owners can reduce food waste, increase return on investment, and improve the environment. The some participants suggested that new entrepreneurs should train employees to engage guests in ways that reduces food waste.

Participants noted that employee training adds value to small restaurants and increase the potential for return on investment. The participants pointed out that training employees improves innovation process and enhances job performance. Results from the study show that 100% of participants agreed that small, independent, family-owned restaurants should train employees as a remedy to food waste.

In the first theme, participants identified the need for employee training. Employee training will reduce food waste, improve the environment, create opportunities for new businesses, and enhance return on investment. Collaboration between employees and owners will reduce food waste, increase profits, and create new businesses. It emerged that Theme 1 is closely connected to the stakeholder theory since training empowers employees to act as intermediaries between restaurant owners and other stakeholders such as customers, employees, suppliers, community leaders, and regulatory agencies who benefit directly or indirectly from the operations of the restaurant. Results from the study show that all participants identified the need for employee training to reduce food waste and increase profits.

Communication among stakeholders. In the second theme, participants emphasized the importance of communication among stakeholders as the key to reducing food waste. Communication between small restaurant owners, employees, suppliers, customers and others through various means of communication will benefit all the parties

involved. Owners of small restaurant may realize higher profits, employees may receive better wages, suppliers will get steady market for their goods, and customers may their favorite food. Bernstein, (2015) noted that small restaurants owners need to take advantage of communication channels available in the market today in order to thrive. Participants identified communication as a decisive strategy in operating a small restaurant to increase profits.

I analyzed data to learn about the importance of communication among stakeholders with respect to food waste and profits. The results show that 100% of participants considered communication among stakeholders as important for small, independent, family-owned restaurant owners to increase profits. In the communication among stakeholders theme, participants emphasized the importance of communication among restaurant owners and collaboration with stakeholders to form partnerships and to generate decisions beneficial to the community. I connected communication among stakeholders theme to the Stakeholder theory in that owners who interact with stakeholders and manage their interests properly may reduce wastage of food, create value, and increase profits (Freeman, 1984).

Customer loyalty. In this theme, participants emphasized the need for customer loyalty since loyal customers provide repeat sales that small, independent, family-owned restaurants need to increase profits. At the beginning of the year, the restaurant owner usually has certain percentage of loyal customers to use for budgeting and forecasting purposes. One participant stated that 90% of their customers are the loyal customers adding that good food and superior customer service are the key to customers coming

back. Customer loyalty may determine growth in some small, independent, family-owned restaurants since restaurants with regular repeat customers can plan and strategize for the future and for growth and existing loyal customers may introduce of new customers.

Participants highlighted the importance of small, independent, family-owned restaurant owners becoming involved in community activities, such as food donations and food giveaways at community events. Small, independent, family-owned restaurant owners may collaborate with community agencies to form partnerships and establish brand awareness. Based on Proietti's (2012) proposition, small, independent, family-owned restaurants cultivate relationships in communities to create profits. One participant stated that employees encourage customers to take leftover food home with them, and that if a customer is unhappy, employees are empowered to address any problems, or issues a customer might have before that customer leaves the restaurant. Accordingly, employees may make refunds, order new food item at no extra cost or issue credit for future use to a customer who may not be satisfied. In a recent study, Kask and Linton (2013) suggested that business owners establish relationships with stakeholders to foster goodwill and establish customer loyalty.

From the study, the results show that all participants indicated that customer loyalty is important in reducing food waste in small restaurants to generate profits for sustainability. I connected this theme to the stakeholder theory since training empowers employees to act as intermediaries between restaurant owners and other stakeholders. Hörisch et. al (2014), noted that treating stakeholders well and managing their interests better, helps business owners create value and thrive.

In this theme that emphasized customer loyalty, participants highlighted the need to reduce food waste and maximize return on investment. Developing relationships with stakeholders creates a win-win situation for owners and other stakeholders. Reducing food waste may provide opportunity for growth for owners and other stakeholders and create possibilities for new businesses.

Research Perspective in Detail

The research question that was the basis of data collection and data analysis for this study focused on the strategies small, independent, family-owned restaurant owners can implement to reduce food waste and increase profits. Restaurant owners may develop strategies from the research findings to reduce food waste and increase profits. The research question was as follows: What strategies do small, independent, family-owned restaurants use to reduce food waste and increase profits? I addressed the research question by collecting responses from interview questions given by four participants. The participants responded to interview questions in a face-to-face interview (see Appendix B) providing depth experience and knowledge to the research. Participants answered seven interview questions and three themes emerged. The themes include: Employee training, communication among stakeholders, and customer loyalty. In the following subsection, I present a synthesis of participant responses to the interview questions that provided the data to answer the research question.

I explored in depth the strategies restaurant owners use to reduce food waste and maximize profitability. All participants indicated that they had training protocol in place to train employees on an on-going basis. Half of participants favored verbal and practical

instructions where employees learn by hearing, seeing or touching. This half insisted on hands on employee training. The other half of participants preferred written training where employees were encouraged to read manuals, recipes, books, and websites that explain food reductions strategies and processes. All participants agreed that food waste was a threat to restaurant survival. On the concept of upselling customers to improve profitability, about half of the participants agreed with upselling customers as an effective way to increase sales and increase profits. However, one out of the four of the participants did not approve upselling customers, arguing that when a customer receives more food than they need, the extra food ends up in trash. One participant noted that employee training is an ongoing process and added that one-on-one training on food waste should be a basic requirement in small restaurants to ensure maximum profit. One participant pointed out that training is the key to portion control and training ensures customers receive a fair share for their money adding that portion control is essential to prevent misuse of resources but also to make sure the customers get what they are paying for. One participant noted that customers who do not get a fair portion of food for their money may not return to patronize the restaurant in future. One participant explained that when a new employee is hired the first lesson involves the protection of company resources –including guarding against food waste. New employees go through a series of training sessions on the values and practices the owners believe in, what they stand for, the short- and long-term goals, and company values and objectives. All participants agreed that training is not a four-hour or a one-day event. Instead, it is an on-going

activity. Training instills confidence especially in new employees and increases the prospects of better return on investment.

Half of participants explained that small restaurant owners must watch their sales trends and sales history, noting that any small restaurant that has been in business for two years or more has sales trends. One participant emphasized that owners should review sales trends periodically and develop employees training protocol that targets food waste. Half of the participants pointed out that employees must be trained to know when the customers are coming and when they are not. One participant suggested that entrepreneurs planning to venture into small restaurant business should take a couple of classes. Classes on quantities and portions can motivate an aspiring entrepreneur to be a profitable restaurant owner. Additionally, one participant introduced the specific form of food waste that can greatly affect return on investment. One participant noted that when employees eat the most expensive food, profits will likely decrease. All participants agreed that training empowers employees to participate in food waste reduction initiatives, provide great customer service, and increase the prospects for higher profits. Other benefits for reducing food waste include protecting the environment by reducing foodstuff that ends up in area landfills.

Half of participants discussed the operations planning that targets food management, specifically the prevention of food waste, which one participant described as the biggest hidden cost in the food industry. Half of participants agreed that the selection of menu items is critical, and the design of the kitchen equipment is equally important. One participant discussed further the dynamics of kitchen design, pointing out

that employees have to make a decision whether to hold our food hot or cold to minimize food spoilage.

One participant identified employee training as essential in the start-up and operation process of small, independent, family-owned restaurants. P4 observed that good food, good customer service, good ambiance, and good location drive small restaurant businesses. One participant underscored the need to plan and execute business goals systematically and to build stakeholder relationships in communities by maintaining knowledgeable staff, serving quality food, and investing in employees to increase profits.

All participants suggested that the owners of family-owned restaurants introduce systems to donate food to neighborhood school events, local charities, and others to build relationships in local communities. Half of the participants emphasized collaboration and relationship building between various stakeholders and small, independent, family-owned restaurant owners.

In an effort to understand the impediments to reducing food waste in family-owned restaurants and to learn new strategies to prevent food waste and maximize profitability, I explored further into the question of food waste among restaurant owners. Half of the participants observed that during lunch or dinner shift, over-portioning or under-portioning can be a challenge when employees are under pressure to get the customers in and out of the restaurant. One participant stated that regular over-portioning can reduce profits while another participant pointed out that under-portioning is equivalent to cheating the customer and can potentially lead to loss of customers. One

participant disclosed that when hosting large events, experienced cooks come from outside. New employees can learn from these experienced cooks. Most of the participants noted that kitchen design can make it hard for employee to throw away food or to eat expensive food that can potentially affect profits. P2 stated that the staff removes items that don't sell from the menu to minimize waste, and if customers ask for it, they explain that they no longer carry it. Some of the participants stated that they cook most foods from scratch to minimize waste. As a result, P3 was categorical that food waste does not occur that the restaurant. Meanwhile another participant advised potential restaurant owners to learn to cook before venturing into the food industry to maintain consistency of menu and items.

Half of participants revealed that a strong Internet presence combined with effective word-of-mouth advertising, were essential for generating new sales, minimizing food waste, and increasing profits. Most participants (75%) also alluded to the importance of word-of-mouth advertising and to good customer service as the key to generating short- and long-term sales goals. Half of participants stated that employees receive extensive training on how to prepare delicious food, adding that Internet presence, social media, and word of mouth are key communications channels used to bring customers to the restaurant. After the customers taste the delicious food, they keep coming back for more, and that sustains operations and generates profits.

Half of participants have invested in recipes, scales, and others equipment to monitor food portions, volumes, and quantities to minimize food waste. By contrast, only one participant had a buffet style restaurant where food portion is not particularly

important. Most of the participants (75%) stated that employees go through training to learn to weigh and feel the sizes of ingredients on scales. Meanwhile, Participant P1 stated that from time to time, they go into communities to invite people to come to dine at their location as one way of preventing food waste. Additionally, half of the participants pointed out that cooks reuse some of the leftover food to make new dishes. Meanwhile one participant explained that the cooks prepare some food items such as greens and hold them cold but, they are capable of bringing the items to the required temperature ready to serve the customer when the order comes in. Half of participants noted that owners must develop a system, invest in it, and use it to generate business profits. One participant suggested treating customers as valuable assets, irrespective of their backgrounds adding that customer service connects stakeholders with service providers. Satisfied customers will tell everybody in the community about the unique service to expect at the restaurant. All participants emphasized the need to hire the right employees and empower them to solve problems to ensure satisfied and loyal customers.

One participant with a 501(c) nonprofit agency is involved with adult males and children as one way to attract more customers. As such, the participant regularly mobilizes employees to participate in community-based soccer games, and after the games, people get free food to taste as a way to attract new traffic to the restaurant. Another participant narrated how the restaurant arranges to store excess food for customer with special orders until the next day. This happens when fewer than expected guests show up at a party or planned event where food orders are placed in advance. Most participants (75%) noted that it is essential to hire employees who share the values of the

owners, adding that well-managed restaurants attract like-minded potential employees who regularly drop off resumes. Half of participants suggested hiring regular customers who may have the right skills and attitude with independent thinking capabilities who are also problem solvers. One participant also suggested retaining good employees by treating them like family members and paying above-average wages to increase profits.

With respect to the strategies that owners use to retrieve edible food, one participant stated that all my family members work here and all my friends eat here, adding that everybody who patronizes the restaurant trust what the staff does and the customers know they will get value for their money. Another participant suggested one customer appreciation day every year when customers come to get free food and drink. Yet another participant encourages customers to buffet stations to take only what they need and what they can finish. Three participants identified food donation as an important way of preventing excess food from going to waste. One participant did not donate food, stating the restaurant did not have excess food to donate. Meanwhile, all participants suggested connecting with vendors, neighbors, and community leaders to strengthen relationships with these stakeholders. One participant suggested paying vendors bills on time to establish a good working relationship, adding that good relationship ensures that suppliers deliver freshest food every time thereby minimizing the prospects for food waste. All participants agreed that collaboration between stakeholders and small, independent, family-owned restaurants through communication that involves sharing information, employee relations, and innovative management skills establishes the necessary customer loyalty to increase profits.

On discussions about future plan to increase profitability, all participants stated that food waste is a public health hazard explaining that uneaten food ends up in area landfills and produces harmful byproducts such as methane gas. One participant said that future plans involves donating more to community schools particularly on international school nights or similar events as donations that gives people in the community a chance to taste the food and eventually some of those people may become customers. One participant plans to open a grocery store next door and buy food products from there. P3 stated that I the near future, food supplies will not be delivered or held in the restaurant. Instead, P3 plans to buy from the grocery store jointly owned by the family. One participant advocated the integration of external influences from stakeholders with internal decision making to maximize the prospects for profits and improve the chances for survival in business beyond 5 years.

With respect to dditional information to reduce food waste and increase profits, two participants reiterated using small food increments and watching sale trends as the key to reduce food waste. At the same time, one participant suggested that employees pay attention to food products as they come in since broken foods such as eggs may end up as waste and affect profit margins. Another participant stated that if food is getting ready to spoil turn it into the special of the day as people always enjoy specials. One participant suggested enhancing the budget control measures to minimize food waste and other expenses. All participants indicated that it is important that small, independent, family-owned restaurant owners create a budget to control expenses and monitor prices to survive in business beyond 5 years. One participant warned against spending more than

what comes in and noted that staff must account for every item. Meanwhile, another participant suggested opening several bank accounts, including one for taxes, another for payroll, and another for operating expenses.

Connecting Findings to Conceptual Framework

Edward Freeman's Stakeholder theory, developed in 1984 was the conceptual framework in which I grounded this study. The premise of the stakeholder theory is to find ways to achieve a high level of stakeholder satisfaction, keeping in mind the fact that the most important stakeholder group is customers. Researchers have shown that, although small restaurants have unique stakeholders, the relationships between small, independent, family-owned restaurants and stakeholders remain insufficiently explored. Stakeholders can be internal or external, and restaurant stakeholders' interests direct link to restaurants' profits. Stakeholders share risks, benefits, or losses that come from a restaurant's operations (Madsen & Bingham, 2014; Tang & Tang, 2012). According to Freeman, a stakeholder is any individual or group of persons that have a direct effect on an organization's goal achievement.

The stakeholder theory was appropriate and relevant for exploring the strategies that small, independent, family-owned restaurant owners use to reduce food waste and increase profitability. Participant responses and themes aligned with stakeholder theory's factors of transparency and social responsibility that are critical to the health and well-being of the business community as well as American society (Asif, Searcy, Zutshi, & Fisscher, 2013; Gavin, 2013). Asif et al. (2013) explained that stakeholder theory recognizes that small restaurant owners have obligations not only to shareholders but also

to other stakeholders such as customers, employees, suppliers, and the community. Addressing the demands of stakeholders is essential for sustainability, profits, and legitimacy.

US Department of Agriculture researchers Buzby, Farah-Wells, & Hyman (2014) found that 133 billion pounds of food went to waste in the United States in 2014. The estimated cost of this waste was \$161.6 billion. Of these waste, 89 billion pounds occurred in restaurants and other food service facilities. Food waste negatively affects some small, independent, family-owned restaurants resulting in loss of profitability. In earlier research by Kantor, Lipton, Manchester, & Oliveira (1997) wasting food was considered tantamount to wasting the resources such as water, energy, and land used to produce the food in the first place.

Applications to Professional Practice

Small, independent, family-owned restaurant owners in the Washington, DC, metropolitan area may use the findings of this study to reduce food waste, improve profit margins, and increase the odds of surviving in a highly competitive industry. Food waste negatively affects some small, independent, family-owned restaurants resulting in loss of profitability. Since the restaurant industry is the largest private-sector employer in the United States, with an estimated 14 million people, or 10% of the U.S. workforce, (SBA, 2015), studying and learning the strategies successful small, independent, family-owned restaurant owners use to reduce food waste and to increase profits is important. New restaurant owners might use the findings to increase the prospects for survival in an industry where the rate of business failure is relatively high. There are one million

restaurants in the United States, which together with other food service facilities generated approximately \$907.2 billion in annual sales (SBA, 2015). Small independent, family-owned restaurant owners might use the results of this study to look at how they procure, store, refrigerate, and rotate their inventories and to learn ways to reduce food waste, earn better profits, and increase the prospects for survival in the business. If small, independent, family-owned restaurant owners can minimize food waste, they will increase profit margins and create more employment in the communities where they operate. The owners will save money, prosper in business, and eventually reduce the prices of food and help improve the environment (Besser, 2012). Reducing food waste in area restaurants will decrease the amount of waste shipped to area landfills, reduce the carbon footprint generated, and improve the quality of life for area residents.

Entrepreneurs who wish to start small, independent, family-owned restaurants in Washington, DC, may use the findings to make good business decisions. Existing small, independent, family-owned restaurant owners in the Washington, DC, area can use the results of this study to create new strategies for growth.

The most important themes for this study were train employees to rotate inventory, use inventory creatively, and interact with stakeholders to sustain operations in small, independent, family-owned restaurants (Fang & Liwen, 2014; Oh, Lee, Kim, & Shin, 2015). Employee training directly or indirectly leads to customer satisfaction and to customer loyalty (Besser 2012; Pérez & el Bosque, 2015). This research may fill the knowledge gap regarding the strategies small, independent, family-owned restaurant owners use to reduce food waste and increase profits.

Implications for Social Change

Strategies to reduce food waste and increase profits among small, independent, family-owned restaurants may lead to positive social changes. Some of the changes include new employment opportunities, a strong economy, community goodwill, improved sustainability, the environment, and a better quality of life for residents of the Washington, DC, area (Wagner, 2012). Owners of small, independent, family-owned restaurants experience pressure from both internal and external stakeholders with respect to the proper use of scarce resources. Ignoring the demands of these stakeholders can greatly affect the rate of return on investment for small restaurants (Blower & Mahajan, 2013). Small, independent, family-owned restaurant owners may use the knowledge obtained from this study to improve communication channels among stakeholders and collaborate with local communities for business sustainability (Freeman, 1984). The results of the study may affect social change if small, independent, family-owned restaurant owners use the findings to recognize and avoid factors that can lead to business failure. Restaurants are key contributors to the economy of the Washington, DC, metropolitan area. The findings in this study may serve to encourage aspiring entrepreneurs to venture into the family-owned restaurant business, as it includes the perspectives and the resources necessary to start and operate a successful small business venture.

Recommendations for Action

A lack of coherent business strategies among small, independent, family-owned restaurants can have a significant effect on profit margins and on the prospects of

surviving in business beyond the first 5 years of operation (Patočkova, 2012). This section includes four recommendations that independent, family-owned restaurant owners may implement to create value for sustainability. First, small, independent, family-owned restaurant owners should promote communication across all levels and among all stakeholders, including customers, suppliers, employees, and community leaders to nurture relationships to ensure business success. Sharing a vision can enhance the prospects for business success and organizational growth (Boyatzis & Soler, 2012; Markides, 2012). Restaurant owners must plan and communicate the purpose of a business to all stakeholders and monitor the economic outcome from the operations.

Second, small, independent, family-owned restaurant owners must recognize and appreciate the significance of customer loyalty as a critical strategy for business survival. Small, independent, family-owned restaurant owners should develop and encourage relationships with key stakeholders and cultivate the kind of loyalty that guarantees a steady flow of revenue. Researchers have suggested community involvement, one-to-one contact, and intermingling between customers and business owners to establish trust and create an atmosphere for the business to thrive (Eikenberry, 2013).

Third, small, independent, family-owned restaurant owners should institute a training protocol to measure food waste to sensitize employees on the correlation between food waste and profit margins and between profits and wages. I recommend that new employees receive training in ways to recognize food waste, understand the big-picture impact of food waste, be able to prevent food waste, and take responsibility for any food waste occurring in the facility. Existing employees should participate in training

on a regular basis to prepare them to recognize and seize critical opportunities to prevent food waste and increase profits.

Fourth, small, independent, family-owned restaurant owners should promote, encourage, and participate in community events. I recommend that owners use their facilities to host community parties, weddings, charity events, reunions, and other events. Marketing strategies should target groups that are receptive to the mission and vision defined by the restaurant owners.

The themes identified from face-to-face interviews with the participants for this study were the basis for the recommendations outlined above. The participants noted the importance of employee training, communication among various stakeholders, and customer loyalty as the key characteristics for preventing food waste to increase profits and to keep the doors of their restaurants open. The audience for the study includes small, independent, family-owned restaurant owners, community leaders, academics, practitioners, leaders of government regulatory agencies, business consultants, nonprofit organization leaders, and researchers who may use the findings to contribute to the body of knowledge on strategies small, independent, family-owned restaurant owners may use to reduce food waste and increase profits for sustainability.

Recommendations for Further Study

The first recommendation is to conduct future research on food waste in various segments of the restaurant industry, such as buffet restaurants, fast food restaurants, and fine dining restaurants to understand the extend of food waste in each segment. The second recommendation for future research is to conduct a mixed method study of the

food waste phenomenon in the restaurant industry. The contributions for a mixed method approach may add insight on what strategies restaurant owners may need to reduce food waste and increase profits (Mertens, 2014). Mixed method research involving various stakeholders may provide valuable lessons that owners may use to increase profits and enhance the prospect for surviving in business beyond the first 5 years of operation. The third recommendation for future research is to conduct a qualitative case study to identify and establish food waste to measure a protocol within the food service industry. A standardized food-waste-measuring protocol may promote awareness, improve communication among stakeholders, and inspire small restaurant owners to implement food reduction initiatives.

This study revealed that leaders in the restaurant sector have been slow to establish strategic employee training and communications protocols and procedures that address the food waste crisis. Further research should include the relationship between stakeholder communications and the extent to which stakeholders should help to lay the groundwork for an elaborate communications system. The final recommendation is to conduct a phenomenological study to engage participants in a deep and meaningful discussion to understand the uniqueness of their lived experiences (Moustakas, 1994). A phenomenological study could uncover details about lived experiences by adding depth of understanding into a broader context of small, independent, family-owned restaurant owners' ability to generate profits and survive in a competitive environment.

Reflections

The findings of this study have confirmed that a qualitative method with a case study design was the best approach for exploring the strategies that restaurant owners in the Washington, DC, metropolitan area may use to reduce food waste and increase profits. This research experience was an exciting journey. Through life's twists and turns, I managed to persevere and complete this doctoral study, despite the challenges I encountered along the way. Interviewing small, independent, family-owned restaurant owners was exciting, partly because of the participants' interest in the subject area. The participants were eager to participate in the study and, to the best of my knowledge, responded openly and honestly to interview questions. Through the interview process, participants reflected on the years of service they have provided to stakeholders and to the communities. I am grateful to the small, independent, family-owned restaurant owners for opening up to me and sharing their business experiences and the strategies they had used to sustain themselves in business. The participants agreed that a scholarly study at this level would produce helpful information for stakeholders in the restaurant industry in general and for family-owned units in particular. There were no issues or problems in securing interviews and obtaining the data needed for this research. The research and data collection process was a pleasant experience. Participants responded positively to my e-mail inquiries and consented to the interview process with no problem. I conducted the interviews with the help of an interview protocol to ensure accuracy and consistency and to ensure that participants responded to every interview question. I took

handwritten notes to support my digital recordings and compared the two sets of notes for accuracy.

I came into the Doctor of Business Administration program determined to complete my doctoral study at Walden University, and nothing was going to stop me. I have achieved that goal thanks the entire community at Walden University. I thank the Walden University community for the support they offered me along the way so I could complete my doctoral study program. I chose Walden University because of its reputation as a top online program in the United States and because its flexible schedule fit in with my lifestyle. The professors at Walden University were outstanding. By helping me reach my academic destination, they launched me into the top 2% of academic elite in the United States. They have also played a pivotal role in my professional growth. I will always be grateful. I go out to change the world with my head held high, and I will be seeking to make the world a better place.

Conclusion

I began this qualitative case study to explore the strategies that small, independent, family-owned restaurant owners use to reduce food waste and increase profits in the Washington, DC, metropolitan area. In Section 1, I explored the effects of food waste on small, independent, family-owned restaurants and stakeholders in the restaurant industry. I performed a review of literature on food waste and its effect on restaurant profits. The literature included several research studies conducted to determine the extent of food waste on the financial performance of small, independent, family-owned restaurants. The literature review provided significant insight about food waste in

the restaurant industry. The review of past and recent peer-reviewed articles revealed the problems associated with food waste and why food waste has become a public safety concern. The focus of Section 2 was on the motivation for selecting the method, design, population and sample, data collection method, and instruments that I used in this study. I emphasized the process of collecting data using face-to-face interviews from selected participants, outlined the mechanisms of data organization and interpretation, and prepared the groundwork for field research. The focus of Section 3 was on the study findings. I identified three main themes: employee training, communication among stakeholders, and customer loyalty. The results indicated that small, independent, family-owned restaurant owners who minimize food waste in economically responsible ways achieve better profit margins than their counterparts who do not care about food waste. Small, family-owned restaurant owners may want to develop partnerships with stakeholders in communities, local associations, nonprofit organizations, and others to increase profits. The implications for social change from the findings of this doctoral study include creating more jobs for stakeholders, increasing business growth for owners, and creating a healthy environment in communities where the businesses operate. Small, independent, family-owned restaurant owners need to increase their involvement in community activities to enhance brand recognition, create social opportunities, and develop customer loyalty and the prospect for future customers. Incorporating these strategies may help small, independent, family-owned restaurant owners to sustain their business activities in communities where they operate and improve prospects for growth. When food waste reduction efforts become part of the business process, they will likely

benefit stakeholders, the firm's return on investment, and the community (Tang & Tang 2012). After all, small, independent, family-owned restaurants are a part of the fabric of the U.S. economy.

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Appendix A: Interview Protocol

- (a) I will introduce myself to the participant
- (b) I will present to consent form, go over the content, answer questions and concerns from participant
- (c) I will prepare my pen and paper in readiness for the interview.
- (d) I will turn on the recording device.
- (e) I will follow procedure to introduce the participant the pseudonym/coded Identification
- (f) I will note the date and time and begin the interview with question one and follow through to the final question. I will follow up with additional questions.
- (g) I will end interview sequence and discuss member checking with participant.
- (h) I will thank the participant for their part in the study. I will obtain contact numbers for follow up questions and for member checking with participants.
- (i) I will end the interview and shut off my recording equipment.

Appendix B: Interview Questions

1. What food waste reduction strategies do you use in this restaurant to increase profits?
2. What challenges do you face when you apply the food waste reduction strategies designed to enhance profitability?
3. What time, money, and other resources do you allocate to food waste reduction strategies that help increase profits?
4. What business activities do you engage in that demonstrate your commitment and support to reduce food waste and increase profits?
5. What strategies have you used to retrieve edible food that would otherwise go to waste and distribute it to those in need and in what ways do such strategies affect profitability?
6. Please describe and explain your thoughts on any new food waste reduction strategies that you plan to use in the future to increase profitability.
7. What additional information can you provide to help me understand the strategies you use to reduce food waste and increase profits?

Appendix C: Organizational Permission

Dear XXXXXXXXXXXXXXXX,

My name is Fabian Makani, and I am a doctoral candidate at Walden University. I am pursuing a Doctor of Business Administration (DBA) degree with a specialization in Finance. I am conducting a study titled: The effects of restaurant food waste on profits. The purpose of this study is to determine what strategies restaurant owners need to increase profits. This study may affect restaurants, such as yours, by showing to restaurant owners, the importance of reducing food waste for profitable growth, brand equity, competitive advantage, and sustainability. As part of this study, I am requesting authorization to conduct interviews with open-ended questions with you the owner of the restaurant for the purpose of data collection. I will conduct the interviews on the date and time suitable to you. Your participation will be voluntary and at your discretion. The interview questions are attached here for you to review. I have also attached an Informed Consent Form which will explain the purpose of the study in detail. Please review the questions and the consent form for you to get a good understanding of the process.

Thanks

Fabian Makani

Appendix D: Informed Consent Form

Informed Consent Form

Dear XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX,

My name is Fabian Makani, and I am a student at Walden University pursuing a doctoral degree in business administration. I am writing to invite you to take part in a research study I am conducting titled: The Effects of Reducing Restaurant Food Waste on Profits. You were invited for this study because you are the owner a restaurant. This form is part of a process called “Informed Consent” that explains the details of the study.

Purpose of the Study:

The purpose of this study is to determine what strategies small, independent, family-owned restaurants owners need to reduce food waste. This study may contribute to business practices by helping restaurant owners identify and determine innovative ways to improve revenue, profits, and market share.

The criteria for participation are as follows:

- All participants must be 18 years or older
- All participants own a small, independent, family-owned restaurant for a minimum of three years.

If you agree to take part in this study, you will:

- Reply to the email with the words “I Consent”
- Agree to audio recording for transcription purposes
- Participate in a face-to-face interview and a follow up member checking interview
- Commit to a maximum, 60 minutes of your time for initial interview, and 30 minutes for member-checking follow up and a 5-minute follow up telephone call for a final member checking effort.
- I will provide you with a copy of the research questions before the interview so that you can familiarize yourself with the interview questions so you can acclimate to the process.
- I will request and collect financial statement from participants as part of the research process.

Voluntary Nature of the Study:

This study is voluntary. Your decision will be respected whether you decide to participate in the study or not. If you decide to participate in the study, you can still change your mind and withdraw at a later date. You may withdraw from the study at any time with no penalty. Risks and

Benefits of Being in the Study:

Being in this study would not pose a risk to your safety or well-being. Participation in this study poses no risks. The benefit of being in the study allows you access to the findings of the study, knowledge, and feedback you can use in

your restaurant owners to reduce food waste and increase profits. The findings of the study, knowledge and feedback will equally be disseminated to non-participating restaurant owners and to the general public for them to use to reduce food waste in area restaurants and increase profits.

Payments:

Participants will not receive any payment, or you thank you gifts, or any kind of reimbursements for participating in this study.

Privacy:

Any information you provide will be kept confidential. Your name or any other information that could identify you will not be included in the study reports. You will be assigned an identifier label, which will be included in the study to maintain your confidentiality and privacy. I will transcribe the interview and have you verify how well I have captured your statements. I will keep the data on a password protected electronic file. I will be the only person who has the password and access to the data. All data I collect from you will be stored in a safe cabinet with a lock for five years. After five years, I will shred all documents and erase all electronic files from the study as required by Walden University.

Contacts and Questions:

Should you have any questions now or later, you may contact me at [number redacted]. If you want to talk privately about your rights as a participant, you can call Dr. Leilani Endicott who is the Research Participant Advocate at Walden University. Her phone number is 1-800-925-3368 ext. 312-1210. Walden University's IRB approval number for this study is 05-23-16-0499924 and it expires on May 22, 2017.

Statement of Consent:

I have read the above information, and I feel I understand the study well enough to make a decision about my involvement. By replying with the words, "I consent," I agree to the terms of the research described here and to participate in the research.

NB: Please keep a copy of this consent form for your records.