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Financial Strategies for Sustaining Small Businesses

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This is to certify that the doctoral study by

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has been found to be complete and satisfactory in all respects,
and that any and all revisions required by
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2018

Abstract

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by

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MBA, Pennsylvania State University, 2001

BS, Elizabethtown College, 1995

Doctoral Study Submitted in Partial Fulfillment

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Abstract

A failure of a small business has a negative impact on the economic health of the community where the small business operates. Small businesses are significant entities in economies around the world, but small businesses have a high failure rate. The purpose of this multiple case study was to explore what financial strategies small business manufacturing leaders use to increase productivity and profitability to sustain the business for longer than 5 years. The population for this study was three small manufacturing business owners in Pennsylvania who have been in business over 5 years and have used financial strategies to increase productivity and profitability. The theory of planned behavior was the conceptual framework for the study. Data were collected using semistructured interviews and direct observation. Methodological triangulation was used to analyze the data. Four themes emerged after the data was coded in NVivo: the importance of company data, planning for a sustainable future using capital expenditures, cash flow management, and owner/employee collaboration in decision-making. The potential for positive social change includes increasing the survival rates of small businesses. The increase in small business survivals may potentially contribute to increases in employment rates in the community of small manufacturing businesses, leading to increased family incomes and improved overall economic health of the community.

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Dedication

This study is dedicated to my husband, Doug, and daughters, Hailey and Kara. Thank you for all the support you gave me through this journey. Without you, I would not have started nor completed this program.

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Many people have helped and supported me through this journey. I would first like to thank you my Chair, Dr. Susan Fan. Dr. Fan was my first faculty member in the DBA program and provided me with a positive foundation for the rest of my classes. As a Chair, Dr. Fan was so supportive and encouraging in class and on a one on one level when necessary. I would also like to thank my committee members Dr. Sean Stanley and Dr. Neil Mathur for their valued feedback and support of adjustments I had to make to my study. I would also like to thank the participants in my study for the fast scheduling of initial interviews and member checking processes.

I would like to thank my husband and daughters for their understanding of the time commitments I needed to complete my assignments. The countless Saturdays and Sundays that you went on daddy/daughter road trips, so that I could spend my undivided attention on writing was greatly appreciated and helped me succeed in this journey. I love all three of you immensely.

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Section 1: Foundation of the Study

Small businesses are a significant segment of the world economy (Haron, Yahya, & Haron, 2014). Small businesses create jobs and stimulate the economy through the innovation of new products and services (Ciubotariu, 2013). Small businesses also contribute significantly to the gross domestic product. However, there is a high failure rate of small businesses. Approximately 50% of all small businesses cease to operate in the first 5 years (Dahmen & Rodriquez, 2014). The goal of this study was to explore what financial strategies small business owners use to increase productivity and profitability to sustain in business beyond 5 years. Section 1 of this study includes the (a) background of the problem, (b) problem statement, (c) purpose statement, (d) nature of the study, (e) research question, (f) interview questions, (g) conceptual framework, (h) operational definitions, (i) assumptions, limitations, and delimitations, (j) significance of the study, and (k) a review of the professional and academic literature.

Background of the Problem

The failure of small businesses is a relevant problem in the United States. Small businesses are an important component of the U.S. economy. Businesses with fewer than 500 employees in the United States accounted for 42% of the U.S. private-sector payroll between 2009 and 2011(Park & Campbell, 2017). Only 79.9% of all new established small businesses in 2014 survived until 2015 (Turner & Endres, 2017). Furthermore, approximately 50% of all small businesses close within the first 5 years of operations (Dahmen & Rodríguez, 2014). Given the importance of small businesses in the economy of the United States and the high failure rate, there is a need for future research into the reasons for the failure of the enterprises. There is previous research on the warning signs of small business failure, but there is a lack of research in the underlying causes of the failure. The understanding of the reasons behind the failures can educate entrepreneurs and decrease the failure rate of the organizations.

Problem Statement

New businesses tend to experience high failure rates (Raffiee & Feng, 2014). In the second quarter of 2015, 6,741 new small businesses started up in Pennsylvania, but in that same quarter 6,267 businesses exited the market (U.S. Small Business Administration, Office of Advocacy, 2017a). The general business problem is that some small business owners are unable to determine financial strategies to increase profitability. The specific business problem is that some small business manufacturing leaders lack financial strategies to increase productivity and profitability to sustain the business beyond 5 years.

Purpose Statement

The purpose of this qualitative multiple case study was to explore what financial strategies small business manufacturing leaders use to increase productivity and profitability to sustain the business beyond 5 years. The population for this study was three small manufacturing business owners in Pennsylvania who have been in business over 5 years and have used financial strategies to increase productivity and profitability. The implications for social change included potentially increasing employment rates in the community of small manufacturing businesses, which leads to increased family incomes and improved overall economic health of the community.

Nature of the Study

There are three types of research methods: qualitative, quantitative, and the mixed method. Researchers who use qualitative research methodology explore thoughts, emotions, and behaviors and present the results in words (Larkin, Begley, & Devane, 2014). Researchers who use quantitative research methodology test hypotheses through statistical procedures to study a phenomenon through relationships or differences among variables (Fossaluza, Izbicki, da Silva, & Esteves, 2017). A mixed method approach includes both qualitative and quantitative methods combined in a single study (Larkin et al., 2014). The research method for this study was the qualitative method. Researchers use questions in the qualitative research methodology to develop themes and analysis of those shared concepts to explore and understand a problem (Astalin, 2013). Neither a quantitative or mixed method research method is suitable for this study because I was not testing the relationships or differences among variables. The objective of this study was to explore decision-making strategies of small businesses through interview questions, so the qualitative research method is the most appropriate.

The research design of this study is multiple case study. Using a multiple case study design enables a researcher to investigate multiple sources and analyze the data holistically to describe themes that explain a phenomenon (Astalin, 2013). The other principal qualitative research designs are grounded theory, phenomenology, and ethnography (Astalin, 2013). The focus in grounded theory studies is to use categories and themes to generate theory (Astalin, 2013). The phenomenological research design is suitable for understanding the lived experience of participants' perspectives (Casey, Proudfoot, & Corbally, 2016). The ethnography approach is for exploring the culture and people of society (Astalin, 2013). Grounded theory, phenomenological, and ethnography designs are not suitable for this study because I was not seeking to generate theories, explore a phenomenon from participants' experiences, or explore the culture and people of society. A multiple case study design was the proper choice for me to explore financial strategies to sustain a small manufacturing business.

Research Question

The overarching research question was the following: What financial strategies do small business manufacturing leaders use to increase productivity and profitability to sustain business beyond 5 years?

Interview Questions

1. What financial strategies do you use in your organization to sustain in business?
2. What financial strategies do you use to increase productivity?
3. What financial strategies do you use to increase profitability?
4. How do you assess the effectiveness of the strategies?
5. What challenges did you face when implementing the strategies?
6. How did you do to address the challenges you faced?
7. What additional information can you share about the financial strategies you use to increase productivity?
8. What additional information can you share about the financial strategies you use to increase profitability?

Conceptual Framework

Ajzen (1991) developed the theory of planned behavior (TPB) that links beliefs of perceived behaviors to behavioral actions. TPB is used to posit that beliefs toward an action determine behavior (Hassan, Shiu, & Shaw, 2016). The key constructs underlying TPB is attitude toward the behavior; subjective norm, perceived behavioral control, and intention together shape an individual's actions (Ajzen et al., 2011). These TPB constructs highlight the controlled aspects of decision-making and actions (Ajzen, 2011). Ajzen's conceptual model provided a lens for understanding the results from this study because strategies based upon the need for improving the quality of financial information can influence the beliefs of small manufacturing business owners and affect approaches to improve productivity and profitability. One strategy may be the use of financial ratio analysis. Beaver (1966) demonstrated the benefit of financial ratios analysis, which has emerged as accepted common element of successful financial practices.

Operational Definitions

Business success: A measurement of both the financial profitability of a business and the growth of the business over a period (Farrington, 2014).

Financial data: The accounting records of an organization that consist of monetary transactions that internal management and external investors and creditors use (Warren, Moffitt, & Byrnes, 2015).

Small business: A business that employs no more than 500 employees (Feinberg, 2014).

Assumptions, Limitations, and Delimitations

Assumptions

Assumptions are concepts, notions, or ideas that researchers believe are true Ford et al., 2015). Assumptions and beliefs are inseparable with research (Foss & Hallberg, 2014). There were six assumptions in this study. The first assumption was that small manufacturing business owners in Pennsylvania over 5 years incorporate financial data in their production decision-making processes. The second assumption was that owners of small manufacturing businesses would be willing to participate in the study. The third assumption was that owners of small manufacturing businesses provided information that is truthful and honest, so the data collected is reliable and valid. The fourth assumption was that small business owners are the decision-makers in the organizations. The fifth assumption was that the interview questions would lead to information that would answer the research question of the study. Lastly, the sixth assumption was that the information concluded from this study will increase success rates of small manufacturing businesses and contribute to social change for the owners, employees, and the economy of the communities.

Limitations

Limitations are the weakness of the research done in a study that is out of control of the researcher (Yin, 2014). There were four limitations of this study. The main limitations of this study were the sample size of the participants and the restricted geographical location of the Commonwealth of Pennsylvania. Additionally, the study was limited to participants who were small manufacturing business owners who have been in business 5 years or more. Bias was another limitation due to my financial background and belief that financial data is important in decision-making processes, which could have affected data interpretation. The final limitation was that the participants may have been uncomfortable disclosing strategies that are financial in nature and may have provided information that is inaccurate with the reality of their processes.

Delimitations

Delimitations put a study into a context and define the boundaries of the study (Marshall & Rossman, 2016). A reader can decide on the usefulness of a study in other settings by knowing the scope and restrictions of the study (Marshall & Rossman, 2016). Restrictions on the geographic region, the type of business, the size of the firm, and length of operating in business narrowed the scope of this study. This study did not include organizations outside of Pennsylvania and firms that do not manufacture. The participants were restricted to small business owners who have been operating in business for at least 5 years. Excluding larger and younger organizations was another delimitation of this study.

Significance of the Study

Findings from this study are potentially significant to the improvement of business practice by providing small business owners in Pennsylvania strategies to increase the success rate of their enterprises. There are almost 1 million small businesses in Pennsylvania (SBDC Pennsylvania, 2015). Small businesses make up 98.2% of the state's employers (SBDC Pennsylvania, 2015). Pennsylvania's economy is reliant on the success of small businesses.

Contribution to Business Practice

Financial distress and failure can affect many interested groups such as workers, customers, suppliers, owners, communities, and economic entities because the economic and social contribution of small businesses is significant (Amaeshi et al., 2016). In 2014, small businesses employed 2.4 million workers in Pennsylvania (SBDC Pennsylvania, 2015). The implications for business practice include the potential for small manufacturing business owners to identify and implement financial strategies to improve operational decision-making to increase business survival rates.

Implications for Social Change

Positive social change might result from this research study. Successful small manufacturing businesses can improve social conditions by creating jobs and fiscal stability of an economy through growth, innovation and competition (Brezinova & Prusova, 2014). Improving small manufacturing businesses' success rates can lead to positive social change in the communities by increasing employees' incomes resulting in improved overall economic health of the employees' families and their communities.

A Review of the Professional and Academic Literature

The purpose of this qualitative multiple case study was to explore what financial strategies small business manufacturing leaders use to increase productivity and profitability to sustain the business beyond 5 years. In 2013, there were 28.8 million small businesses in the United States (U.S. Small Business Administration, Office of

Advocacy, 2017b). U. S. small businesses created 63% of all net new jobs between 1992 and 2013 (U.S. Small Business Administration, Office of Advocacy, 2017b). The purpose of this review of professional and academic literature was to synthesize literature relating to the topic of this doctoral study.

The key resource for sources in this literature review was the Walden University Online Library in addition to Google Scholar and government databases. The most common database used to obtain information was Business Search Complete. Key search words included *small business, small business owner, Pennsylvania small business, financial strategies, theory of planned behavior, financial ratio analysis, small business failure, small business success, small business strategies,* and *financial decision-making.* This doctoral study includes material from 110 different sources with 88.3% of these sources being peer-reviewed and 86.7% published in 2014 or after. The references included in this study are comprised of 120 journals, five government websites, two books and one PowerPoint presentation.

The review of professional and academic literature section contains four main sections: Theory of Planned Behavior, Financial Ratio Analysis, Business Success and Failure and Small Business. There are two subsections in the Financial Ratio Analysis section: Profitability Ratios and Liquidity Ratios. There are six subsections in the Small Business section: Economic Impact of Small Businesses, Small Businesses in Pennsylvania, Small Business Owner, Management Accounting Systems in Small Business, Small Business Failure Factors, and Small Business Success Strategies. There are two subsections in the Management Accounting Systems in Small Business section:

Factoring Influencing the Use of Management Accounting Systems in Small Business and Outcomes of Using Management Accounting Systems in Small Business. There are four subsections of the Factoring Influencing the Use of Management Accounting Systems in Small Business section: Firm Size, Environment, Employee Characteristics, and Organizational Structure.

Theory of Planned Behavior

Ajzen (1991) developed the TPB, which is an extension of the theory of reasoned action (Hassan et al., 2016). TPB links beliefs of perceived behaviors to behavioral actions. TPB is used to posit that beliefs toward an action ultimately determine the behavior (Hassan et al., 2016). The key constructs underlying TPB is attitude toward the behavior, subjective norm, perceived behavioral control, and intention, which together shape an individual's actions (Ajzen et al., 2011). The belief of likely consequences, beliefs about what others expect as normal, and beliefs about factors that may be present to help or harm the behavior steer a behavior (Ajzen, 2011). These TPB constructs highlight the controlled aspects of decision-making and actions (Ajzen, 2011). The additional element of how much control the individual has over the factors of being successful led to the creation of TPB from theory of reasoned action (Shiau & Chau, 2016). Ajzen's conceptual model provided a lens for understanding the results of this study. The beliefs of small manufacturing business owners on financial data can influence the financial strategies used at a facility. Additionally, the need for improving the quality of financial information can influence the beliefs of small manufacturing business owners and affect approaches to improve productivity and profitability.

TPB is not without its critics. The strongest critics reject the theory because they believe unconscious attitudes and processes drive human social behavior (Ajzen, 2011). However, most critics just criticize the theory due to limits of predictive validity and for being too rational (Ajzen, 2011). Due to events in life over time, beliefs and attitudes toward behavior change, causing the predictability of behaviors to be limited (Ajzen, 2011). Additionally, emotion can have an indirect irrational influence on behavior (Ajzen, 2011). TPB does not include the irrational influence.

Financial Ratio Analysis

Beaver (1966) developed financial ratio analysis when he conducted research that demonstrated the usefulness of financial ratios to illustrate the financial health of a firm. Financial ratios help explain the financial quality of a business's operations (Jezovita, 2015). After development, financial ratio analysis has emerged as an accepted common element of successful financial practices. Financial ratio analysis suggests a business can be managed using financial ratios derived from an organization's financial statements (Alo, Akosile, & Ayoola, 2016). Financial ratios explain the financial statements of an organization (Faello, 2015). Similarly, financial ratios are the way to view the financial statements (Dahmen & Rodríguez, 2014). The key construct underlying financial ratio analysis is using ratios developed from accounting data to make comparisons and decisions for organizations of any size (Alo et al., 2016). Financial ratios provide information on the firm's state of liquidity, solvency, the structure of assets and their resources, management efficiency, and the degree of success (Andrijasevic & Vesna, 2014). When using financial ratios to evaluate a firm, additional factors such as firm age, sector, and location need to be considered (Gupta, Wilson, Gregoriou, & Healy, 2014).

Production decisions may have an impact on financial ratios and the financial health of the firm. Financial ratio analysis is a strategy that small manufacturing businesses owners can use as an approach to improve productivity and profitability. For example, financial ratios can help identify problem areas that need to be addressed (Faello, 2015). Using ratios, small business owners can predict how business decisions will affect profitability and productivity. Banks and other credit assessors use financial ratios to predict business success or failure (Gupta et al., 2014). Trends in financial ratios show how a firm is performing over time in an upward or downward movement (Faello, 2015).

In addition to showing the current financial condition of a firm, ratios can help to predict and highlight the future of an organization, whether this is survival or business failure (Oz & Yelkenci, 2015). Beaver (1966) determined cut-offs in 30 different financial ratios in predicting bankruptcy. Viewing the financial ratios of an organization a stakeholder should be able to benchmark the probability of business success or failure (Dahmen & Rodríguez, 2014). Looking at financial ratios individually may not show the true picture of a firm's future, but looking at various ratios concurrently can give an understanding to the future (Oz & Yelkenci, 2015). Additionally, looking at ratios over time can show a trend in performance (Oz & Yelkenci, 2015).

Financial ratios also have their limitations. Often there is an ignorance of the limitations, so there is a reduction of the validity of the information that comes from financial ratios (Andrijasevic & Vesna 2014). A financial ratio is only as good as the information used to create the financial ratio (Faello, 2015). If there is a misstatement in the information used to calculate the ratio, the financial ratio is not accurate (Faello, 2015). Accounting methods and principles chosen by a firm impact the financial information in a firm's financial statements (Faello, 2015). If these are not consistent between firms or over time, a comparison between firms or over a time frame are not comparable (Faello, 2015).To understand where inconsistency might be an issue, financial statements should provide explanations about accounting methods and changes in accounting methods (Faello, 2015). Similarly, financial ratios do not take into account off-balance assets such as customer base, human resources, commitments, product quality, vendor base, and company reputation (Warren et al., 2015). These items are as important to internal and external stakeholders as on balance sheet assets (Warren et al., 2015).

Profitability ratios. The performance/profitability is instrumental to understanding if a firm is successful. Profitability shows the strength of the firm in comparison to other organizations (Haron et al., 2014). Management efficiency influences profitability (Kober, Subraamanniam, & Watson, 2012). Commonly used profitability ratios are return on equity, return on assets, and return on sales. Return on assets and the effectiveness of company assets influence return on equity (Kober et al., 2012). Furthermore, return on sales influences return on assets because it is a measure of operating efficiency (Kober et al., 2012). A proxy for profitability as well as gross operating income is return on assets (Mazzarol, 2014).

Liquidity ratios. Prevalent working capital management theory shows that a firm can have a better competitive position if the liquidity of the firm is increased (Kroes & Manikas, 2014). Working capital is the assets and liabilities needed in business to operate daily (Mazzarol, 2014). Managing working capital can improve profitability (Mazzarol, 2014). The management of working capital includes managing the speed of converting cash from receivables to paying for operations and is key to profitability (Mazzarol, 2014). Cash flow management leads to increased firm performance. Improving the cash conversion cycle shows increased cash flow management leading to increased performance (Kroes & Manikas, 2014). A shorter cash conversion cycle creates future sales faster (Kroes & Manikas, 2014). Liquidity ratios help show the cash conversion speed. Days of sales outstanding and days of inventory outstanding show a faster cash conversion cycle, increased cash flow and improved firm performance (Kroes & Manikas, 2014). The sum of days of sales outstanding and days of inventory outstanding minus days of payables outstanding is used to calculate the cash conversion cycle. Although the finance department manages cash inflow/outflow, individuals outside the finance department make the decisions on items that affect cash flow such as inventory, the collection of receivables, and the delay of payments to suppliers (Kroes & Manikas, 2014). Inventory turnover also increases profitability (Mazzarol, 2014). Mazzarol (2014) suggested that small businesses are most profitable when they can collect faster, turn inventory over faster and pay slower (Mazzarol, 2014). In contrast, Mazzarol also found that account receivable and accounts payable management was even more important than cash conversion or inventory turnover. There tends to be a correlation between profitability and formal cash flow management in small businesses (Mazzarol, 2014).

Business Success and Failure

Profitability and market share are two factors that define the success of a business (Saunila, Ukko, & Rantanen, 2014). Many factors influence the success of a business including managerial, economic, political, and environmental (Oz & Yelkenci, 2015). However, there is not a universal measurement for business performance (Farrington, 2014). Business performance can be measured financial and nonfinancially (Farrington, 2014). The performance of a business includes both market share and growth in addition to profitability. Profitability is the financial measures that include net income and return on investment (Saunila et al., 2014). Growth of a firm is a measurement used to determine performance, but in the short-term profit may take priority over long-term growth (Farrington, 2014). Therefore, growth may be a measure for long-term performance, but financial profitability for short-term performance (Farrington, 2014). Studies on both long-term and short-term performance should include both financial profitability and growth (Farrington, 2014). Additionally, growth has many facets to consider including number of employees, profits and turnover compared over a number of years (Farrington, 2014).

Financial statement information and ratios can help predict business success or failure (Noga & Schnader, 2013). Furthermore, in addition to looking at just financial statement data, the amount and level of book and tax indifference can indicate financial distress (Noga & Schnader, 2013). Fluctuations in the amount, level, and abnormal changes in book to tax differences show changes in managerial actions that may signal information about a firm's underlying financial condition (Noga & Schnader, 2013). Usually large differences between book and tax records indicate there are issues known to management but not external parties (Noga & Schnader, 2013). The difference between tax and book differences widens with failing financials (Noga & Schnader, 2013). In contrast, looking at financial information individually would not show problems to investors in the same way taxes would indicate potential financial issues (Noga & Schnader, 2013).

Small Businesses

There is not a universally accepted definition of a small business (Chhabra & Pattanayak, 2014). A universal definition of a small business is difficult to establish because there are different dimensions that a definition would need to capture for various industries and countries (Chhabra & Pattanayak, 2014). Professionally, the American Institute of Certified Public Accountants does not provide a definition for small businesses (Okabe & Suez-Sales, 2015). However, in 2013, they created a financial reporting framework for small and medium enterprises that allows for some additional professional judgement when preparing financial statements (Okabe & Suez-Sales, 2015). Researchers also do not agree on a single definition (Ciubotariu, 2013). Furthermore, countries also differ in their concept of a small business. Most law-based definitions of small businesses include quantitative data such as the number of employees or annual turnover (Lopez & Hiebl, 2015). Sales volume in addition to employee counts is another way a small business can be identified (Chhabra & Pattanayak, 2014). Market share is a different view that some use to define a small business (Karadag, 2015). When defining small businesses there are other factors that should be included in addition to size, and they include contractual agreements, owner-manager relationships, the complexity of transactions, and future plans (Okabe & Suez-Sales, 2015).

One reason that there is not one generally accepted small business definition is that each small business is unique and diverse (Ciubotariu, 2013). In addition to being diverse in size, they are diverse in industry and legal status (Ciubotariu, 2013). Small businesses can be in manufacturing to high tech to service industries (Ciubotariu, 2013). Legally, the structure of a small business may be a corporation, partnerships, or numerous other legal forms (Ciubotariu, 2013). This causes problems because banks and other organization define small businesses to fit their strategic purposes (Ciubotariu, 2013).

There are some common characteristics among small business in addition to their diversity (Ciubotariu, 2013). Internal communication between management and employees is quick due to the close personal contact between employees and management (Ciubotariu, 2013). The manager is usually the owner creating a central management structure (Ciubotariu, 2013). Intuition usually influences strategy rather than formal strategic plans (Ciubotariu, 2013). Cash flow forecasting and inventory re-ordering is typically informal in nature and done within an owner's head rather than a formal system (Mazzarol, 2014). Financing and capital development is often difficult to obtain (Ciubotariu, 2013). The hierarchal is often flat and employment advancements are often minimal (Ciubotariu, 2013). Employees and managers have many roles and specialization is often reduced (Ciubotariu, 2013). The business's relationship with the community is often close (Ciubotariu, 2013).

Small businesses have distinct resources, but also have distinct difficulties when compared to larger organizations (Lopez & Hiebl, 2015). Small business traits may have a positive or negative impact on the performance of a firm. Small businesses have advantages that larger organizations do not have such as adaptability and flexibility (Ciubotariu, 2013). However, the simpler organization structure of a small business does not allow the firms to take advantage of economies of scale (Lopez & Hiebl, 2015). Small businesses are also often vulnerable to losing customers and are reluctant to adopting regulations (Ciubotariu, 2013). Environmental pressures can have a higher impact on small businesses due to niche customer base, limited market share and demand fluctuations (Taneja, Pryor, & Hayek, 2016). Profitability, firm growth, and productivity increases are issues for small businesses (Haron et al., 2014). In order to overcome the disadvantages small businesses need to use the resources they do have access to efficiently (Lopez & Hiebl, 2015).

Economic impact of small businesses. Small businesses are a predominant figure in economic setting in the entire world (Haron et al., 2014). Due to their predominant role, the performance of small business is an important topic (Haron et al., 2014). Small businesses represent a large proportion of economic growth, job creation and innovation in the world economy (Ciubotariu, 2013). By stimulating the economy, developing new products and creating new jobs small businesses raise the standard of living (Ciubotariu, 2013). Job creation lowers unemployment rates (Ciubotariu, 2013).

Job creations by small businesses alleviate poverty levels (Chhabra & Pattanayak, 2014). In addition to job creation, another important impact made by small businesses is their contribution to the gross domestic product (Chhabra & Pattanayak, 2014). Studies have shown that small businesses contribute over 50% of gross domestic product and 60% of total employment in high-income countries, and over 60% of gross domestic product and over 70% of employment in low-income countries (Chhabra & Pattanayak, 2014). In middle-income countries, the figures are higher with small businesses contributing to 70% of gross domestic product and 95% of total employment (Chhabra & Pattanayak, 2014). President Obama called small business the “backbone of the American economy” (Dahmen & Rodríguez, 2014). Small businesses generate 46% of gross domestic product, employ 49.2% of the private sector, and represent 99.7% of US employer firms (Dahmen & Rodríguez, 2014).

Economists predict that small businesses will dominate the world economy in the 21st century (Ciubotariu, 2013). The development of small businesses can solve world problems (Ciubotariu, 2013). In addition to small businesses being a driver of economic growth, they are also a driver of social growth ((Karadag, 2015). Small businesses play a predominant role in entrepreneurial innovation (Karadag, 2015). Small businesses can help increase competitiveness (Ciubotariu, 2013). Additionally, small businesses take a role in creating linkages between sectors, expanding the pool of skilled and semiskilled workers, providing support to large organizations, flexibility to adapt to market failures, and enter niche markets that large corporations cannot profit from (Karadag, 2015). Small businesses can be more innovative than larger firms can because the simpler structure can adapt faster to customer needs and be more responsive than large entities (Karadag, 2015). Small businesses affect the lives of a large number of people through employment, but affect a much larger group through the supply of a large variety of goods and services (Barnes & Westrenius, 2015).

Impact of small businesses in Pennsylvania. Small businesses hold a predominant role in world economies and help remedy unemployment issues and increase the growth rate of per capita income improving economic stability (Haron et al., 2014). Small businesses are key suppliers and service providers to larger corporations (Haron et al., 2014) In the United States small businesses make up 90% of all businesses and employ over two-thirds of the population in rural communities (Osborne, Wisnieski, Soni, Bharadwaj, & Palmer, 2013). This impact is even greater in Pennsylvania where 98% of all businesses employ 100 or fewer employees (Osborne, et al., 2013). PA rural small businesses contribute 90% of revenues from sales within Pennsylvania, less than 4% come from international sales, and only 2.2% of revenue is from online sales (Osborne et al., 2013).

Small business owner. Due to the importance of the small business in the economy, the small business owner is a crucial factor to US economy (Dahmen & Rodríguez, 2014). Small business owners and entrepreneurs are the lifeblood of the businesses and rural communities, so it is important to understand who the owners are to understand the businesses (Osborne et al., 2013). Of all adults in the United States, 10.4% are engaged in some sort of entrepreneurial activity (Osborne et al., 2013). Demographically small business owners can vary by sex, race, age, and educational level

(Dahmen & Rodríguez, 2014). Of the small business owners in Pennsylvania over 50% possessed a college degree while only 18% of all rural Pennsylvanians have a college degree (Osborne et al., 2013). PA entrepreneurs are 95.5% Caucasian, which is statistically in line with PA rural statistics (Osborne et al., 2013). The industry of two thirds of small businesses in rural Pennsylvania relates to a field that the owner was previously employed (Osborne et al., 2013). Typically, there is a low amount of separation between ownership and control in small business (Barnes & Westrenius, 2015). Owners typically are is in control of operations, operating capital and decision-making (Barnes & Westrenius, 2015).

Owners as decision makers play a significant role in the performance of small businesses and their strategic decisions impact the results (Francioni, Musso, & Cioppi, 2015). The characteristics of the owner influence their strategic decisions (Francioni et al., 2015). Personality characteristics include need for achievement and risk attitude (Francioni et al., 2015). Need for achievement is a personality characteristic of an individual who wants high results because of their actions and feel responsible for those results (Francioni et al., 2015). Studies show that individuals with a high need for achievement make rational thought out strategic decisions that are less likely influenced by internal and external political factors (Francioni et al., 2015). Risk attitude is a trait that illustrates various degrees of risk taking or risk avoidance (Francioni et al., 2015). There is a mix of results on how individuals with high risk taking attitude make decisions (Francioni et al., 2015). Some studies show that decision makers with high risk taking attitudes tend to make faster and less rational decisions, but other studies show that they make more rational and strategic decisions (Francioni et al., 2015). The demographics of a decision maker also influence how they make strategic decisions (Francioni et al., 2015). Education levels increase the rationality behind decisions and rationality increases with age (Francioni et al., 2015).

The intellect of a small business owner is rich in knowledge and skill that is un-substitutable in their trade (Haron et al., 2014). Small business owners are often entrepreneurs. Small business owners in rural PA are confident about the overall market for their products and services (Osborne et al., 2013). The productivity, growth, profitability, and survival of the business are dependent on the owner (Farrington, 2014). Long-term survival requires strategies that are new, competitive and responsive, all entrepreneurial in nature (Farrington, 2014). Innovation similar to entrepreneurship is key to business success and survival (Alam & Dubey, 2014). Innovation gives a company sustainable competitive advantage (Alam & Dubey, 2014). An owner is often the sole initiator of innovation in a small business (Alam & Dubey, 2014). Innovation is how an owner adapts and changes business activity (Alam & Dubey, 2014). Innovation is a persistent trait in an individual (Alam & Dubey, 2014).

Contrasting, an owner's ability to gain information from financial records correlates with the success of a business (Dahmen & Rodríguez, 2014). Small businesses have escalated financial problems because the owner comes from a technical background and their knowledge about finance and accounting is limited (Karadag, 2015). Owners of small businesses make financial decisions differently than those of large organizations (Mazzarol, 2014). Owners typically lack management and/or accounting skills, so owners make financial decisions on personal opinion rather than data (Lopez & Hiebl, 2015). Additionally the gender, age, and experience of an owner have influence over the decisions made as well (Mazzarol, 2014). Small business owners overlook strategic management particularly in financial matters (Karadag, 2015). Many small business owners lack the knowledge to set up and use formal accounting systems to assist in decision-making (Mazzarol, 2014). As a result, small business owners are in general unwilling to adopt financial systems (Chhabra & Pattanayak, 2014). Owners lack financial skills and do not understand the information or how to use it (Chhabra & Pattanayak, 2014). Sometimes financial are deemed to be a burden with no tangible value to the company (Chhabra & Pattanayak, 2014). A small business owner is more likely to use financial data in decision making when they have the skills to read and understand financial statements (Mazzarol, 2014). There is a strong association between financial strength of owners and their use of financial statements (Dahmen & Rodríguez, 2014).

A small business leader's personality, decision-making style and industry knowledge as well as leadership behavior stimulates the degree that innovation is encouraged in the business (Taneja et al., 2016). There are contrasting theories on whether or not a small business owner should have formal or informal structures in place to make strategic decisions (Taneja et al., 2016). Some theorists state that there should be a formal strategic planning process, but others think the flexibility and adaptively of an informal small business are better to respond quickly (Taneja et al., 2016). Typically small business owners act through passion (Taneja et al., 2016). They have passion for creating, inventing, and innovating (Taneja et al., 2016).

Management accounting systems in small business. Historically accounting records were financial in nature, but as technology increased, databases helped gather financial and non-financial information (Warren et al., 2015). Non-financial and intangible assets not captured in financial records are in management accounting systems (MAS) (Warren et al., 2015). About 98 percent of all financial data is now digitized (Warren et al., 2015). With the increase of technology, the creation of MAS occurred. MAS are systems that integrate customers, processes, human resources and financials to improve operations to be successful (McLellan, 2014).

Management accounting (MA) is the process of collecting and recording useful accounting and statistical data as well as reporting the data to organizational decision makers (Leitner, 2014). Management accounting is a broad term and consists of a variety of practices that provide managers with information (Lopez & Hiebl, 2015). Managers can use reports from MAS that display information about specific expenses and revenue and information by individual performances, processes, activities or departments (Hojna, 2014). There are many types of MAS used in different industries and organizations (Leitner, 2014). No specific system that is universally appropriate for all businesses (Odar, Kavcic, & Jerman, 2015). They need adapted and designed for specific circumstances (Odar et al., 2015). The data is critical in decision-making, so the quality of the data that comes from the MAS is critical (Leitner, 2014). The expectation is that decisions made by organizations will maximize shareholder wealth (Abdul-Baki, Uthman, & Sanni, 2014). High quality Information from MAS is necessary for high quality decisions (Odar et al., 2015). In order to get high quality decisions, MAS need developed and maintained appropriately (Odar et al., 2015).

Managers use the data from MAS to improve performance, efficiencies, and profitability (Warren et al., 2015). MAS are analytical tools used by managers to plan, control, and improve the efficiency of a firm (Lopez & Hiebl, 2015). The purpose of MAS is to provide financial data to allow a business to plan and control (Ceran, Gungor, & Konya, 2016). MAS provide financial information about business transactions to aid in managing the business (Chhabra & Pattanayak, 2014). Sub-systems of MAS can include budgeting, performance evaluation, costing, decision-making, communication, and strategic analysis (Lopez & Hiebl, 2015). MAS information is used to plan, evaluate, and define business processes by using past activities of the business to make strategic decision on the future (Ceran et al., 2016). The decisions made by all processes of the organization including sales and production are impacted by MAS information (Ceran et al., 2016). An additional role of MAS is to be a control system and align organizational goals with the actions of management and employees (Warren et al., 2015). These systems use goals and incentives to manipulate the actions of the employees (Warren et al., 2015).

Financial management is the center of MAS in small businesses (Karadag, 2015). MAS should include information from both the supply and demand side of the businesses to build a true foundation for decision-making (Shil, Hoque, & Akter, 2015). The data must be timely true and relevant (Ceran et al., 2016). The accuracy and reliability of the information determines the quality of the financial data and the information needs to be high quality to make crucial management decisions (Ceran et al., 2016). MAS provide reports with the data to assist managers to make financial decisions (Chhabra & Pattanayak, 2014). Small businesses use MAS less than large firms (Lopez & Hiebl, 2015). Not only is the use less, but it is also different from the use of MAS in large firms (Lopez & Hiebl, 2015). Most research on MAS has concentrated on large firms, but it remains unanswered if the research on large firms is transferable to small businesses (Kober et al., 2012). Small businesses are different from large corporations, so MAS used in small businesses need to focus on what is important in small businesses rather than adapting MAS from larger firms (Lopez & Hiebl, 2015).

The amount of use and type of financial data used in small businesses in heavily reliant on internal and external needs (Okabe & Suez-Sales, 2015). Financial data has an impact through MAS on how organizations respond to external and economic pressures (Shil et al., 2015). Financial records of small businesses often have more professional judgement than allowed in large organizations (Okabe & Suez-Sales, 2015). Small businesses need to use financial statements for planning, management decisions, and meeting external obligations (Okabe & Suez-Sales, 2015). Financial information should be the raw materials used in the decision-making process in small businesses (Purwati, Suparlinah, & Putri, 2014). The use of financial data in decision-making is a sign that management has accountability to run a small business professionally (Purwati et al., 2014). Strategic financial management plays a significant role in the survival, growth and performance of small businesses (Karadag, 2015).

In contrast to the importance of MAS, the purchase and implementation of MAS in small businesses is usually a result of an influence from a third party rather than the commitment of a business owner (Kober et al., 2012). Typically, instead of using MAS for decision-making or internal information needs, the implementation of MAS is typically to conform to larger partner networks or provide information to external third parties (Lopez & Hiebl, 2015). Due to the third party influence, owners may not be as committed to utilizing the full capacities' of the MAS as a larger firm and thus having less impact on the financial performance of a small business (Kober, et al., 2012). Often there is an inability for the owner to realize the value of investing in an IT system such as MAS (Maiga, 2015). In contrast, one of the major factors in successfully implementing MAS is the commitment and support from top management (Beheshti, Blaylock, Henderson, & Lollar et al., 2014). Studies have revealed that small businesses either do not maintain financial records or do not maintain a sufficient amount of financial records (Chhabra & Pattanayak, 2014). It is common that small businesses do not maintain complete financial records (Chhabra & Pattanayak, 2014). Small businesses that do not keep financial records believe that record keeping takes time, dislike the figures, or have a lack of knowledge on how to collect the information needed (Chhabra & Pattanayak, 2014).

In general, performance increases from use of information from MAS in small businesses (Lopez & Hiebl, 2015). In support of using MAS, small businesses have limited resources and they need to overcome those disadvantages by effectively using the resources they do have access to, so MAS an assist small businesses in getting the information needed in planning and controlling (Lopez & Hiebl, 2015). Although an internal source often does not initiate the implementation of MAS, Karadaq (2015) argued that the small structure of a small business allows the firm the opportunity to employ appropriate technology easier. Small businesses have fewer resources, so MAS can help manage their limited resources by providing information needed for management and control (Lopez & Hiebl, 2015). Studies show that the use of adequate financial information increases small business performance (Lopez & Hiebl, 2015). It is important to find appropriate MAS to improve small business performance and save the limited resources available to small businesses (Lopez & Hiebl, 2015).

Factors influencing the use of management accounting systems. Small businesses have simpler and less developed MAS than large organizations (Lopez & Hiebl, 2015). The usage of information in MAS is mainly for external purposes and not internal decision-making (Lopez & Hiebl, 2015). Firm size, environmental factors, employee characteristics, and organizational structure influence the use of MAS in small businesses (Lopez & Hiebl, 2015). Changes in the political, social, and economic environment of the firm change the needs and development of MAS (Odar et al., 2015). Other reasons why they use less MAS is company size and the simplicity of the organizational structure (Lopez & Hiebl, 2015).

Firm size. Company size is a factor that influences the use of MAS (Lopez & Hiebl, 2015). The larger the organization the more likely the company will the use MAS (Lopez & Hiebl, 2015). As firm size changes studies find that the use of MAS fluctuates (Lopez & Hiebl, 2015). There is a negative correlation between firm size and the personal connection between management and employees, so there is a less probability of usage of MAS in smaller firms when there is a close connection between management and employees (Lopez & Hiebl, 2015).

Environment. External environmental factors can also affect the use of MAS in small businesses (Lopez & Hiebl, 2015). In a globalized economy, economic turbulences disturb small businesses (Andreica, Popescu, & Micu, 2014). Firms that have gone through an internationalization process typically use MAS more readily (Lopez & Hiebl, 2015). Political systems can affect the use of MAS (Lopez & Hiebl, 2015). When economic environments change due to leadership, the use of MAS changes (Lopez & Hiebl, 2015). A firm operating in a democratic run government environment will use MAS more frequently because there is more societal influence on business decisions (Lopez & Hiebl, 2015). Additionally, stronger business competition in a democratic environment increases the use of MAS (Lopez & Hiebl, 2015). The availability of capital also influences the use of MAS (Lopez & Hiebl, 2015). During funding shortages, the use of MAS conserves the available resources (Lopez & Hiebl, 2015). Cultural factors can also have an impact the amount of usage of MAS (Lopez & Hiebl, 2015). Cultures such as Japan that have lifetime employment encourage the increased use of MAS because the employees have a stake in the use of the resources (Lopez & Hiebl, 2015). In contrast, small businesses in developing countries use MAS less due to lower educational levels (Lopez & Hiebl, 2015). Low perceived environmental uncertainty, low competition, and predictable market demand all decrease MAS use (Lopez & Hiebl, 2015). During difficult economic conditions, small businesses have fewer resources to implement MAS (Lopez & Hiebl, 2015). Ironically, this is the time MAS are most useful according to many researchers.

Employee characteristics. Characteristics of the employees influence the use of MAS information (Lopez & Hiebl, 2015). The use of MAS decreases in parallel with the decreased training the owner, manager or accounting staff have in accounting or on the system (Lopez & Hiebl, 2015). Owners or accounting staff with low training in accounting may perceive MAS as a tool for external reporting only and not internal decision-making (Lopez & Hiebl, 2015). The owners or accounting staff do not perceive the information to be useful internally, but they also do not have the training to use the system (Lopez & Hiebl, 2015). Additionally, small businesses usually have a structure where employees wear many hats, so specialized trained employees in one area are rare (Lopez & Hiebl, 2015). Small businesses do not use MAS sufficiently because of lack of training and resources (Lopez & Hiebl, 2015). In contrast, an owner who is actively involved in their business performance use MAS more readily because they are involved in decisions to improve performance (Lopez & Hiebl, 2015). Lastly, from a different perspective when there is a professional manager who is not an owner in place, the use of MAS information increases (Lopez & Hiebl, 2015). An owner who lacks accounting training can hire a professional to offset the lack of financial knowledge in the owner (Lopez & Hiebl, 2015). In contrast, the training accounting professionals are given is typically geared towards large corporations and may not be suitable for small businesses (Burke & Gandolfi, 2014). Often small businesses have inadequately qualified staff in areas where talent is required due to lack of financial resources (Pop, 2012). Small businesses need competent managers (Andreica et al., 2014).

Organizational structure. Organizational structure influences if there is MAS in place and the type of MAS in a small business (Andreica et al., 2014). As discussed previously, the more resources available to an organization increases MAS use (Lopez & Hiebl, 2015). Correspondingly, the higher the complexity of the organization the more likely MAS information is used (Lopez & Hiebl, 2015). This is because the departments are more independent and there is a higher need for the MAS to provide information for decisions (Lopez & Hiebl, 2015). If the owner is highly involved in daily operations, there is a higher probability that usage of MAS is lower because the owner is a decision maker with probably a lack of financial knowledge (Lopez & Hiebl, 2015). Similarly, high levels of family influence decreases use of MAS in a business (Hiebl, Duller, Feldbauer-Durstmuller, & Ulrich, 2015). In contrast, the reason for the low levels of MAS in owner-controlled firms is the personal connection between the owners and managers, so there is less need for information from MAS (Lopez & Hiebl, 2015). A firm that is part of a larger informal conglomerate often uses MAS more because there is an expectation to reduce costs and MAS are necessary to complete that exercise (Lopez & Hiebl, 2015). The type of organization also affects the usage. There is an expectation for manufacturing firms to control costs, so these businesses will adopt MAS easier (Lopez & Hiebl, 2015). Additionally, decentralized organizations are more likely to implement MAS used for budgeting (Lopez & Hiebl, 2015).

Outcomes of using management accounting systems. MAS can help facilitate decision-making processes (Lopez & Hiebl, 2015). Businesses can obtain large amounts information from financial data in MAS. A sample of items that can be obtained include information about the cash, accounts receivable, debt, sales, purchases, income, gains/losses, the sale and pricing of products, investment decisions, tax reporting, estimated sales, production estimates, operational budget, breakeven analysis (Purwati et al., 2014). The information from MAS can provide tools for long-range forecasting, product life cycle analysis, industry analysis, SWOT analysis and supply chain analysis (Lopez & Hiebl, 2015).

MAS help small businesses control costs, measure performance, evaluate investments, and assess prices (Lopez & Hiebl, 2015). Small businesses using MAS can adapt to a changing environment faster because they have tight internal controls that allow a small business to react to and neutralize external threats (Lopez & Hiebl, 2015). As internal controls become greater in importance, MAS can provide the controls necessary (Lopez & Hiebl, 2015). Additionally, the information can integrate business plans with key performance indicators (Lopez & Hiebl, 2015). MAS with the integration of IT technology increases low cost strategy and product differentiation resulting in increased market performance and profitability (Maiga, 2015). The information, controls and integration leads to development of future sales increasing profitability and productivity (Purwati et al., 2014). The lack of MAS information usage in high uncertainty environments hampers performance and lowers competitiveness (Lopez & Hiebl, 2015).

Financial information that meets accounting standards in small businesses adds value and increasing investment opportunities with rural banks and facilitates business decisions (Purwati et al., 2014). Banks are able to assess the business feasibility and respond in a favorable manner with financial information that meets accounting standards ((Purwati et al., 2014). Accurate and standardized financial statements in small businesses will help the organizations qualitatively and quantitatively ((Purwati et al., 2014). Standard accounting principles managers of small businesses can manage the company in a more professional manner ((Purwati et al., 2014).

While the majority of literature surrounding MAS supports the use of using financial data in MAS in decision-making, Leitner (2014) argued there is the possibility that bias in raw accounting data can influence the accuracy of the data used in decision-making. To make high quality decisions the information going into the system must be high quality (Ceran et al., 2016). Both timeliness and relevance improve the quality of the data (Ceran et al., 2016). Errors and inaccuracy can negatively affect the decision-making quality.

Small business failure factors. Small businesses are more likely to fail than large businesses and new organizations are more likely to fail than old business (Haron et al., 2014). Studies show that the main cause of business failure include lack of financial planning, funding and capital shortage, unplanned growth, low strategic and financial projection, excessive fixed asset investments and mismanaging capital (Karadag, 2015). Similarly Purwati et al. (2014) argued the biggest cause of failure in small businesses is bad planning, bad management, lack of funding, lack of experience of the manager, bad recording quality, and inadequate technology. Small businesses have some disadvantageous characteristics such as lack of economies of scale, lack of a collective voice to influence policy, and weak financial capacity to spend on R&D (Chhabra & Pattanayak, 2014). In reality, small businesses face many complex problems (Purwati et al., 2014).

Poor financial management is one of the leading causes of small business failure (Karadag, 2015). Financial management is central in overall management, so any ineffectiveness and inefficiency can lead to longevity and performance problems of a small business (Karadag, 2015). Most problems in small businesses are financial in nature (Karadag, 2015). One of the most challenging financial management obstacles for small businesses is specifically cash flow management and working capital (Mazzarol, 2014). Insufficient capital including excessive debt and poor capital management is a cause for small business failure (Dahmen & Rodriquez, 2014). Difficulties in gaining financing are also a factor in survival (Karadag, 2015). Some of this is due to collateral deficiencies or personal and business financial statement problems (Karadag, 2015). To achieve a favorable appearance to a bank, a business must maintain financial records (Chhabra & Pattanayak, 2014). Small businesses owners in rural Pennsylvania feel that the economy itself is a barrier to their success (Osborne et al., 2013). From a different perspective, rural small business owners in Pennsylvania do not see availability of publicly funded assistance service providers as a barrier to business success (Osborne et al., 2014).

Unreliable cash flow information can lead to cash flow shortage and bankruptcy (Haron et al., 2014). Not managing cash properly results in not being able to repay debts to banks (Haron et al., 2014). Owners in small businesses typically prioritize production/service and marketing functions in startups, and this often leads to poor financial management and business failure (Karadag, 2015). Prioritizing production/service is a result of an owner's lack of accounting and financial skills (Lopez & Hiebl, 2015).

Inadequate management skills or poor business knowledge is another cause for small business failure (Dahmen & Rodríguez, 2014). Some of the challenges faced by small businesses include insufficient managerial skills, lacked of trained personnel, poor access to financial resources and low use of new technology (Karadag, 2015). Often make managerial mistakes, do not develop a strategic plan, and have poor financial control (Karadag, 2015). There is a correlation between outcomes of financial strategies and decisions and the performance of a small business (Karadag, 2015). Some business owners avoid hiring professional finance people because they do not want to delegate power and thus financial problems grow and threaten the firm (Karadag, 2015).

Insufficient or improper use of MAS and the information they provide contributes to small business failure (Lopez & Hiebl, 2015). Some of the reasons for this failure include decreased accuracy in cost calculation, which affects price calculations, overhead calculations and investment decisions (Lopez & Hiebl, 2015). High cost of production and overhead and low demand for products cause small businesses to close their doors (Chhabra & Pattanayak, 2014). Lack of information can result in bad investment decisions and cause business failure (Lopez & Hiebl, 2015). Lastly, the utilization of information in MAS must be correct (Lopez & Hiebl, 2015). In contrast, if a small business adopts MAS in hopes of increasing firm performance does not use the information as designed the usage could lead to bad decisions and cause business failure (Lopez & Hiebl, 2015). The MAS needs to be adapted further than to the owner's experiences for the information MAS to be objective (Lopez & Hiebl, 2015).

Businesses are at risk when the financial literacy of an entrepreneur falls short (Dahmen & Rodríguez, 2014). When the financial literacy of an owner falls short, the review of financial records is less frequent and the businesses experience financial troubles (Dahmen & Rodríguez, 2014). Small business owners can use financial statements to find symptoms of business failure, but without the literacy they cannot see the symptoms or do not even try to see them (Dahmen & Rodríguez, 2014). Without financial literacy a small business owners may fail to see business failure signs in time to fix the problems.

Small business success strategies. Strategic and financial decisions that drive growth and the objectives of the organization can manage many factors that cause failures (Karadag, 2015). To be successful organizational leaders must execute new strategies to accommodate environmental changes occurring in technology, globalization, and information to be competitive in the market place (Taneja et al., 2016). Small business success is dependent on the skills of the managers (Pop, 2012). Strategic management implementation by the owners or managers can differentiate a successful firm from an unsuccessful firm (Karadag, 2015). The managers must plan, organize, train, coordinate, and control the business functions to ensure the economic success of a small business (Pop, 2012). Due to the high failure probability of small businesses, owners must develop strategies to overcome the failure odds against them (Haron et al., 2014).

The use of MAS information increases business performance because it provides the information to managers for better decision-making (Lopez & Hiebl, 2015). The reports from MAS provide managers with information about potential risks and implications that can result from decisions (Van Auken & Yang, 2014). Studies show that using MAS in small businesses lowers time and resources spent in forecasting and identifying of business obstacles (Lopez & Hiebl, 2015). Management forecasting assists in decision-making and coordinates between businesses processes, so targets are set and objectives are met (Andreica et al., 2014). Success of a small business depends on how well they manage their resources (Chhabra & Pattanayak, 2014). A crisis is an event that can lead businesses into financial failure if not handled correctly (Ceran et al., 2016). Information from MAS can prevent the crisis (Ceran et al., 2016). There is data that supports that the use of MAS information in decision-making has a positive influence on firm performance (Odar et al., 2015).

Managing cash flow is an important strategy that provides benefits to businesses (Haron et al., 2014). Managing cash flow including measuring liquidity and providing this information to owners to show resource demands and predicting future performance of the firm (Haron et al., 2014). Providing unreliable information on cash flow can cause for cash shortfall and potential bankruptcy (Haron et al., 2014). Haron et al. (2014)

reported that studies show small businesses typically have formal record keeping decision and financial statements, but on the contrary, the studies performed to date show inconsistency on if the information influences decision-making. Haron et al. (2014) conveyed that information from cash flow statement, cash flow budget, inventory cash flow ratio, and bank balance contributed to profitability performance as compared to information from Accounts Receivable or accounts payable. Small businesses that seek advice or assistance from third parties either professionally or informally tend to be more successful and have greater turnover figures than those who do not (Osborne et al., 2013). Producers of financial statements and specifically statement of cash flow agree that it is helpful to look at the relationship between profitability and net cash flows to plan, analyze, and evaluate performance (Okabe & Suez-Sales, 2015). Managing inflow and outflow of cash including reducing amount of excess cash, reducing receivable collection periods and lengthening accounts payable period can increase the profitability of a firm (Karadag, 2015). When managers reduce the use of observation as an inventory estimator, profitability increases because there is an elimination of possible excess or shortage of inventory (Karadag, 2015).

Innovation is a key component to business success (Alam & Dubey, 2014). Due to the ever-changing environment, small businesses need to look at threats and turn them into opportunities through innovation (Taneja et al., 2016). Innovations types include products, services, processes, and production methods (Saunila et al., 2014). Additionally, innovation can be an improvement in any part of the business, not just products, services, and processes, but in leadership, communication, human resources, and marketing (Taneja et al., 2016). Innovation initiated by an owner gives a firm competitive advantage and success (Alam & Dubey, 2014). Innovation is a critical component in firm performance and profitability (Saunila et al., 2014). In contrast, innovation may or may not positively influence profitability (Saunila et al., 2014). Innovation may be a source of cash flow, but in contrast, innovation may require an outflow of cash with heavy investments that will take time to recover (Saunila et al., 2014). The number of innovations is not as important as having innovations or competencies that others lack (Saunila et al., 2014). Profit measures business success and satisfying the needs of consumers creates profit (Pop, 2012). Innovation needs to meet consumer needs and deliver products and services that customers want (Taneja et al., 2016). Leaders must build a culture that supports and encourages innovation and is supportive of suppliers, customers, and employees (Taneja et al., 2016). Process innovation can increase productivity (Shil et al., 2015). Developing new means of producing, selling, or distributing is process innovation (Shil et al., 2015). Information from MAS gives the information to increase productivity through process innovation (Shil et al., 2015).

Networking is the series of direct and indirect ties with others (O'Donnell, 2014). Networking is an integral means for small businesses to be successful, but it must be more than just there it must be used positively (O'Donnell, 2014). Sometimes acting alone is not enough for small businesses in innovation (Taneja et al., 2016). Co-opetician is the competition between direct competitors in innovation (Taneja et al., 2016). Often there is a need to have cooperation between competitors as well as suppliers and customers (Taneja et al., 2016). If internal capabilities do not exist, alliances can help (Taneja et al., 2016). Networking can be a successful low cost small business marketing strategy (O'Donnell, 2014).

Due to increased global competition even among small businesses, firms need to continuously redesign and develop their strategic strategies to gain and keep competitive advantageous (Surowiec, 2015). Strategic management focusing on long term forecasts including future challenges and opportunities in small businesses can reduce costs, increase competitiveness, improve decision making, increase employee motivation, shorten delivery time and increase customer satisfaction (Brezinova & Prosova, 2014). On the contrary, often the implementation of strategic management does not occur in small businesses due to size of firm, informal leadership, oral over written communication, and a focus on operations management versus strategic management (Brezinova & Prosova, 2014).

Transition

The results of this study could provide valuable information to small businesses owners to help sustain in businesses over the first 5 years. The review of professional and academic literature emphasized the importance of small businesses and the unique characteristics that make them different from larger organizations. There are failure factors that small businesses face due to the nature of their size, but there are strategies to overcome these factors. By using a qualitative research method to interview successful small business owners, to explore what financial strategies they use to increase productivity and profitability, this study may contribute to the success of future small businesses.

Section 2 begins with a restatement of the purpose statement. Following the purpose statement, section 2 includes (a) role of the researcher, (b) participants, (c) research method and design, (d) population and sampling, (e) ethical research, (f) data collection instruments, (g) data collection technique, (h) data organization technique, (i) data analysis, and (j) reliability and validity. Section 3 follows section 2 and begins with an introduction of the purpose of the study and a summary of the findings. Following the introduction section 3 includes (a) presentation of findings, (b) application to professional practice, (c) implications for social change, (d) recommendations for action, (e) recommendations for future research, and (f) reflections. Section 3 completes the study with a conclusion.

Section 2: The Project

The substantial role small businesses play in the economy makes the performance of small businesses an important topic (Haron et al., 2014). In this study, I explored the financial strategies that increase productivity and profitability in small businesses. The participants in this multiple case study included three small manufacturing business owners in Pennsylvania. The data collection techniques included semistructured interviews and direct observation. Section 2 of this study includes the (a) the restatement of the purpose statement, (b) role of the researcher, (c) participants, (d) research method and design, (e) population and sampling, (f) ethical research, (g) data collection instruments, (h) data collection technique, (i) data organization technique, (j) data analysis, and (k) reliability and validity.

Purpose Statement

The purpose of this qualitative multiple case study was to explore what financial strategies small business manufacturing leaders use to increase productivity and profitability to sustain the business beyond 5 years. The population for this study was three small manufacturing business owners in Pennsylvania who have been in business over 5 years and have used financial strategies to increase productivity and profitability. The implications for social change included potentially increasing employment rates in the community of small manufacturing businesses, which leads to increased family incomes and improved overall economic health of the community.

Role of the Researcher

In qualitative research, the researcher is the primary instrument used to study the phenomena and is directly accountable for interpreting and presenting the findings (Morse, Lowery, & Steury, 2014). In this study, I was the primary data collection instrument. As the researcher, I selected the research methodology and design to use in the study. I also recruited participants and collected the data using semistructured interview questions and direct observation. Interviews are often the primary source of data in qualitative descriptive studies (Kahlke, 2014). Researchers learn about lives, feelings and experiences through interviews (Hyden, 2014). I used a standardized interview protocol in all the interviews. Standardized interview protocols in qualitative studies increase reliability because the same questions often result in dependable answers (Platt & Skowron, 2013). An interview protocol keeps an interview focused and directed toward the desired information (Jamshed, 2014). Researchers collect more data when there is a protocol in place for the interview (Leins, Fisher, Pludwinski, Rivard, & Robertson, 2014). The interview protocol used for this study is in Appendix A. In direct observation, a case study researcher observes the phenomenon as the data collection instrument and disseminates the interpretations of the observation (Fusch, Fusch, & Ness, 2017). The field notes are the notes a case study researcher makes during the time while observing and reflective journals are reflections a case study researcher makes after the conclusion of the observations (Fusch, 2015). Once the data was collected, themes and codes emerged while I analyzed the data. Researchers in qualitative studies commonly generate codes and themes from data collected (Kahlke, 2014).

My interest in this research topic stemmed from marrying into a family that has small businesses decades old. Since entering the family, I have worked in small manufacturing businesses owned by the family. I used this to my advantage as a researcher who has experience in the field of study has a greater chance of obtaining reliable answers from participants (Halpern & Leite, 2015). I selected participants from regional manufacturing businesses. I did not have any personal relationships with the participants in the study. My goal was to gather information to help small business owners in my regional area to promote positive social change in the local communities.

A case study researcher should use the highest ethical standards when conducting research (Yin, 2014). I followed the three basic ethical principles in the Belmont Report: respect for individuals, beneficence, and justice (National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research, 1979). The National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research (1979) wrote the Belmont Report to develop ethical principles and guidelines for research involving human subjects. The Belmont Report focused on the safety and well-being of the research participants (Bromley, Mikesell, Jones, & Khodyakov, 2015). The report includes a distinction between research and practice, the three basic ethical principles, and the application of these principles.

The researcher in qualitative researcher is the main element in both collecting the data and analyzing the data, so the analysis is vulnerable to subjective interpretation (Cope, 2014). The researcher must take deliberate actions to minimize bias in the interpretation. A qualitative researcher should commit to studying the phenomenon in a deception-free manner (Kahlke, 2014). I took three steps to reduce bias in the interpretation of the data: taping the interview, methodological triangulation, and member checking. In contrast to field notes, video or audiotaping the interviews can reduce the subjective interpretation by using them as a comparison (Potter, Mills, Cawthorn, Donovan, & Blazeby, 2014). Methodological triangulation by collecting data from multiple sources is encouraged to decrease subjective interpretation (Kahlke, 2014). Member checking is the process of giving the interviewees the opportunity to confirm the information that a researcher interpreted from the information collected during an interview (Harvey, 2015). Member checking continued until I achieve data saturation.

Participants

I carefully selected the participants in the study because the selection of the sample in a qualitative study influences the strength of the study (Emerson, 2015). All the participants should have predictable results and are literal replications of each other (Yin, 2014). A set of criteria determined eligibility. Inclusion criteria are the attributes a participant must hold to be eligible for the study (Robinson, 2014). The criteria for the participants in this study included (a) the participant is a small business owner of a manufacturing firm, (b) the business is over 5 years old, (c) the business is located in Pennsylvania, (d) the business is profitable, (e) financial data is used in decision–making, and (f) the business owners is over 18 years old. In 2016, the Small Business Administration modified the size standards in multiple industries to qualify as a small business (U.S. Small Business Administration, Contracting, 2016). For this study, the previous standard of 500 or fewer employees was used as the criteria for businesses to be qualified as a small business.

To assure proper ethical procedures and protection of the human subjects in the case study, I gained approval from Walden University's Institutional Review Board (IRB). Social scientists are obligated to ethical practices similar to those in the medical field (Yin, 2014). Researchers should inform participants of the procedures taken to maintain anonymity in a study, so they can make an informed consensual decision to participate (Robinson, 2014). I required a written informed consent from each participate. Informed consent in a written format is the preferred method to guarantee that the participants are participating in the study willfully (Oye, Sorensen, & Glasdam, 2016).

A group of eligible participants received personal phone calls and follow-up emails as invitations to the study. The invitation explained the intent of the study, the eligibility requirements, and the positive social change that may result from the study. Hoyland, Hollund, and Olsen (2015) suggested that clear information regarding the study conveys competency and confidence of the researcher and enable participants to make informed decisions. Given the constraints of this study, I will selected the first three participants who responded. A small sample size is appropriate for multiple case studies when the study does not require an excessive degree of certainty (Yin, 2014). A small sample size in an interview study allows the voice of the participants to be clear in the study and guarantees that there is adequate time to analysis the interview content (Robinson, 2014). Scheduling of face-to-face interviews transpired via emails after the selection of the participants. There was an audio recording of the interviews. As the researcher, listened to the recording and transcribed the information into a written format. I interpreted the data and went back to the participants through the member checking process until I reached data saturation.

The affiliation between an interviewer and an interviewee must be positive. Participants are only appropriate for a qualitative study if they willing to share information (Narui, Truong, & McMickens, 2015). Positive rapport between the interviewer and interviewee is the key to the success of a qualitative interview (Bowden & Galindo-Gonzalez, 2015). To gain a good working relationship, the researcher must gain the trust of the participants by developing and maintaining a collaborative rapport (Narui et al., 2015). To gain the trust of the participant, I explained that the participation in the study is voluntary, and that the participant can withdraw at any time. Participants who voluntarily enter into a study are more open, patient, and interested in the study topic (Robinson, 2014). I also explained the procedures of the study, so the participant knew what to expect during the process beginning with recruitment, throughout the interview, to follow up contact, and the conclusion of the study.

Research Method and Design

Research Method

There are three types of research methods: qualitative, quantitative, and mixed method. A mixed method approach is a combination of both qualitative and quantitative methods combined in a single study (Cairney & St Denny, 2015). Both qualitative and quantitative researchers seek to answers the questions of "how, where, when, who, and why" for the phenomenon under study (Leung, 2015). Qualitative researchers explore thoughts, emotions, and behaviors and present the results in words (Larkin et al., 2014). Quantitative researchers examine thoughts, emotions, and behaviors objectively and present the result numerically (Larkin et al., 2014).

The research method for this study was a qualitative method. Researchers who use qualitative methods use questions to develop themes and analysis of those shared concepts to explore and understand a problem (Astalin, 2013). The participants in qualitative research are individuals that have experienced the phenomenon under study (Palinkas et al., 2015). The essence of qualitative research is to make sense of and recognize patterns among words (Leung, 2015). I interviewed participants about their experiences and interpreting those words to understand the financial strategies of small business owners.

Researchers who use quantitative research methods test hypotheses through statistical procedures to study a phenomenon through the relationship of variables (Fossaluza et al., 2017). Quantitative researchers use statistics to interpret numerical data in a logical and strict objective model (Leung, 2015). In contrast to qualitative research that uses interpretation quantitative research is rooted the realist or positivist traditions (Porter, 2007). A quantitative or mixed methods research method was not suitable for this study because I was not testing the relationship of variables or statistically interpreting numerical data. The objective of this study was to explore financial strategies of small businesses owners through interview questions, so a qualitative research method was the most appropriate.

Research Design

There are four principal qualitative research designs including case study, grounded theory, phenomenology, and ethnography (Astalin, 2013).The research design of a study is the framework of the study that connects the data collected to the study's research questions and ultimately to the conclusions of the study (Yin, 2014). The chosen research design needs to be compatible with the study's foundation of knowledge, discipline, and research questions (Kahlke, 2014). The research design is must have the power to address the research questions (Marshall & Rossman, 2016). The research design of this study was multiple case study.

Grounded theory, phenomenology, and ethnography research designs were not appropriate for this study. Grounded theory research design use data and concepts ungrounded through a study to develop a theory about a social phenomenon (Bristowe, Selman, & Murtagh, 2015). This study was not developing a theory about a social phenomenon. Phenomenology research studies a phenomenon by exploring the lived experiences of people that have experienced the phenomenon (Dowden, Gunby, Warren, & Boston, 2014). This study was not exploring the phenomenon by studying lived experiences of individuals. Ethnography is the process of learning about a culture and the members of a community (Bristowe et al., 2015). This study was not be studying the people of a culture.

The research design chosen for this study was a multiple case study research design. A case study research design allows a researcher to gain knowledge and understand a complex situation in society (Yin, 2014). Case study research explores a phenomenon in its natural environment (Houghton, Casey, Shaw, & Murphy, 2013). Data saturation increases the validity of the study because it enhances the authority and completeness of the data (Yin, 2014). To obtain data saturation new data is no longer obtainable and there is sufficient information collected that the study can be duplicated (Fusch & Ness, 2015). Methodological triangulation is the method of collecting data from multiple sources to achieve data saturation (Houghton et al., 2013). Methodological triangulation enhances the study by correlating data from multiple collection methods (Fusch & Ness, 2015). The sources used in this study will include semistructured interviews and direct observation. Triangulation, a strength of case study research, is the strategy of collecting data from multiple sources to confirm and complete data collection (Houghton et al., 2013; Trepal, Stinchfield, & Haiyasoso, 2014). Triangulation confirms the data collected from sources and increases the accuracy, credibility, and trustworthiness of the case study (Hanson et al., 2017). Through triangulation, a case study research design shows the complete picture of the phenomenon (Houghton et al., 2013). The use of member checking will also achieve data saturation by eliminating any new emerging data (Houghton et al., 2013) A multiple case study design allows a researcher to study a phenomenon in diverse settings (Houghton et al., 2013).

Population and Sampling

The population for this qualitative study included a purposive sample of three profitable small manufacturing business owners from Pennsylvania. The population of a study is the total amount of people who are eligible for interviewing as part of the sample (Robinson, 2014). Purposive sampling is a non-random sampling strategy that guarantees that certain cases with the population have representation in the study (Robinson, 2014). Using purposive sampling, researchers select participants to ensure that the participants are rich in the knowledge about the research question (Cleary, Horsfall, & Hayter, 2014). Purposeful sampling achieves the qualitative principle of engaging appropriate participants who can articulate and are willing to share information (Palinkas et al., 2015).

Practical considerations such as the timeframe of the study influence the sample size of a qualitative study (Robinson, 2014). Additionally, a smaller sample size gives each participant an identity and voice in the study rather than part of a larger entity (Robinson, 2014). A large sample size may produce artificial and unmanageable amounts of data (Cleary et al., 2014). The size of the sample is less important than the quality of the sample (Bradbury-Jones & Broadhurst, 2015). To achieve qualitative research standards, the strategy of member checking will achieve data saturation. Member checking is a strategy used to achieve data saturation and increase the trustworthiness and completeness of a qualitative study (Harvey, 2015).

The participants in the study was three small manufacturing business owners in Pennsylvania who have been in business longer than 5 years and have used financial strategies to increase productivity and profitability. A positive working relationship between the researcher and participants increases the quality of a study (Narui et al., 2015). The interview setting is important to shape the dynamics of the relationship between the researcher and participant. The physical setting of an interview shapes the interviewee level of cooperation and perceptions (Dawson, Hartwig, Brimbal, &

Denisenkov, 2017). The interviews took place in a quiet, private location chosen by the participant to maintain comfortability. A setting that is free of pretense and deception results in reliable qualitative research (Kahlke, 2014).

Ethical Research

Ensuring research is done ethically is a critical role of the researcher (Yin, 2014). I followed the three basic ethical principles in the Belmont Report (National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research, 1979), respect for individuals, beneficence, and justice. To assure proper ethical procedures and protection of the human subjects in the case study, I gained approval from Walden University's IRB. The Walden University IRB approval number for my study was 11-03-17-0567267. Potential participants received an invitation to participant in the study via email that included an informed consent form after initial phone calls were made. An informed consent form includes the aim of the study, the requirements of participation entails, the voluntary nature of participation, and other pertinent information needed to make an informed consent (Robinson, 2014). Voluntary participation is central to good ethical procedures (Robinson, 2014). To guarantee the consent is voluntary, participants should decide to consent or not with as little outside influence as possible (Oye, Sorensen, & Glasdam, 2016). In addition to voluntary participation, participants could withdraw at any point. There were no incentives for participating in the study.

The protection of the individuals in research is critical (Oye et al., 2016). Risks and burdens assessed against potential benefits determine if individuals are protected (Oye et al., 2016). Measures taken to protect the rights of the individuals included storing information collected and protecting the names of the individuals and organizations for confidently. A password protected hard drive and locked filing cabinet for 5 years will store the data collected for 5 years. After 5 years, the deletion of the data and shredding of the hard copy information will occur. Qualitative researchers often use pseudonyms to protect the identity of participants (Connelly, 2014). Participant A, B, and C identify the individuals to maintain confidentiality.

Data Collection Instruments

I was the primary data collection instrument in this study. The researcher in qualitative studies plays the central role in data collection and is the primary data collection instrument (Draper & Swift, 2011). The researcher can influence the data (Draper & Swift, 2011). A semistructured interview was the vehicle used to facilitate the data collection. The interview provides the researcher with information from the participant about the phenomenon (Castillo-Montoya, 2016). To enhance the reliability and validity of the data collection process, utilization of several took place. An interview protocol provides consistency among interview participants and increases the dependability of the answers (Platt & Skowron, 2013). Questions that are easily understood and interpreted consistently increase the quality of the data collected (Neuert & Lenzner, 2016). Appendix A is a copy of the interview protocol for this study. Member checking is the process of taking information back to the participants after transcription has occurred to verify the information collected portrays the participants view accurately (Harvey, 2015). Methodological triangulation confirms the accuracy of data by obtaining data from multiple collection methods (Yin, 2014). Interviews and direct observation served as the two different sources of data. The techniques used to increase reliability and validity in a study increase the confidence level that the results accurately portray the phenomenon (Porter, 2007).

Data Collection Technique

There is a wide range of data collection techniques in qualitative research, but the choice is crucial to high-quality research (Draper & Swift, 2011). The depth and quality of data are the highest consideration in qualitative data collection (Castillo-Montoya, 2016). A semistructured interview served as the primary data collection technique in this study. The words of the interviewee in the interview are the data that is collected (Pierre & Jackson, 2014). Interviews are the most predominant data collection technique in qualitative studies (Pierre & Jackson, 2014). Often a combination of interviews and another source of data achieve a complete view for analysis (Turner, 2010). Direct observation served as the secondary data collection technique. Interviews are a conversation between two individuals with a purpose (Draper & Swift. 2011). An interview gives a participant the opportunity to talk in-depth about the research question to explain a phenomenon (Ahmed & Ahmed, 2014). Semistructured interviews begin with a predefined set of questions, but the participant can expand on the inquiries, and the researcher has the freedom to be flexible in the structure and phrasing of the questions (Draper & Swift. 2011). This semistructured atmosphere allows probing questions, but also lacks consistency among each interview because the wording and probing questions may vary (Turner, 2010). The interviewer is responsible for ensuring that the information obtained from each interview covers the same general areas (Turner, 2010).

The interviews were face to face in a location chosen by the interviewer and agreed upon by the participant. The interview protocol for the semistructured interview is located in Appendix A. Face to face interviews allow for observation of body language, but the impersonal nature of interviews that are not face to face allow for participants to reveal information that is more sensitive (Draper & Swift, 2011). An audiotape of the interviews served as the media to generate electronic transcripts. Direct observation transpired as part of a plant tour and spending time observing in the manufacturing facility. This study did not have a pilot study after IRB approval.

It is the responsibility of a researcher to interpret the experiences of the participants sufficiently so that the portrayals of the experiences are accurate (Harvey, 2015). Member checking is a process that researchers take the information gathered back to the participants, so they can confirm the accuracy or clarify the information (Houghton, Casey, Shaw & Murphy, 2013). After the interview transcription, I provided my interpretations to the participants for accuracy confirmation. This process will continued until there is no further information available. In addition to member checking data, methodological triangulation improves confirming the accuracy of the findings (Yin, 2014). Methodological triangulation is the process of gathering information about a phenomenon using multiple methods (Carter, Bryant-Lukosius, DiCenso, Blythe, & Neville, 2014). Qualitative researchers use strategies such as member checking and methodological triangulation to strength the rigor of the study (Trepal et al., 2014).

Data Organization Technique

There are four principles to data collection; using multiple sources of evidence, organizing and documenting the data, maintain a chain of evidence to increase reliability, and exercise care when using electronic sources (Yin, 2014). Proper data organization techniques improve the rigor of the study. Transcription occurred in Microsoft Word to convert the raw data into transcripts. NVivo is the tool used to identify the codes and themes in the transcripts and observations. Specialized software assists a researcher in organizing and keeping track of ideas in development (Talanquer, 2014). To fully capture the phenomenon, both verbal and non-verbal observations need incorporated into an analysis (Cronin, 2014). Codes and themes are common phrases, ideas, and experiences among the participants (Turner, 2010). The use of codes instead of names to identify the individuals and organizations protect the participants. The participants are referred to as Participant A, B, and C. The electronic records are stored on a password protected USB drive and placed in a locked cabinet along with hard field notes made during the direct observation. I will maintain the data in the locked cabinet for 5 years and destroy the information at that point.

Data Analysis

I used methodological triangulation to do data analysis for this study. Triangulation is the practice of using more than one approach to confirm the consistency of a finding (Yin, 2014). A researcher who uses methodological triangulation applies multiple data collection methods to obtain a complete picture for the researcher than a single method could achieve (Manganelli, 2014). A researcher uses methodological triangulation to confirm the data collected is complete (Fusch & Ness, 2015). A semistructured interview and direct observation were the two sources of data used to accomplish methodological triangulation. Another method of data collection often accompanies interviews in a research study to gain a more comprehensive view of the phenomenon (Turner, 2010). The convergence of the two methods of data collection in triangulation confirms the consistency of the research findings (Yin, 2014).

Transcription completion occurred after the interviews were completed. After the transcription and interpretation process was complete, I went back to the participants for the member checking interview process. Member checking was the third method of data collection. Member checking is the process of allowing the participants the opportunity to confirm the accuracy of the interpretations or clarify the information collected (Harvey, 2015). Allowing participants to continue to have a part in the data analysis process validates the information collected (Castillo-Montoya, 2016). Once the participants confirmed the accuracy of the data, I uploaded the interpretations into NVivo for coding and analysis. Software such as NVivo can assist in locating texts, occurrences, and themes in the data collected (Yin, 2014). Themes or codes are common phrases or ideas among research participants (Turner, 2010). A comparison of the themes or codes and the field notes and reflective journal added to the validation of information accuracy. Using the themes and codes identified I drew conclusions from the data collected. The conceptual framework, TPB, served as a lens to view the conclusions of the data analysis.

Reliability and Validity

Researchers recognize that qualitative research has significant contributions to research due to the differences of the approach in comparison to quantitative research (Houghton et al., 2013). However, due to these differences assessment of the reliability and validity of qualitative research is different (Houghton et al., 2013). In contrast to quantitative researchers, qualitative researchers use techniques and procedures as part of the research process to provide reliability and validity (Porter, 2007). Although these procedures do not guarantee reliability and validity, they increase the confidence level that the results accurately represent the phenomena (Porter, 2007). Researchers and readers of qualitative research have the responsibility to ensure that the research findings are as accurate as possible (Porter, 2007). The four criteria most often used to assess the rigor of a qualitative study are dependability, credibility, transferability, and confirmability (Houghton et al., 2013).

Reliability

Reliability is synonymic with dependability and refers to how constant the data is in the study (Houghton et al., 2013). To maintain dependability in my study, I included three techniques in my processes including audiotaping of the interview, member checking of data interpretation, and interview protocol. Audiotaping increases reliability by providing a source to compare to a transcript (Potter et al., 2014). Member checking is the process of having the participants of the study read the interpretations of the transcripts to confirm the data is consistent their intentions (Houghton et al., 2013). Member checking continued until I reached data saturation. I used a standardized interview protocol in all the interviews. Standardized interview protocols in qualitative studies increase reliability because the same questions often result in dependable answers (Platt & Skowron, 2013).

Validity

Validity in qualitative research refers to how appropriate the tools, processes, and data are for the study (Leung, 2015). A credible study takes all perspectives of a participant into account (Porter, 2007) and is an authentic explanation of the phenomena (Houghton et al., 2013). The interview questions in this study addressed the phenomena from different angles to allow the participants to voice their complete perspective on the subject. Prolonged engagement and probing within a case study can increase the credibility of the data collected (Houghton et al., 2013). Transferability of a study refers to whether or not the findings can be usable in another similar context or situation, while still preserving the meanings and inferences from the completed study (Houghton et al., 2013). To maintain transferability, the context of the research must be adequately described so readers can make judgments as to whether or not the findings are usable in another setting (Houghton et al., 2013). Direct quotes and excerpts of field notes are included in the findings section to demonstrate transferability. Confirmability is the accuracy and unbiased nature of the data in a study (Houghton et al., 2013). I used methodological triangulation in the study by collecting information from semistructured interviews, performing member checking, and direct observation. Methodological triangulation is the process of using multiple methods to collect consistent data to support the findings of the study (Yin, 2014). Collecting data using multiple methods provides a more undoubted and exact case (Yin, 1994, Houghton et al., 2013). Data saturation refers to the lack of any new emerging data (Houghton et al., 2013). I took the interpreted data back to the three participants for member checking to achieve data saturation.

Transition and Summary

It is crucial that small business owners understand the financial strategies other small business owners use to sustain in business over 5 years. There is an association between a success of a small business and a small business owner's use of financial information (Dahmen & Rodríguez, 2014). Data was collected using a qualitative multiple case study to explore the financial strategies small business owners use to increase productivity and profitability to sustain in business over 5 years. Section 3 begins with an introduction of the purpose of the study and a summary of the findings. Following the introduction section 3 includes (a) presentation of findings, (b) application to professional practice, (c) implications for social change, (d) recommendations for action, (e) recommendations for future research, and (f) reflections. Section 3 completes the study with a conclusion.

Section 3: Application to Professional Practice and Implications for Change

Introduction

The purpose of this qualitative multiple case study was to explore what financial strategies small business manufacturing leaders use to increase productivity and profitability to sustain the business beyond 5 years. The data came from interviews with business leaders and direct observations at three manufacturing facilities. The findings of this study resulted in four main strategies that successful manufacturing small business leaders use to increase productivity and profitability. Small business leaders collect and use company data to make decisions to be successful. Planning for the future sustainability of the business is another financial strategy used by business owners. Additionally, cash flow management is an important financial strategy to continue to be viable in manufacturing. Lastly, the collaboration between management and employees is a strategy used to make decisions, increase productivity, and be successful.

Presentation of the Findings

I used interviews and direct observation of manufacturing processes to gather data for analysis in this study. The data were collected to answer the following overarching research question: What financial strategies do small business manufacturing leaders use to increase productivity and profitability to sustain business beyond 5 years? Four themes emerged from the data: importance of company data, planning for the future, cash flow management, and management and worker collaboration.

The majority of the data collected came from the interviews. The field notes and reflective journals assisted in reaching data saturation. Data saturation occurred when the information became complete, and there was no further data to be uncovered (Fusch & Ness, 2015). Once the data collection was complete, the interview interpretations, field notes, and reflective journals were imported into the qualitative data organization software NVivo. I coded the data and ran queries to discover the themes that emerged. The first theme was the strategy of importance of using company data to run the business. The second theme was the importance of planning for the future to sustain the business. The third theme was the management of cash flow through receivables management, purchasing, and debt management. Lastly, the fourth theme that emerged was the importance of management and worker collaboration in the manufacturing facility. These themes align with the conceptual framework used in this study, TPB. The business leaders in this study used the strategies that emerged as themes as strategies that they believed would increase productivity and profitability.

First Theme: Importance of Company Data

Data collection and the use of data in planning can help sustain an organization (Fulker, Timur, Dew, & Butler, 2016). All participants acknowledged that company data was important to understanding the businesses. Participant C stated that a business could not improve if the owner does not collect data and manipulate the data to improve productivity and profitability. Participant C uses company data to manage all aspects of the organization. Three subthemes emerged from the importance of company data. These subthemes included MAS, operating costs, and the reporting of data.

Management accounting systems. Participant A confirmed the importance of using MAS in a small business. Advancements in information technology have assisted businesses in the collection of data to run business processes (Relich & Pawlewski, 2018). The business run by Participant A uses MAS to monitor productivity on the floor by understanding the time clocked into jobs by workers. This system can also give the management an understanding of run times to understand missed run times and areas is room for run time improvement. Participant C also commented about the importance of digital data, so anyone can pull the information up to understand what happened in that job. The data includes the time it takes to do a job, the raw materials used in the job, and waste factors. Observation at Participant C's organization indicated the use of electronic job reports. Participant A also mentioned that the business uses accounting software to sort and generate reports, so they can understand where they are spending money. Participant A acknowledged that the challenge with using MAS is that to get good data from systems the data going in must be good. Generation of high-quality decisions from MAS data is only possible if the data in MAS is high quality (Leitner, 2014).

Operating costs. Understanding process costs in manufacturing give business leaders a solid financial basis to making decisions and planning for the future (Ungureanu, 2014). Participant A commented that monitoring of costs keeps costs down and prices increases occur when necessary. Participant A looks at alternative sourcing as a strategy to keep material and parts costs. An additional strategy to keep costs down used by Participant B is to take advantage of discounts on purchased goods. Participant A spoke about the challenge of keeping costs down but still maintaining quality in the parts and materials, they are purchasing. Participant C also monitors unallocated wages and overhead costs.

Reporting of data. All the participants discussed reports that the businesses use to review the data collected at their organizations. The reports vary from gross profit and sales by product line and sales person to the number of website visits and the ratio of dollars invoiced to the number of employees. Participant C reviews reports that illustrate the organization's leading and lagging indicators of the business's performance. Many of the reports used by the business leaders in this study compared actuals to goals or models. Direct observation at Participant A's organization revealed reports on the floor that graphically showed actuals as compared to the goals. Participant C expressed the importance of looking at station throughputs versus historical information to understand the usage going through the machines to understand opportunities in the market and identify efficiency improvements.

Second Theme: Planning for the Future and Capital Expenditures

All the participants discussed the strategy of planning for the future is what makes the business sustainable. Participant B stated that predicting what is going to be beneficial in the future is how to stay one step ahead of the competitors. Participant B also stated that reaction puts you behind, pro-action is good, but predicting is better. Prediction is valuable to businesses, so that they can make proactive sustainability decisions (Márquez-Chamorro, Resinas, Ruiz-Cortés, & Toro, 2017). Future planning can be in the form of investing in capital expenditures and research and development. Participant A spoke about looking for investments that give them a return, keep the business up to date and keep up with their competition. The participants also mentioned that recent tax reform increased the incentive to purchase fixed assets. Participant B also acknowledged that capital expenditures and investing in the future bring financial burdens.

There is a linkage between permanent economic growth of a business and capital investments in the business (Simos, 2017). All three participants either recently upgraded or were in the process of upgrading equipment at the time of the study. This action by the business owners was evident from the interviews and confirmed through direct observation. Although all the upgrades were made to increase sustainability in the future, the direct reasons behind the upgrades were different. Participant A upgraded two new machines to keep the equipment up to date. The old machines had a significant amount of downtime decreasing productivity. Additionally, the availability of the skills to fix the older machines was diminishing with the retirement of older employees. In contrast, Participant B invested in state of the art equipment to drive innovation and negate the effects of a hard to find good labor pool. Lastly, Participant A noted that investments are visuals that employees see as investments into the business rather than all the profits going in the pockets of the owners.

Strategies for determining what investments are good for the business can use financial data. Financial ratios assist managers in decision-making (Faello, 2015). Participant B talked about using financial ratios such as return on investment and net present value to evaluate if an investment is strategic or not. During the direct observation of the new equipment at the business of Participant B, it was noted that a capital improvement must increase productivity or lower costs to be considered for investment.

Third Theme: Cash Flow Management

The availability of internal cash flow in manufacturing can have a significant impact on the level of productivity (Satpathy, Chatterjee, & Mahakud, 2017). Participant B stated that cash and cash management is the most important driver in manufacturing. Cash is managed from both the inflow and outflow of cash. On the inflow side, receivables management is a strategy used to manage cash. Both Participants B and C emphasized that holding customers to strict payment terms is critical so that customers do not use their business as a bank or lending source. Participant C looks at invoices generated reports including average days to pay and deposit reports to manage cash flow and receivables. Participant C also uses receivable management to avoid using a line of credit, so interest is not charged on borrowing that money. Additionally, Participant C has implemented a deposit requirement for custom jobs. Participant B also discussed payables management as a strategy for managing cash. Managing payables allows the business to pay promptly and take advantage of discounts on purchased goods giving the business a step ahead of competitors who may not be able to take advantage of the discounts.

The participants had different approaches to managing cash flow for investments in the future. All the participants use retained earnings to invest in capital expenditures and research and development to sustain in the future. Participant A and B also talked about the use of bank debt to finance capital purchases. Participant A uses bank debt when the return is higher than the cost of the debt. Participant B acknowledged that the business had a healthy mix of bank debt with internal use of retained earnings for capital purchases. In contrast, Participant C avoids bank debt because of the interest. Participant C explained how the business develops a plan on when they need equipment and works with the supplier to pay installments before getting the equipment.

Fourth Theme: Management and Worker Collaboration

A significant challenge expressed by all three participants in implementing new strategies in the business was getting acceptance of the changes by all parties including the floor workers. Organizational change causes stress to employees because of the uncertainty associated with the change (Giauque, 2015). Participant A articulated that communication of a change to the floor must not be perceived as a criticism to the workers, but the change is an improvement to make the business more profitable and sustainable to benefit the workers. Two subthemes-goal communication, and ideas from the floor-emerged that addressed this challenge expressed by the participants.

Goal communication. Participant A highlighted the importance of goal communication from management to the shop floor. Goal communication improvement increases performance and the strength of a manufacturing facility (Larsson, Syberfeldt, & Safsten, 2017). The goals should be communicated and posted so workers can be held accountable. During direct observation at Participant A's business, reports were posted openly on the floor showing goals and outcomes. Larsson et al. (2017) concluded from a study that simple visualization accompanied by an oral presentation was the most effective method of goal communication. Without the understanding of the goals, the workers cannot be held accountable to reach those goals.

Ideas from the floor. Sometimes the best ideas come from the floor of a shop rather than from management. Innovation generated by employees is important to organizations to maintain a competitive advantage (Veenendaal & Bondarouk, 2015). A strategy Participant A uses to improve productivity is if a worker is running a job faster than the time allocated to the job, reduction of the run time occurs, so the worker must be innovative to figure out how to improve in the shorter run time without impacting quality. A manager should be cautious about increasing productivity when quality may be sacrificed (Brecher, 2014). Participant C utilizes employees from all levels of the organization in decision making because many of the best ideas come from the floor.

Using committees is a strategy the participants use to achieve a good collaborative relationship between management and workers and cultivate ideas from the floor. All three participants acknowledged that they did not want to be perceived as a top-down management company. Collaborative committees in an organization can break the feeling of isolation and bring a united culture to an organization (Fulker, 2016). Participant A felt when a committee from backgrounds in the business was used to develop ideas and presented to employees from a unified team there was less resistance to change. Similarly, Participant B spoke about using committees of both family and non-family members with equal weight to make decisions.

Ties to Conceptual Framework

The conceptual framework of this study was TPB. Ajzen (1991) developed TPB as an extension of TRA (Hassan et al., 2016). Under TPB, a person's intention of towards a behavior determines human behaviors (Adamos & Nathanail, 2016). A person's attitude, subjective norms, and perceived behavioral control shape an individual’s intention (Adamos & Nathanail, 2016). This framework can increase the understanding of the strategies that emerged from the data collected in this study. The participants all acknowledged that the importance of reviewing and comparing company data to goals. The goals were the outcomes the participants perceived as the subjective norms, so when actual data do not reflect the goals, decisions and actions are taken to improve the processes. The participants plan for the future through capital investments based on their prediction and perceived beliefs of what will make the business sustainable in the future. The decisions emerging from cash flow management by business leaders reflect a business leader’s attitude of perceived business norms. In this theme, the business leaders had two different perceived believes on how to handle debt and financing of capital investments due to previous banking relationships. The distinction of TPB from TRA is the added construct of how much control an individual has of being successful determines the behavior (Shiau & Chau, 2016). The strategy of increasing collaboration between management and workers highlights this TPB element because strategically managers are working with employees to make a change successfully.

Ties to Existing Literature

Owners are the decision makers in small businesses and their strategic decisions impact the performance of the organization (Francioni et al., 2015). The characteristics of the owner influence their strategic decisions (Francioni et al., 2015). It is observable from the results of this study that the individual influences strategies of successful business owners. Though four themes emerged, each participant had some divergent elements in their strategies. There is a link between the findings in this study and existing literature published on small businesses and small business owners.

Data is a valuable asset to business decision-making processes (Zafar et al., 2017). The findings from the study emphasized the importance of using data in decisions. Purwati et al. (2014) suggest that data is the raw materials that go into small business decision-making processes. All the participants talked about using data in all aspects their businesses from sales to operations to personnel. Although each participant uses data in decision-making, the data elements, the collection data, and the reporting are different among the organizations. One participant uses a MAS while another uses internally generated reports. This concept of using data in decision-making agrees with existing literature. Odar et al, (2015) explained there is not a data structure that is universally appropriate for all businesses, but systems need to be adapted to specific organizations.

The data must be timely true and relevant (Ceran et al., 2016). Electronic data was part of the importance of company data theme that emerged. The findings showed that the use of MAS and digitally uploaded data increased timeliness and availability of the data. In additional to being timely, the data must be relevant. When a business owner relies on data in decision-making quality assurance is necessary (Zafar et al., 2017). The accuracy and reliability of the information determine the quality of the financial data and the information needs to be high quality to make crucial management decisions (Ceran et al., 2016). The data is critical in decision-making, so the quality of the data that is also critical in decision-making (Leitner, 2014). The findings of this study acknowledged that the quality of data used in reporting is a challenge to small businesses.

Profitability, firm growth, and productivity increases are challenges for small businesses (Haron et al., 2014). Alam & Dubey (2014) asserted that innovation is key to business success and survival. Participant B discussed to have the upper hand in manufacturing against competition; an organization must predict the next innovation. He discussed that innovation in the manufacturing processes makes a small business competitive and sustainable. Similarly, Participant A spoke about looking for investments that allowed them to keep up with the competition. The process of identifying the needs and opportunities in the marketplace to be competition is unique to each business owner (Ropega, 2016). The lack of response to needs in the competitive marketplace contributes to the failure of small businesses (Ropega, 2016). The participants in the study create innovation through capital expenditures and futurist planning.

Participant B acknowledged that capital expenditure could create a financial burden for small businesses. Small businesses often find it difficult to obtain financing and capital development (Ciubotariu, 2013). To overcome the disadvantages, small businesses need to use the resources they do have access to efficiently (Lopez & Hiebl, 2015). Though none of the participants mentioned the difficulty in getting capital funding, all mentioned the use of retained earnings as a resource used to fund capital purchases. Additionally, Participant C discussed not using bank debt to avoid interest payments, so that the businesses could use resources available internally. Lastly, the findings of the study found that recent tax reform was an additional reason for capital expenditures. If tax rates decrease, accelerating depreciation in 2017 when tax rates were higher may become a permanent benefit in the future (Kay, 2017).

Kroes and Manikas (2014) explained that cash flow management could lead to increased firm performance. Increasing receivable turnover into cash speeds up the time the cash is available for payables and this process is the key to profitability (Mazzarol, 2014). The findings of this study concur with this existing literature. The strategy of managing receivables to increase cash flow was a theme that emerged from the data collection. Additionally, Participant B discussed the importance of payables management and taking discounts that other competitors may not have available. When maximizing cash discounts money is gained (Tueffel, 2016).

The need for management and worker collaboration to successfully create ideas and implement changes was a theme that emerged from the data collection. This theme agreed and contrasted with current literature. Similarly, Ropega (2016) stated that an entrepreneur who can acquire and build is a desirable attribute. In contrast, this theme differentiated with existing literature on how small businesses typically operate. Bares & Westrenius (2015) stated that small business owners are typically in control of the operations, operating capital, and decision-making in the organizations. Ownership and control are often synonymous in small businesses (Barnes & Westrenius, 2015). The participants in this study do not want to the perception as having a top-down management style. Another conflicting topic concerning employees and management was the close interaction. Ciubotariu (2013) indicated there is close personal contact between employees and management, so internal communication is quick. The participants in the study alluded that there was not as much personal contact, so it was difficult to impellent change without having resistance.

Applications to Professional Practice

Small business owners are integral players of small businesses (Turner & Endres, 2017). The performance of small business performance is highly reliant on a small business owner's strategies of running a business (Francioni et al., 2015). It is undeniable that in most small businesses that the owner is rich in knowledge of the business industry (Haron et al., 2014). In contrast, a small business owner often lacks management and financial skills to run a business (Karadag, 2015). The findings of this study could potentially be significant to business practice because the strategies identified in this study can assist current and future small businesses in running their business from a financial and management in addition to their rich knowledge in the technical side of the business.

The use of company data in making strategic decisions was a theme that emerged from all the participants. Small businesses owners can use data collected to make business decisions. When a business uses data in decision-making, decisions are timelier, and the organization is more efficient (Gauzelina & Bentza, 2017). After data collection implementation in a business, an owner or management team can use the data to assist them with decisions from sales, to production to personnel. Small business owners often make financial decisions based on personal opinion rather than data (Lopez & Hiebl, 2015). In addition to strategic financial decisions, technical manufacturing decisions may be enhanced by using data.

The goal of a business is to be continual into the future. Two strategies emerged from the study that makes a small business continuous. The first is managing the business in the present and the second is planning for the future. The strategy of managing current cash flow is a strategy of managing the present. Small businesses need resources to survive the present, and cash is the resource to continuous purchase raw materials and pay expenses. Planning for the future includes innovation. Innovation gives businesses a sustainable competitive advantage (Alam & Dubey, 2014). The participants in this study highlighted the importance of planning for the future through being predictive and investing into capital expenditures for the future.

Lastly, the strategy of worker and business owner collaboration is a strategy small business owner should consider when managing a business. Although small business owners are often the decision makers in small businesses (Francioni et al., 2015), employees are the individuals who manufacture daily. Innovation often comes from the floor of a business rather than management (Veenendaal & Bondarouk, 2015). Goal communication, using ideas from employees and collaborative committees are identified strategies in this study to promote business owner and employee relationships in business.

Implications for Social Change

This study has the potential to contribute to positive social change. The importance of small businesses is undeniable. Small businesses are the backbone of rural communities (Dahmen & Rodríguez, 2014; Osborne et al., 2013) and account for 41.2% of U. S. private payroll (Turner & Endres, 2017). The failure rate of small businesses within the first five years is 50% (Turner & Endres, 2017). Small businesses typically have a close relationship with the community where they operate (Ciubotariu, 2013). Without small businesses, the economy of rural communities and economies worldwide would decline.

The findings from this study could directly provide positive social change for small business owners. The livelihood of small business owners comes from their businesses and can be vulnerable based on the success of the business (Ho Jun & Hanna, 2012). Without success, small business owners may go into debt and have reduced family income (Ho Jun & Hanna, 2012). The strategies that emerged from this study can help increase the productivity and profitability of small business to be sustainable past 5 years. Small business owners can directly implement these decision-making strategies to improve the success of their business possibly. An increase in small business success rates could provide a positive social change for small business owners.

Similarly, this study could indirectly contribute positive social change to economies. The findings in this study could increase the survival rates of small businesses. When businesses succeed, the people of the community benefit from the success. Successful businesses provide individuals with more employment opportunities, which increase family incomes. Employment opportunities decrease poverty levels (Chhabra & Pattanayak, 2014). The economic strength of a community may increase due to decreased poverty levels resulting from increased family incomes. The increased economic strength of a community increases the health of the community as a whole. A community in which small business reside could see a contribution of positive social change because of the findings of this study.

Recommendations for Action

The purpose of this qualitative multiple case study was to explore what financial strategies small business manufacturing leaders use to increase productivity and profitability to sustain the business beyond 5 years. The survival of small businesses is important socially and economically (Kubickova, Moravkova, Tuzova, & Necas, 2017). Current and future small manufacturing businesses should pay attention to the results of this study to increase productivity and profitability in their businesses to improve success rates. The Small Business Administration centers and business development organizations should also pay attention to the findings in this study to help small manufacturing business leaders improve strategies in their organizations. Dissemination of the findings may be in presentations or through prepared literature. I will advise the participants in the study of the findings and information on how to locate the published complete doctoral study if they have an interest in readings the full study.

Recommendations for Further Research

I recommend further research on the topic of financial strategies used by business leaders to increase productivity and profitability. The sample size of three was a limitation of this study. Further research is recommended on a larger size of participants. The judgment of the researcher determines when the study has reached data saturation (van Rijnsoever, 2017). Another researcher may judge that data saturation needs a larger sample size. Two additional limitations were the geographical location of the business leaders and the industry sector. Geographically, the business leaders in this case study were from Pennsylvania. Additional research on business leaders outside of Pennsylvania is recommended. This study was limited to manufacturing businesses, so further research outside of the manufacturing sector is recommended to understand what additional financial strategies are used by businesses. Lastly, this study used a qualitative case study method and design, so the use of other research methods and designs in future research could increase the understanding of business profitability and productivity strategies. Researchers with different levels of data accessibility, financial constraints, and time limitations may choose different methods and designs of research to explore the topic (Adamos & Nathanail, 2016).

Reflections

My experience within the DBA Doctoral Study process was a learning experience in many facets, educationally and personally. Educationally, learning to navigate an online program was the first challenge I had in the DBA program, as this was the first online degree I had taken. All my professors were very understanding and helpful when technology was an issue. Secondly, understanding what it meant to write academically and succeeding in writing as an academic was a big step in the DBA process. I credit my professors and especially my chair and committee in educating me on this portion of the DBA process. The residencies gave me a wealth of knowledge and re-charged me each time to move forward in the process. Personally, I had to overcome of personal weaknesses to succeed in finishing my DBA degree. Though an extrovert, I had to overcome getting to know others in large settings when I did not know anyone such as the case of the residencies. Additionally, asking others for help is not a strength of mine, so recruiting participants was something I needed to overcome to collect data.

As a professional in the field of finance, I had some preconceived ideas about what financial data manufacturing business leaders should use in their decision-making processes. Cash flow was one of those preconceived ideas, and each of the participants talked about cash flow extensively in their interviews. I also expected inventory turnover to be another topic that would emerge as a financial strategy used by manufacturing business leaders and this topic did not emerge as a theme. Lastly, I found the theme of capital expenditures and planning for the future to be an interesting and fruitful theme that emerged from the data collection process. The findings of the study should be helpful to financial professionals including me in running businesses successfully.

Conclusion

Small businesses are the strength of the US economy (Park & Campbell, 2017). The failure of these small businesses hurt the national economy as well as the rural areas that receive social and economic benefits from small businesses (Kubickova et al., 2017). The findings of this study identify financial strategies that small business leaders can use to increase productivity and profitability in their businesses. Using data to increase margins, manage cash flow, and continuously investing and planning for the future increases the sustainability of small businesses. By utilizing these strategies, small businesses may increase survival rates and continue to support small communities.

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Appendix A: Interview Protocol

Initial Interviews

What I will do	What I will say
Introduce self to the participant.	Good Morning/Afternoon. My name is Jennifer Cummings and I am a doctoral candidate at Walden University.
Explain the purpose of the study and the format the interview will follow.	The purpose of this study is to explore what financial strategies small business manufacturing leaders use to increase productivity and profitability to sustain the business beyond 5 years.
Explain the consent form and answer any questions from the participant.	I previously provided you with a consent form that I am asking you to sign. The consent form gives you the participant information about the study, so you can willingly agree to participate in the study. The consent form gives you the applicable information, so your consent is an informed decision.
Have the participant sign two copies of the consent, one for self and one for participant.	If you have no further questions about the consent please sign two copies. One copy is for you as the participant and one copy is for me as the researcher.
Turn on recording device.	I will now start the recording and the interview will begin.
State the date, time and place of the interview.	For the record, today is XXXX, the time is XXXX, and this interview is taking place at XXXX.
Specify the participant in the interview with a coded identification.	The participant in this interview will be known as Participant X.
Conduct interviews by asking the interview questions and follow up questions.	What financial strategies do you use in your organization to sustain in business? What financial strategies do you use to increase productivity? What financial strategies do you use to

	increase profitability? How do you assess the effectiveness of the strategies? What challenges did you face when implementing the strategies? How did you do to address the challenges you faced? What else would you like to share about financial strategies you use to increase productivity? What else would you like to share about financial strategies you use to increase profitability?
Turn off recording device and end interview.	I will now turn off the recording device as we have concluded the interview.
Discuss member checking with the participant.	After I transcribe and interpret the data from this interview, I will give you the opportunity to confirm the interpreted data that was collected from the interview. I will continue this process until the data is confirmed and no further new data is obtained.
Answer any additional questions the participant may have after the interview.	Do you have any additional questions for me about the process or research study?
Thank the participant for being part of the study.	I appreciate your time today and being part of the study. I will be in touch to complete the member checking process.

Member Checking Interviews

What I will do	What I will say
Introduce the follow up interview to the participant.	Good Morning/Afternoon. Thank you for agreeing to meet with me for the follow up interview. In this interview, I will give you the interpretation of your answers to my interview questions. I will ask that you provide me with confirmation and additional information I may have missed in the interpretation.

Ask the participant if they have any additional questions.	Do you have any additional questions before we begin the interview?
Turn on recording device.	I will now start the recording and the interview will begin.
State the date, time and place of the interview.	For the record, today is XXXX, the time is XXXX, and this interview is taking place at XXXX.
Specify the participant in the interview with a coded identification.	The participant in this interview will be known as Participant X.
Share a copy of the interpretations of the interview answers with the participants and ask for confirmation and additional information.	This section will include the interpretation of each of the interview questions answered once the interpretation has concluded.
Turn off recording device and end interview.	I will now turn off the recording device as we have concluded the interview.
Answer any additional questions the participant may have after the interview.	Do you have any additional questions for me?
Thank the participant for being part of the study.	I appreciate your time today and being part of the study. I will be in touch to schedule future follow up interviews as needed.