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Management Accounting Systems for Small Business's Competitive Advantage

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Walden University

College of Management and Technology

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Renato Alcazar

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Walden University
2020

Abstract

Management Accounting Systems for Small Business's Competitive Advantage

by

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MBA, Westwood College, 2012

BS, Laguna College, 1979

Doctoral Study Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Business Administration

Walden University

December 2020

Abstract

Small businesses providing ancillary services to the motion picture industry fail at alarming rates due to leadership's lack of strategies for service diversification and business expansion. Grounded in the contingency theory of management accounting, the purpose of this qualitative multiple case study was to explore management accounting systems (MAS) strategies leaders of ancillary service providers use for business diversification. The data collection included face-to-face semistructured interviews with 10 small business owners who successfully used MAS strategies for business diversification in California. The data analysis entailed using keyword frequency comparisons and coding techniques that facilitated the verification and triangulation of key themes. The emerging themes were procedures to monitor production and business operation, techniques to anticipate business growth and development using service diversity, up-to-date information technology system for diversity, and measures to understand risks and uncertainties in decision-making. Proper planning and application that addressed all 4 themes were essential to attain business success or improve business performance using MAS. The implications for positive social change include the potential to increased employment and reduced poverty in local communities by giving small business leaders a framework in decision-making to increase economic sustainability and growth.

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Dedication

I dedicate this humble achievement to the Almighty God for granting me life, energy, and good health to persevere in this life. I offer this accomplishment to my dear children – *Reggie*, *Gina*, and *Jaclyn*, and my grandson, *Gabriel*. I also dedicate this work to my parents, who nurtured my early education, discipline and determination. My dedication also goes to all my brothers and sisters and the rest of my family. You all served as the source of my motivation to strive and use my full potential to make a change in my life. Lastly, my dedication goes to you all who helped, pushed, and cheered me when I feel low, so I can keep my chin up and complete this humble work.

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Section 1: Foundation of the Study

Background of the Problem

Small businesses have an essential role in maintaining financial security, enhancing innovation, and supporting U.S. economic development and growth (Arasti, Zandi, & Bahmani, 2014; Decker, Haltiwanger, Jarmin, & Miranda, 2014; U.S. Small Business Administration, 2015). Many small business owners (SBOs) lack sustenance and success strategies to adequately maintain the business operations, leading to failure within the first 5 years (Astebro, Holger, Ramana, & Weber, 2014; Ibrahim, 2015; Shukla & Shukla, 2014). SBOs are confronted with the challenges of operational uncertainties, which can be magnified by poor financial management resulting in business failures (Karadag, 2015). In California, small businesses supporting the motion picture industry lost approximately 5,000 entities or 34% of growth from downsizing and bankruptcy between 2013 to 2014 (U.S. Census Bureau, 2017).

The lack of management accounting systems (MAS) among business leaders results in declining small enterprise dynamism leading to business failures (Decker, Haltiwanger, Jarmin, & Miranda, 2017; Shields & Shelleman, 2016). The absence of financial analytical strategies on the part of the SBOs are factors that affect business performance and success (Fraser, Bhaumik, & Wright, 2015). To achieve and maintain a competitive advantage, SBOs must understand diversification strategies that support survival and stimulate business growth (Lueg, Malinauskaite, & Marinova, 2014). An enhanced small business sector might favorably affect local economies and communities through increased tax revenues and new product and service offerings.

Problem Statement

Small businesses providing ancillary services to the motion picture industry are failing at alarming rates due to leadership's lack of strategies for service diversification and business expansion (Cucco, 2015). In California, small businesses supporting the motion picture industry lost approximately 5,000 entities or 34% of growth from downsizing and bankruptcy between 2013 and 2014 (U.S. Census Bureau, 2017). The lack of MAS among business leaders results in declining small enterprise dynamism leading to business failures (Decker et al., 2017; Shields & Shelleman, 2016). The general business problem is that the prospects for small businesses to provide ancillary services to the motion picture industry are declining. The specific business problem is that some leaders of ancillary service providers lack MAS strategies to use for business diversification.

Purpose Statement

The purpose of this qualitative multiple case study was to explore MAS strategies leaders of ancillary service providers use for business diversification. The targeted population for this study consisted of SBOs of motion picture ancillary service providers who successfully used MAS strategies for business diversification in California. The implication for positive social change may include job creation arising from business expansion. An enhanced small business sector can favorably affect local economies and communities through increased tax revenues, as well as new product and service offerings.

Nature of the Study

I used a qualitative research method for this study. Researchers use a qualitative method to explore, describe, and understand a phenomenon from an individual or group perspective (Zachariadis, Scott, & Barrett, 2013). Qualitative research was suitable for this study because I sought to explore, describe, and understand a phenomenon as experienced by the participants. Quantitative research requires statistical measurement, testing, and comparisons of research variables guided by hypotheses (Odar, Kavcic, & Jerman, 2015). I did not choose the quantitative method because testing a hypothesis and analyzing variables are not the objectives of my study. In mixed methods, the researcher combines quantitative and qualitative research techniques, methods, approaches, or concepts into a single study or set of related studies (Frels & Onwuegbuzie, 2013). Because I did not seek to examine relationships or differences among variables from a combination of participants' natural experiences and numerical analysis, the mixed method approach was not appropriate for this study.

I applied a qualitative case study design. Researchers explore a multifaceted social phenomenon and explore numerous data sources, ensuring a multifaceted view of the phenomenon in a case study design (Hoon, 2013; Yin, 2017). A case study design was suitable because my objective was to collect data from multiple sources to perform an in-depth exploration of the research question. Researchers use an ethnographic design to study the cultural tradition or collective belief of one or more select groups, through observation and immersion (Wolcott, 2010). An ethnographic design was not appropriate for this study because I did not observe or immerse myself in group cultures.

Phenomenological design researchers seek to explore the meanings of participants' lived experiences to understand one or more phenomena (Moustakas, 1994). Since I focused on in-depth case analysis of numerous data sources and types as opposed to the lived experiences of the participants, the phenomenological design was not appropriate for this study.

Research Question

What MAS strategies do leaders of ancillary service providers use for business diversification?

Interview Questions

1. What MAS strategies do you use to increase business diversification?
2. What contingent factors contributed towards formation of an effective MAS?
3. What MAS practices do you use to mitigate external environment challenges to business diversification?
4. What information technology control systems do you use for efficient management accounting?
5. How do you use MAS to manage information uncertainty?
6. How do you use MAS to foster interaction amongst decisions makers for business diversification?
7. How do you use MAS as a tool for decision-making for diversification?
8. How can business leaders use MAS to increase business growth?
9. What more can you add regarding this study?

Conceptual Framework

I used the contingency theory of management accounting (CTMA) as the conceptual framework for this study. CTMA is a structure for management to measure the different procedures of handling information uncertainty, encouraging coordination among groups of decision-making participants and for potentially using MAS (Nielsen, Mitchell, & Nørreklit, 2015). Otley (1980) developed CTMA to provide a plausible explanation for the different types of management accounting practices and tools business leaders may use in environments of operational and economic uncertainty.

The application of CTMA can include different types of uncertainties arising from situational factors such as (a) external environment; (b) strategies and mission; (c) technology; (d) firm interdependence; (e) business unit, firm, and industry variables; and (f) knowledge and observable factors (Granlund & Lukka, 2017; Otley, 2016). To attain optimal business success, leaders should consider the contingent elements involving the operational environments when using management accounting tools (Otley, 1980). Scholars and practitioners have used CTMA to identify significant issues for assisting business leaders in adopting appropriate management accounting practices (Feeney & Pierce, 2016). CTMA is a key concept for researchers to identify key business processes for effective firm performance and the strategic use and consumption of resources by the business owners (Hoque, Covaleski, & Gooneratne, 2013). Researchers can use CTMA to explore management accounting attributes to make economical strategic decisions (Campbell & Park, 2016).

Business scholars and practitioners use CTMA to determine the subjective operational practices to establish the basis of the independent characteristics of the structures for business leaders (Feeney & Pierce, 2016). Business leaders recognized key elements of small films' management strategy intended to help low-budget film ventures achieve profitability while confronted with uncertainties by predicting results using data from the production environment (Huang, Markovitch, & Strijnev, 2015). The performance framework for small businesses includes an in-depth assessment of strategies to match the contingent condition of the business organization while maintaining competitiveness and sustainability using MAS (Shields & Shelleman, 2016).

Operational Definitions

Budget: Budget control is an essential tool for financial and operational planning and control in which managers set financial and performance goals as standards, compare the actual results, and adjust performance, as needed by the organization (Bedford & Malmi, 2015).

Budget planning-forecasting: Budget planning and forecasting is the practice of outlining a business organization's long- and short-term financial goals and is comprised of budgets for (a) cash, (b) sales, (c) operations, (d) capital, (e) strategies, and (f) projected financial statements (Bedford & Malmi, 2015; Lakhani & Kleiner, 2014).

Business diversification: Business diversification is an organizational strategy to enter into a new business line, market, or industry in which the business entity is not currently engaged, while also creating a new product for that new market (Kim, Hoskisson, & Lee, 2015).

Competitive intelligence: Competitive intelligence is the collection, analyses, and distribution of financial information about products, services, customers, and competitors to assist owners, leaders, and managers in decision-making and strategic planning for competitive advantage in the marketplace (Bulley, Baku, & Alan, 2014).

Financial analytical review: Financial analysis review is the process of assessing financial related activities and results including economic, long-term business activity, and capital investment to identify value, performance, and sustainability (Williams & Ravenscroft, 2014).

Management accounting system: A MAS is an integral part of the management processes involving the use of financial and operational information for managers or business owners for decision-making, planning, and control (Zaleha, Ruhana Isa, & Khairuzzaman, 2014).

Management control system: A management control system is a recurring and formalized set of institutionalized protocols, procedures, or information-gathering mechanisms designed to assist business owners in making decisions or fulfilling their responsibilities (Shields & Shelleman, 2016).

Assumptions, Limitations, and Delimitations

Assumptions

Assumptions are known ideas concentrated on information deemed as plausibly true based on a researcher's representation of the study population, patterns, behaviors, research design, or other factual accounts (Cunliffe & Scaratti, 2017). The first assumption was that participants would articulate and share their understanding of

management accounting strategies through honest and truthful answers to the interview questions. I sought to meet this assumption by only including SBOs who had successfully used MAS strategies in decision-making in their organization. The second assumption was the implementation of MAS strategies continues to be an essential practice towards enhancement of service diversification and business expansion. I selected qualified participants with direct and thorough knowledge of MAS and sufficient business experience.

Limitations

Limitations are research boundaries usually beyond the control of the researcher that may affect the study design and results (Argouslidis, Baltas, & Mavrommatis, 2014; Marshall & Rossman, 2014). The first limitation involved a small size of research participants in which the outcome may not be applicable to a wider population. Although strictly a limiting factor, I conducted the study using only a lesser portion of the available organizations. Secondly, the study results were limited to the perspective of participants' potential unwillingness to share the full extent of business decisions, choices, and experiences. I used open-ended questions in an attempt to gather open details and information from the participants; however, natural limitations existed within the constraints of this process to ascertain details. Furthermore, the focus of this qualitative case study research was to form an understanding of events or phenomena rather than generalize the results. The case study design was the driver to the third limitation. This design may have led to different results that did not identify any substantial findings or conclusions.

Delimitations

Delimitations are confines or constraints applied by researchers to focus the scope of a study (Childers, 2014). The first delimitation was that the population of this study was limited to approximately 10 SBOs of ancillary service providers in the motion picture industry located in California. The next delimitation of this study was that the procedures to be applied during the interviews and review of archival documents excluded further information that I could have gathered from other qualitative or quantitative designs. Last, I used the application of CTMA as the sole conceptual framework to analyze the study findings.

Significance of the Study**Contribution to Business Practice**

SBOs may address the gap in business practice because of uncertainties by utilizing MAS for business diversification. Understanding and utilizing MAS strategies to develop plans and processes beneficial to attain competitive knowledge can assist SBOs with increasing success rates and operational stability (Brookschenhall, Heffner, & Henderson, 2014). Addressing the gaps in the existing literature concerning the management accounting skills required for SBOs to succeed in diversifying business operation is significant (Naia, Baptista, Januario, & Trigo, 2014). Findings from this doctoral study might assist SBOs in the development of innovative ability and proficiencies to achieve business diversification and improve overall firms' performance.

Business leaders need exposure regarding MAS as part of the management process involving the use of financial and operational information for decision-making,

planning, and control (Zaleha et al., 2014). SBOs need knowledge regarding MAS as a valuable resource in complex and strategic organizational decision-making processes (Nielsen et al., 2015). The findings in this study could assist management accounting practitioners in addressing the gap in business practice regarding operational improvement and diversification for mitigation of weaknesses and effective decision-making.

Implications for Social Change

The implications for positive social change include the potential to contribute to job creation arising from business expansion. An enhanced small business sector can increase tax revenues and new product lines and service offerings, which can favorably affect local economies and communities (Massa, Farneti, & Scappini, 2015). Positive social change can be reflective of a decline in unemployment rates resulting from improved financial health of small businesses using MAS (Healy, Serafeim, Srinivasan, & Yu, 2014; Kim, et al., 2015). Increased income from small businesses could generate additional tax revenue for development projects that benefit the welfare of local communities. Small businesses are essential for job creation, innovation, competitiveness, and economic growth in the United States (Shukla & Shukla, 2014).

A Review of the Professional and Academic Literature

In this doctoral study, I conducted a review of the professional and academic literature covering MAS strategies on business performance and diversification of small businesses. I defined organizational resilience broadly as the firm's ability to bounce back from environmental disturbances, uncertainties, or other contingent events.

Organizational resilience is a latent variable not easily predicted by SBOs (DesJardine, Bansal, & Yang, 2015). The purpose of this literature review was to provide an in-depth assessment and conduct a comprehensive analysis of the research themes that support my research question. The research objective is to explore MAS strategies used by SBOs for success in business diversification.

Researchers use relevant literature to highlight key themes related to a study's conceptual framework, problem statement, and the main research question (Booth, Papaioannou, & Sutton, 2016; Wolcott, 2014). The literature review section includes concepts and theories related to how MAS strategies affect the strategic management practices and business performance of small businesses. The literature review incorporates the subject field in support of defining future research questions. The resources that I crafted for this review include peer-reviewed research articles, case studies, government publications, and seminal sources.

For this study, I reviewed concerted resources on information dealing with small business and management from databases available at the Walden University Online Library. The following databases were used to collect peer-reviewed full-text articles for purposes of this study: ABI/INFORM Complete; Science-Direct; Business Source Complete; ProQuest; Emerald Management Journal; local and federal government databases, including the SBA and U.S. Census Bureau; Google Scholar; and SAGE Premier. I organized this literature review into the following main subject categories pertaining to small businesses supporting the motion picture industry in California: *contingency theory in management accounting, management accounting systems, small*

business, budgetary control, financial analysis, small business success strategies, strategic decision-making, and business diversification. Out of 300 sources used in the study overall, 285 (95%) are from government and peer-reviewed sources, and 86% are articles published between 2014 and 2018. The literature review contained 131 references; 92% were scholarly peer-reviewed articles, 2% were government websites, and 6% was compiled from seminal resources.

Contingency Theory in Management Accounting

Otley (1980) developed CTMA practices and expounded that there is no single general standard accounting practice that applies to all organizations. Burns and Stalker (1961) explained that management accounting practices differ from one organization to another, due to differences in organizations' environments, sizes, and sectors. The views of business climate vary across business leaders, depending on their firms' sectors, and stages of progress and development (Motoyama & Hui, 2015). The main concern of business leaders is engaging in a profitable, sustainable, and competitive business (Rule & Tskhay, 2014; Waldman & Bowen, 2016). In principle, the leadership of an organization will implement the organization's management accounting practices.

CTMA identifies influential factors that can assist SBOs in adopting appropriate management accounting practices for their organizations (Otley, 1980). Hoque et al. (2013) emphasized that CTMA is the theory used by researchers to understand the nature of effective firm performance and how business owners should strategize the use and consumption of resources. Further, CTMA enables business owners to establish coordination among decision participants in making use of MAS strategies for decision-

making (Nielsen et al., 2015). SBOs can rely on CTMA when developing business strategy.

The structure of CTMA encompasses the tools to address business uncertainties. McLaren, Appleyard, and Mitchell (2016) postulated that to fully comprehend the process of management accounting within the framework of CTMA, business owners should not ignore the technical characteristics of change and uncertainty. As Lapsley and Rekers (2017) posited, developing strategy is a complex practice, as well as an inherently social process involving uncertainties. Different development phases and uncertainties generate distinctive elements of management accounting practice, which frequently do not satisfy expectations due to socioeconomic factors (Van Helden & Uddin, 2016). SBOs face the challenges of operational uncertainties predicated by difficulties arising from poor financial management which contributed to failures in SMEs (Karadag, 2015). SBOs' risk management function plays a critical role in monitoring and managing risks and uncertainties stemming from internal and external forces, which if not addressed properly and in a timely manner could affect the firm's profitability, success, or survival (Brustbauer, 2016; Burritt, Herzig, Schaltegger, & Vierre, 2019). Inability to fully understand CTMA to address uncertainties can lead to business failure.

The application of CTMA can include different types of uncertainties arising from situational factors, such as (a) external environment; (b) strategies and mission; (c) technology; (d) firm interdependence; (e) business unit, firm, and industry variables; and (f) knowledge and observable factors (Granlund & Lukka, 2017; Otley, 2016). To attain optimal business success, leaders should consider the contingent elements involving the

operational environments when using management accounting tools (Otley, 1980). However, as Granlund and Lukka (2016) contended the concepts and instruments of MAS in addressing uncertainty are taken for granted thereby not maximizing the efficiency and effectiveness of available financial tools. Otley (2016) added the systematic methodology that can develop into a predictive instrument for the design of appropriate control systems in addressing uncertainty is at times imprudent and ineffective. Management control practices are frequently changing and emerging; thus, there is a need for research to support and address these uncertainties systematically over time (Otley, 2016). To apply CTMA in business operation, SBOs must recognize the different levels of uncertainties. Venturing into the business environment, where many uncertainties exist, can be a challenging task for entrepreneurs (Camenzuli & McKague, 2015; Wang & Huang, 2015).

Uncertainty from external environment. Businesses are fully exposed to the uncertain elements outside the establishments. CTMA is an important concept that can be helpful for researchers in identifying the nature of effective firm performance and how business owners develop the strategy for the use and consumption of resources (Hoque et al., 2013). Fakoya (2014), for example, used CTMA in a case study involving the effectiveness of forced internalization of brewery wastewater treatment cost by district in South Africa. In the study, a contingent condition required brewery managers to focus on the development of waste reduction strategies (a) to address uncertainties, (b) improve production efficiency, and (c) limit the amount of wastewater and chemical oxygen demand emissions discharged to the district waste treatment plant (Fakoya, 2014). The

measures adopted by the organization resulted to improvements in environmental, social, and economic performance (Fakoya, 2014). Business owners venturing products and services must be fully aware of external uncertainties.

Baker, Bloom, and Davis (2016) explained that external economic policy uncertainty, if not appropriately addressed, can be associated with higher stock price instability and reductions in investment and employment in policy-complex sectors. Venturing into the business environment, where many uncertainties exist, can be a difficult task for entrepreneurs (Camenzuli & McKague, 2015; Wang & Huang, 2015). McLaren et al. (2016) postulated that to understand the process of CTMA, business owners should not ignore the technical characteristics of change and external uncertainties but must unilaterally include in the analytical processes. Asymmetrical structure of how enterprise experiencing uncertainties continue to venture and alleviate societal demands can lead to key economic opportunities (Hazudin, Kader, Tarmuji, Ishak, & Ali, 2015).

Business leaders have the major obligation to operate a profitable, sustainable and competitive business (Mengel & Wouters, 2015; Rule & Tskhay, 2014; Waldman & Bowen, 2016) added that business owners must commit the appropriate capital, flexibility and human resources necessary to achieve this goal. Nielsen et al. (2015) suggested that using CTMA as a framework can assist business owners in identifying structures to measure the different procedures of handling information uncertainty. CTMA can be used by SBOs to establish coordination among the group of decision participants and apply MAS strategies for decision-making (Nielsen et al., 2015). Lapsley and Rekers (2017)

further added that establishing a strategy using MAS is a complex practice which involves social process uncertainties. For example, Lapsley and Rekers (2017) described how theatre producers convey strategy to uncertain markets by validating intermediary organizations that contribute and communicate the value of new products lines to support the strategic process. Lin, Hsu, Hsu, and Chung (2020) and Mick and Shay (2016) also added that external and internal costs arising from uncertainty are circumstantial factors that can impact business strategy.

Uncertainty from strategies and mission. The research conducted by Nielsen et al. (2015) is concerned about the role of management accounting in constructing important decisions in the organization. Nielsen et al. (2015) studied the outsourcing inference in two significant manufacturing companies by exploring the application of management accounting information in an intricate and strategically important decision-making situation. Nielsen et al. (2015) selected experienced participants as decision-makers with hypothetically incompatible preferences, controlled information provision experiences, and uncertainties in dealing with the financial results of different decision preferences. The case studies performed by Nielsen et al. (2015) revealed the two different procedural methodologies to decision-making, investigative and actor-based methods. The investigative method demonstrates how a composite system of advanced management accounting procedures can be organized leading to calculative rational decision-making. The actor-based method encompassed the existing tool to organize accounting portrayed by a combination of managers and employees dynamically engaged in decision-making. These methodological approaches integrate substantively different

behaviors of managing information ambiguity, fostering collaboration among the combination of decision participants, and utilizing the tools of management accounting. Ahmad and Al-Shbiel (2019) and Nielsen et al. (2015) learned that management accounting information and procedures perform a valuable role in complex and strategic decision-making in the organization.

Bolisani and Bratianu (2017) claimed that formation of knowledge strategy is affected by uncertainty and environmental turbulence. Almandoz, Lee, and Marquis (2017) supported this finding by discovering the shift in the strategic orientations of their participant arising from attempts to align uncertainties and fluctuating resource environments with the goals of the organization. As the initial idea and goal of organizations remained similar, the entity ended up with different strategic orientations and senior leadership team (Almandoz et al., 2017). Owens, De Weck, Stromgren, Goodliff, and Cirillo (2017) concluded in their study of environmental uncertainty a compromise between changing a design to diminish failure rates and operating a fixed design to reduce uncertainty. Bolisani and Bratianu (2017) proposed an integrated method that incorporates planning as a continuous effort to acclimate to the needs and development of opportunities that can alleviate uncertainties. Lomas, Asaria, Bojke, Richardson, and Walker (2016) contended to consider the impact of the inclusion of different cost categories in making decisions surrounding uncertainty in the organization. When performing an economic evaluation, business leaders must establish which cost categories need to prioritize in projecting estimates of cost-effectiveness and the impact to decision uncertainty (Lomas et al., 2016).

Ahmet Erkoyuncu, Roy, Shehab, and Kutsch (2014) performed an identical study to identify a framework to address the effect of uncertainty on cost estimates. The proposed innovative framework involving the defense sector identified project planning, uncertainty visualization, and capability management for consideration by the leadership of the defense sector (Ahmet Erkoyuncu et al., 2014). In a separate study, Gadde and Wynstra (2018) examined the role of uncertainty in procurement and supply management and the variations of this function over time. Current business leaders are engaged in the measures of addressing the consequences of uncertainty which impacted the buyer-supplier relationships, including the perceptions and the utilization of power, control, and dependence (Gadde & Wynstra, 2018). Gadde and Wynstra (2018) concluded that leaders could not elude uncertainty in business operation. Strategies and missions will diminish certain kinds of uncertainty, but further modification can increase other forms of uncertainty.

Uncertainty from technology. Technology decisions are fundamentally valuable to firms focused on innovation and diversification. A business entity can only endure competitive challenges through innovation and improvement of internal system (Bello & Ivanov, 2014). The developments and continued augmentations in information technology system have assisted business leaders in the use of data to run business reports and processes for decision-making (Appio, De Luca, Morgan, & Martini, 2019; Jasim & Raewf, 2020; Relich & Pawlewski, 2018). Kauffman, Liu, and Ma (2015) described how significant uncertainties related to decision-making on investment activity for information technology (IT) which is a problem that leaders have been apprehensive

about for a long time. Uncertainties from technology can impact a firm's operational and transactional performance, application of standards and competition, and future market environments. Lingens, Winterhalter, Krieg, and Gassmann (2016) stated that managers encounter the challenge of choosing the right specific technology decision when executing decisions. Morris, Webster, and Reilly (2016) validated similar challenges experienced by leaders when they conducted a study on the investment decisions under uncertainty of future technology costs for investments on electricity generation. Morris et al. (2016) suggested developing a framework in which current investment in a technology depending on uncertain conditions will result in lower costs of the technology in the future. Properly planned and timely decisions addressing uncertainty in technology using CTMA can lead to business success.

There are different methods of handling information uncertainty such as promoting collaboration among the decision-makers and considering the use of management accounting. Kauffman, Liu, and Ma (2015) proposed a valuation modeling method for IT investments under uncertainty that includes procedure to capture cost and benefit flow variations in several years. Mehta, Hall, and Byrd, (2014) claimed that project uncertainty complicates the knowledge-sharing processes notwithstanding the applied technology. However, the frequency of technology use routinely increases knowledge exchange amongst IT teams (Mehta et al., 2014; Alaeddin, Shawtari, Salem, & Altounjy, 2019). A fundamental challenge of technology and innovation is for firms to decide in an uncertain environment which future technologies to develop in-house versus procuring outside services (Fixson et al., 2017). Fixson et al. (2017) claimed that

technological uncertainty performs as an essential stimulus for corporate entities to evaluate and manage their boundaries. For example, Metcalfe et al. (2017) claimed that the advancement in technology should be considered globally where uncertainty over the activities of marine and terrestrial resource can incline users to management judgements that can potentially compromise indigenous livelihoods, conservation, and resource sustainability goals. Fan, Peng, and Xu (2017) concluded the energy-efficiency paths or technologies provided more cost advantages for Hybrid Electric Vehicle (HEV) than energy-substitution following their study of integrated uncertainties involving HEV technology. Addressing uncertainties arising from changes in technology can be achieved in-house or from outside resources. The development in information technology system had assisted business leaders in the use of data to access financial reports and applicable business information using MAS for decision-making (Alaeddin et al., 2019; Fuzi, Habidin, Janudin, Ong, & Bahador, 2019).

Uncertainty from firm interdependence. Following the perceptions of integration and differentiation from contingency theory, Vieregger, Larson, and Anderson (2017) evaluated the capital resource distribution decisions of the multi interdependent business firm. Vieregger et al. (2017) focused on uncertainties arising from the capital reallocation from year to year within the multi-business organization and the relative influence of business unit leaders. Vieregger et al. (2017) suggested that uncertainties on capital restructuring are associated with influence from business unit interdependence which the research and development (R&D) should closely monitor. Supply chain agility encompass uncertainty but has an essential element and necessity for firms to strive and

achieve competitive advantage (Doktoralina & Apollo, 2019; Wu, Tseng, Chiu, & Lim, 2017). Lin et al. (2020) and Wu et al. (2017) substantiated that flexibility in the integration procedures has the highest impact surrounding firm interdependency in developing the competitive advantage of innovation and chain agility under uncertainty.

Xia, Ma, Lu, and Liu (2014) argued the alternative of diversification to address uncertainties by the emerging market is less considered component of firm interdependence. Doktoralina and Apollo (2019) and Huang et al. (2014) further noted that supply chain integration had a significant positive outcome on the suppliers' performance where a business affiliation can moderately weaken by demand uncertainty. Although time delays impede learning from experience surrounding market uncertainties, competitors' experiences of prior interactions shape patterns of rivalry and increase profit-making opportunities over time (Luoma et al., 2017; Nicolò, 2020). Hsu and Wang (2017) collaborated this idea following their findings on the interdependence between competitive firms leading to the survival of the industries of newspapers and high technology. Drawing on resource dependency theory, Chu, Wang, Lai, and Collins (2017) found that traditional firm interdependency is a more effective strategy in highly uncertain environments but less significant when extensive relationships involving assets are involved. Leaders of successful business organizations recognize the strategy involved in building and maintaining relationships (Lin et al., 2020; Xesha, Iwu, & Slabbert, 2014). Xesha et al. (2014) clarified the importance for business owners to approach strategizing efforts based on established relationships with stakeholders.

Uncertainty from business unit, firm, and industry variables. Business leaders must identify which cost categories require consideration in generating estimates of cost-effectiveness and decision uncertainty when performing an economic evaluation of an entity (Lomas et al., 2016). Both Alaeddin et al. (2019) and Rowe, Besson, and Hemon (2017) echoed the risk encountered by companies when the environment becomes uncertain or when organizations engage in an organizational transformation. Identification and understanding of specific contingencies involving firm size and industry can provide additional perspective in addressing environmental uncertainties (Rowe et al., 2017; Chaudhry & Amir, 2020). In essence, Rowe et al. (2017) advocated for the concept the stronger the capability to identify weak signs by reconfiguring strategic resources, the lower the impact of risk from environmental uncertainties. Eshima and Anderson (2017) validated the idea that a weaker ability to address risk in policy uncertainty can lead to higher stock price volatility and a reduction in investment and employment in policy-sensitive industries. Swink and Schoenherr (2015) suggested utilizing appropriate reported financial data by determining specific cost benefits and by analyzing the impact of process span as an important contingency approach. Furthermore, Vieregger et al. (2017), depicting from the concepts of integration and differentiation from contingency theory, suggested that uncertainties on business unit influence are moderated by R&D strength and unrelated diversity. Abdi and Aulakh (2017) suggested that cross-border partnerships and governance mechanisms can be both alternatives and supplements to contingencies resulting from behavioral and environmental uncertainties.

Doktoralina and Apollo (2019) and Moghaddam (2015) explained that with the pressure of global competition, firms strive to accomplish excellence in bringing significantly high-quality with low-cost products and services through enhancement and improvement of the supply chain system to achieve competitive advantages. Moghaddam (2015) established an indistinct multi-objective mathematical model to determine and organize the participating providers and discover the maximum amount of new and refurbished parts and final products in a reverse logistics system of configuration. The model created by Moghaddam (2015) captured the fundamental ambiguity in customers' demand, suppliers' capacity, and the ratio of returned products including the presence of contradicting goals in reverse logistics systems. Moghaddam (2015) defined the independent roles in the study summing up profit, defective parts, late deliveries, and economic risk factors related to the participating providers wherein the uncertainties are identified in a uncertain environment. Gousal and Ye (2015) added the results of their review on the effect of uncertainty on employment structure following the survey of professional forecasters, and regression-based forecasting involving the GDP growth, inflationary results, S&P500 stock price index performance, and the fluctuation in fuel prices. The results indicated that higher uncertainty posed a negative impact on employment, and the effects are relatively felt by the smaller businesses.

Uncertainty from knowledge and observable factors. Knowledge and competency to deal with uncertainty are necessary for the identification of financial strategies for small business that can impact the result of any business operation. To fully comprehend the process of management accounting within the framework of CTMA, the

technical characteristics of change and uncertainty should not be ignored; they must be considered in the analysis (McLaren et al., 2016). Business operations are more multifaceted and competitive because of environmental uncertainty which make business success difficult to achieve contributing to increase failure in SMEs (Alaeddin et al., 2019; Gwadabe & Amirah, 2017). Pérez-Luño, Saporito, and Gopalakrishnan (2016) suggested that the skill to form implicit understanding is essential to the competitive advantage of any organization but is also critical to the survival and growth of SMEs. Gwadabe and Amirah (2017) recommended that SBOs need to address uncertainties by developing strategies to survive in the deteriorating economy. Business owners have the main responsibility to interact with the external environmental competition which requires knowledge and competency in large proportions (Gwadabe & Amirah, 2017; Chaudhry & Amir, 2020). De Villiers et al. (2015) posited that if uncertainties in the study process are inaccurately accounted for, the combination of knowledge observatory factors processes may result in under or overconfident outcomes and in some cases incorrect results.

Rizzo and Blackburn (2016) discussed the pertinent qualifications for entrepreneur has become more complex requiring significant expertise in making decisions. Reliance on new technologies have never been employed to support design evaluation and business analytics (Rizzo & Blackburn, 2016). Despite literature published about the importance of knowledge and other factors to address uncertainty, Lavia López and Hiebl (2014) showed the practice of using management accounting is not only lesser but also different in SMEs compared to larger entities. Following the

comparison of SMEs, factors such as environment, organization, and staff significantly influence the use of management accounting and the benefits to the firms' performance (Lavia López and Hiebl, 2014; Wei & Yao, 2020). Furthermore, Hohenthal, Johanson, and Johanson (2014) and Nicolò (2020) concluded that experiential network knowledge and knowledge on the important factors about customers and competitors could impact the value of business relationships in uncertain foreign markets. Ahi, Baronchelli, Kuivalainen, and Piantoni (2017) supported this notion that SMEs adopting a more rationalized decision-making process are more likely to succeed in foreign markets. The reason behind major film companies' success in decades, despite the extreme complication in product valuation that is distinct of the film industry, is defined in the management decision approach employed by the film executives to deal with uncertainty (Teti, 2013).

Resource-Based View Theory

Similar to the foundation of CTMA, Hitt et al. (2016) suggested that promoting the use of (resource-based view) RBV can add productivity in operations management research and can potentially yield various positive influences for this field and adjacent areas. RBV theory, which is also known as the Penrosian Theory, closely coincides with the conceptual framework of my study (Penrose, 1959). Penrose (1959) built the foundation and application of RBV, which many researchers and scholars used to assess valuable resources to understand how firms establish advantages over industry rivals with strategies. The RBV model of an organization is one of the important concepts for

researchers to identify the nature of greater firm performance and the strategic use and consumption of resources by the business owners.

López-Cabarcos, Göttling-Oliveira-Monteiro, and Vázquez-Rodríguez (2015) highlighted that the RBV comprises the elements on how leaders can sustain their business operation for a longer term using their resources and capabilities. Resources considered are anything internal, either tangible or intangible that can strengthen or weaken the performance of the business organization (Barney, 1991; Fong, Lo, & Ramayah, 2014). According to Barney, internal resources, which are key elements of a firm's success and growth, may be physical, human, or organizational, and include brand equity, unique technologies, governmental relationships, trademarks, materials, processes, information, patents, controlled assets, and capabilities that improve the firm's efficiency. Researchers who adopt the RBV in their study consider the firm as an amalgamation of distinctive capabilities and competencies that can influence options on strategic growth and evolution (Barney, 1991). Using the RBV, SBOs can expect to yield superior returns and attain a sustainable competitive advantage by instituting inimitable, rare, valuable, and irreplaceable resources to enhance business performance. Gituku and Kagiri (2015) asserted that business leaders must employ the firm's internal resources to defuse threats from rivals or exploit new opportunities to attain a competitive advantage.

Contrary to CTMA however, RBV does not address different organizational uncertainties but focuses on the effective and efficient internal use of resources by a firm to maximize profit (Hitt et al., 2016). Having this difference in mind, Lämsiluoto et al. (2015) utilized both CTMA and RBV theories to define the relationship between post-

business transfer success and the development of a management control system in the small business. The concept of RBV theory is focus on the firm performance and the strategic use and consumption of resources which is not the only interest for this study.

Decision-Making Theory

Another close alternative theory for this study is the decision-making theory (DMT). Established by Hansson in 2005, DMT is another conceptual framework that is closely related to CTMA. DMT provides concepts on the normative theory outlining how decisions should be made and the descriptive approach to decision-making which focuses on how decisions are executed (Haidar, 2016; Hansson, 2005). Researchers have used the DMT to frame their strategies and actions to meet the goals of the organization (Renfree, Martin, & Micklewright, 2014). DMT includes the careful formulation of a problem, the selection of relevant information that can assist in the application and evaluation of appropriate decision-making tools, and the selection of useful decision-making techniques (Haidar, 2016). However, similar to RBV, DMT does not address the different organizational uncertainties. Decision-makers will create a level of preparedness to respond to any external threats and opportunities that may have the potential to impact the normal flow of business activities in a timely fashion (Nemkova, Souchon, Hughes, & Micevski, 2015). The concept of DMT as used by decision-makers focused on the understanding of the choices supporting the structures for making evidence-based financial decisions, which can impact business activities and facilitate sustained operations.

Granlund and Lukka, (2016) argued that the concepts and measurement instruments of uncertainty had tendency to constantly replicate in a similar fashion and less considerable manner involving validity. Van Helden and Uddin (2016) find that diverse development phases and uncertainties develop to distinctive types of management accounting practices often do not match expectations due to socioeconomic factors. Otley (2016) concurred that a systematic methodology that will progress into a predictive instrument for the design of appropriate control systems is at times imprudent and ineffective. The presence of management control practices frequently changed and emerged requiring research that can support and address these uncertainties over time (Otley, 2016).

Management Accounting Systems

Management accounting system is a valuable resource to business decision-making processes (Pedroso & Gomes, 2020; Zafar et al., 2017). The attributes of sustained business operation and competitive advantage of firms involves not only having sufficient valuable resources for performing strategies but also how effective and efficient uncertainties are addressed (Hutahayan, 2020). Shields and Shelleman (2016) provided that a management accounting system (MAS) refers to the methodical use of management accounting to accomplish organizational goals. Formation of effective and high-quality decisions originating from the use of MAS is possible to generate high quality results (Leitner, 2014; Pedroso & Gomes, 2020). A business entity can only endure competitive challenges through innovation and improvement of the internal system (Bello & Ivanov, 2014; Hutahayan, 2020). SBOs have encountered the challenges

of operational uncertainties resulting from poor financial management that eventually contributed to failures in SMEs (Karadag, 2015). Patten and Patten (2014) provided a straight-forward recommendation which is not to overly complicate and not to oversimplify when addressing business issues and conditions.

Chenhall and Moers (2015) studied the challenges of directing a business operation in an uncertain environment by embracing innovation. Chenhall and Moers and Wei and Yao (2020) exhibited how accounting practitioners and professionals developed the design of the management accounting system (MAS) in response to the need of the organizations. Motoyama and Hui (2015) demonstrated how opinions of business climate vary through business owners, dependent on their firms' industries and stages of organizational development. Schneider, Jun, Janvrin, Ajayi, and Raschke (2015) advised that accounting scholars and practitioners need to ascertain how can data analytics assist the accounting practice such as MAS application at work. For example, the reason why major film studios have been successful over the last decades, despite the extreme product valuation conditions that is common in the film industry, is manifested by the management decision approach in dealing with uncertainty by the film executives (Teti, 2013).

Ng, Harrison, and Akroyd (2013) established a structure for the systematic assessment of management accounting applications in small businesses employing a revenue management perception. Shields and Shelleman (2016) justified that repeated use of the MAS to evaluate product or service profitability and to measure customer profitability has a major positive impact on return on investment. By implementing the

attributes of MAS and addressing the divergence and fixity of uncertainties, SBOs can potentially attain sustainable competitive advantage (Wei & Yao, 2020). Bruwer and Yolande (2015) and Wei and Yao (2020) advocated that a business organization is more likely to attain sustainability if accounting information system generates relevant, reliable, and up-to-date financial and non-financial information to management for decision-making. The fundamental factor to an effective use of a MAS is to keep accounting information system current and accurate pertaining to the financial information, market trend, people or competitors (Ahmad & Al-Shbiel (2019); Bruwer & Yolande, 2015). Furthermore, the accuracy and reliability of the information defines the quality of the financial data and the information needs to be high quality to make crucial management decisions (Ceran, Gungor, & Konya, 2016; Leitner, 2014).

Management Accounting System Strategies

If SBOs understand how to apply MAS strategies to their business, operating results are more likely to be successful in any environment, even during periods of uncertainty (Bellavitis, Filatotchev, Kamuriwo, & Vanacker, 2017; Vahlne, Hamberg, & Schweizer, 2017). Using financial measurements as part of MAS strategies, the busy SBOs can gain valuable information on the performance of the business. As part of the MAS, there are different metrics available in many kinds of literature to describe and measure the financial performance of organizations. Some analysts used different methods to analyze and evaluate financial statements. The MAS strategies on financial analysis serve as indicators of the different aspects of the business and present a reliable overall picture of business operation (Armitage, Webb, & Glynn, 2016; Cescon,

Costantini, & Grassetti, 2019; Wei & Yao, 2020). The most common tools include (a) ratio analysis, (b) comparative analysis of financial statement, (c) trend analysis, (d) common size analysis, and (e) cash flow statement analysis (Collier, 2015). Some of the valuable economic decisions are developed from the findings on the analysis of financial reports consistent with recognized Financial Accounting Standards and practices (Williams & Ravenscroft, 2014). Bamiatzi and Kirchmaier (2014), for example, suggested using sales and profit growth analysis to determine the strategies needed for high growth small businesses that can be successful despite the overall decline in the business industry. Other literature also postulates that sales, profit, and growth analyses are common measurement of performance applicable to small businesses (Karadag, 2015; Mazzarol, 2014; Patten & Patten, 2014).

Financial ratios are commonly used financial metrics by practitioners that are powerful tools for decision-making used when evaluating the performance of the business (Delen, Kuzey, & Uyar, 2013). Delen et al. (2013) further discussed that financial ratios allow the decision-maker to analyze business performance by comparing results using ratios across industries or within the firm. Collier (2015) described that ratio analysis is a mathematical relationship expressed in numbers that is used as an indicator for accessing the performance of a business. Similarly, Delen et al. (2013) emphasized the forms of financial ratios as liquidity, profitability, long-term solvency, and asset utilization or turnover ratios. The fundamental key underlying financial ratio analysis is using ratios developed from accounting data (financial statements) to make comparisons and decisions for organizations of any size (Alo et al., 2016).

The liquidity ratio, known as the short-term ratio, is a tool to determine the liquidity or the ability of the firm to meet current obligations, expressed by using the link between current assets and current liability. The activity ratio, also known as the turnover ratio, is a financial analysis tool used to measure a business' ability to convert assets into cash. Activity ratio is a metric tool for business owners to determine the performance of the business by using analytical ratios such as (a) creditors turnover ratio, (b) debtor turnover ratio, (c) stock turnover ratio, and (d) working capital turnover ratio. Solvency ratio, also known as leverage ratio allows analysts to quantify the ability of the business entity to meet debts and other obligations which can affect the long-term commitments of the business.

Small businesses need constant access to working capital to meet daily obligations and finances of on-going projects (Bellavitis et al., 2017). To determine whether a business entity has sufficient cash flow to meet short-term and long-term liabilities, the solvency ratio can be utilized. Some of the financial metrics used in interpreting solvency of the business entity are the debt-equity ratio, interest coverage ratio, and proprietary ratio. Profitability ratio can be used by business owners to assess the business' ability to generate earnings after expenses and other relevant costs incurred in a given period. Furthermore, gross profit ratio, net profit ratio, operating profit ratio, and return to investment ratio are the most common profitability financial metrics used by business entities to assess operation.

Some scholars have continued to question whether or not the development of financial decision-making frameworks as a MAS tool can effectively contribute and

support growth and attain competitive advantage. Aruldoss, Travis, and Venkatesan (2015) commented that some methods are restrictive procedures in predicting the bankruptcy or downsizing, and do not address the related activities like collecting the suitable data and providing the results to the appropriate user after processing and completing the procedures. Aruldoss et al. (2015) added the condition demands a study for comprehensive clarification for predicting bankruptcy or downsizing with intelligence such as using a MAS. Kroes and Manikas (2014) agreed with other scholars and expressed the importance of the abilities of firms to manage their cash flow by developing policies to manage working capital involving cash, receivables, inventory, accounts payable, and cash payments to improve financial performance. The core of improving financial performance, therefore, contributed to the monitoring functions and strategies adopted by the firm (Cescon et al., 2019; Post & Byron, 2015). Despite the opinions that support the link between cash flow to financial performance, the curiosity of Kroes and Manikas (2014) sparked the continued debate about the significant relationship between the strategies of cash flow management and financial performance. Chenhall and Moers (2015) described how management accounting has emerged from a traditional to cybernetic technique as a financial tool which developed into a more systematized process when dealing with innovation or uncertainties. Aren and Sibindi (2014) justified that proper handling and management of cash flow is an extremely important contributor to the stability and survival of the business. Poor cash flow management could lead to serious financial deficiency or failures of small business in any industry (Aren & Sibindi, 2014).

Business analytics. As part of the MAS tools, business analytics is an emerging trend used by business leaders to interpret data and support decision-making. Brands and Holzblatt (2015) and Nalchigar and Yu (2020) acknowledged how the development and implementation of business analytics assist the organization in performing strategic cost management to accomplish long-term goals and objectives. Brands and Holzblatt added that leaders utilized business analytics for planning and decision-making involving cost activity and operational control for performance measurement. Business analytics is one of the management tools that can assist managers in establishing a well-informed/evidence-based business decision (Delen, Moscato, & Toma, 2018). Kasemsap (2017) described how business analytics could be utilized as a tool to validate underlying relationships within the data input, process, output, and the underlying categorical results toward business success. Business analytics is a powerful tool that can open opportunities if customized to meet corporate goals (Brands & Holzblatt, 2015; Duan, Cao, & Edwards, 2020).

Wang (2014) described business analytics which involves (a) aptitudes, (b) innovations, (c) skills, and (d) practices for consistent review and examination of past business performance to establish an understanding and initiate business planning activity. Business analytics encompass issues about leveraging value from data other than data management, number crunching, technology consumption, and systematic reasoning (Acito & Khatri, 2014). Acito and Khatri emphasized that extracting value from data requires the alignment of strategy and desirable behaviors to business performance management in conjunction with tasks and proficiencies. Seddon, Constantinidis, Tamm,

and Dod (2017) acknowledged the idea and identified the factors using analytical modeling that expound how business analytics compliments business value in their study. Ramanathan, Philpott, Duan, and Cao (2017) and Duan, Cao, and Edwards (2020) supported the discourse about the relationship between the implementation of business analytics and business performance which also encompasses actions involving environmental sustainability. Calof, Richards, and Smith (2015) continued to validate how business analytics together with foresight and competitive intelligence contributed to systematic designed and more successful industrial policy.

While Wang and Byrd (2017) supported the notion that business analytics indirectly influence decision-making effectiveness, Cao, Duan, and Li (2015) claimed minimal research exists to formulate such a conclusion. Sharma, Mithas, and Kankanhalli (2014) argued that there is less evidence the business analytics contribute value to an organization. The role of decision-making processes which include resource allocation and orchestration processes require extensive review to understand how business analytics can contribute in value creation (Appelbaum, Kogan, Vasarhelyi, & Yan, 2017; Sharma et al., 2014). Delen et al. (2018) acknowledged there are studies in which business leaders often established decisions following gut feelings and intuitions disregarding part or all of the available data in the organization. While some literature discloses the impact of business analytics on management accounting (Nielsen, 2015), limited research provided discourse using business analytics for assessing a company's performance in an enterprise system environment (Nielsen, Nielsen, Jacobsen, & Pedersen, 2014).

As a continuing trend, the use of business analytics applications continued to penetrate across the various industries in which leaders and employees are trained and upskilled to meet the challenge of understanding, developing and implementing the analytics methodologies (Gupta, Zhu, Paradice, & Sankar, 2017). Bichler, Heinzl, and van der Aalst (2017) emphasized that business analytics will continue to assist business owners in understanding the environment and assimilating to the need of the organization in dealing with the design of new systems. Business leaders need to establish a strong data and analytical strategy, implement a data-driven cultural transformation, and consider information integrity when performing data analysis for competitive advantage (Nalchigar & Yu, 2020; Vidgen, Shaw, & Grant, 2017). Understanding the role of business analytics in small business can significantly enhance the organizational performance and achieve objectives in the business environments (Kasemsap, 2017). Block, Fisch, and van Praag (2017) found that SBOs possessing more business experience can effortlessly identify and exploit more innovative opportunities. The level of creativity, knowledge, flexibility, and skills of the SBO is an asset for achieving competitive advantage through innovation (Prajogo, Oke, & Olhager, 2016).

Budgets and budgetary controls. Managers used budget control systems to set goals for strategy implementation and to communicate and continue to focus on new strategic opportunities. SBOs who provide ancillary services in the film industry employed many elements of MAS including budgets (Teti, 2013). Elements of MAS are used to facilitate decision-making which may include (a) computation of product/service profitability, (b) taking action on comparisons of actual to budgeted performance, and (c)

assessment of customer profitability (Huang et al., 2015; Teti, 2013). Budget control is the process of comparing budgeted plans and standards to actual financial results, analyzing variances, and taking a corrective action (Bedford, 2015). The U.S. Small Business Administration (2015) attributes many business failures to poor business planning and control. Business leaders use budgets as a primary tool for planning and control (Pietrzak, 2014; Veledar, Gadžo, & Lalić, 2020). For example, Huang et al. (2015) explored the anticipated cost and revenue inputs and the comparison of the operating results of low-budget and big-budget film producers. Both big and low budget films generate profit, after key components of revenue and cost are evaluated in the management review procedure (Huang et al., 2015).

Business practitioners have verified that there is a positive connection between budget and organizational performance (Veledar et al., 2020). The potential results arising from budget control as a MAS tool can provide knowledge into the relative importance of management accounting information for SBOs (Shields & Shelleman, 2016). To justify the use of budget control as a tool of MAS, Ghiassi et al. (2016) presented an alternative modeling strategy by considering production budgets, pre-release advertising expenditures, production runtime, and reasonability to the predictive variables. Burritt et al. (2019) emphasized the importance of incremental procedures when working towards complex sustainability and the value of fostering cleaner production practices through multitude of MAS tools. The management decision approach that the film executives employed to deal with uncertainty are a common characteristic of successful companies in the film industry (Teti, 2013). Roach (2016) and

Veledar et al. (2020) postulated that developed and developing countries are pursuing means where they can decrease public expenditure and indebtedness while simultaneously trying to increase productivity and efficiency by using budgetary cost control initiatives. The private sector procedures of outsourcing and contracting resulted in more sparingly realistic strategies considering the global recessions and other budgetary constraints experienced by the public sectors (Roach, 2016).

Budgeting and financial planning are necessary elements when instituting the monetary goals and objectives of the organization (Albuquerque, Filho, Nagano, & Philippsen, 2016; Veledar et al., 2020). A question arises how a small business with an inadequate financial budget system and narrow technical proficiencies can compete in this advanced era of a social media compelled marketplace. In essence, SBOs who perform consistent evaluations between actual results and budgeted amounts had greater levels of sales growth over entities that made minimal comparisons between actual and budgeted amounts (Shields & Shelleman, 2016). Su, Baird, and Schoch, (2015) posited a significant connection between budget control and performance in the progress, maturity, and other developmental stages of businesses.

Strategic Decision-Making

Scholars have different views on the diverse approaches to decision-making. Recent theories of decision-making provided the business owners continue to meet challenges attributable to (a) the use of outdated and baseless information, (b) the practice of using personal experiences, (c) observation and opinion of others, and (d) emotions in drawing their conclusions for business operations. Considering all the alternatives that

business leaders take in making choices, the key factor is to execute rationality in decision-making through appropriate guidance and strategy (Cascetta, Carteni, Pagliara, & Montanino, 2015; Cashmore, Richardson, Rozema, & Lyhne, 2015). The lack of proper guidance in decision-making contributes to the additional challenges that business owners encounter in making reliable and strategic plans (Alonso-Coello et al., 2016; Cescon et al., 2019).

The identification of strategies in decision-making for small business focuses mainly on the impacts of generating profits. Sniezek (2014) and Cheng, Wong, Cheung, and Leung (2016) pointed out how decision-makers pick choices based on the contingent condition of whether they should make decisions using the standard principles based on the cognitive approach to decision-making. Suter, Pachur, Hertwig, Endestad, and Biele (2015) also suggested that opinions in exercising decision-making are executed based on the weighted probabilities of expected outcomes. On the contrary, it is essential for business leaders to include specific supplemental strategies when exploring data from the financial statements in the development of competitive advantage (Lin et al., 2020; Obeidat et al., 2014). In exploring the notion behind an effective decision-making which integrates financial analysis, successful leaders recognize the importance of having proper operating systems and frameworks that can provide valuable data to supports a successful business environment (Shepherd, Williams, & Patzelt, 2015). Shepherd et al. (2015) posited that realizing how decision-making relates to the opportunity recognition of success can offer a critical platform for sound decisions.

A critical and important performance factor for small business is the value of operational and strategic decision-making capability. Consistent with this principle, the focus is on strategic decision-making that produces sustainability, competitive advantage, increase the value of the firm, and diversity in business operation to sustain or increase market share. Measuring business performance and alleviating uncertainties is a useful tool for assessing the strategic decision-making for leaders of the organization. Levitt, Farry, and Mazzarella (2015) defined decision-making as a cognitive process leading to the selection of an idea from a series of actions engulfed in an assortment of several alternatives. Decisions are exposed to limitless variations and uncertainties even when actions originated from the same data inputs.

Business Diversification

The research objective is to explore the MAS strategies used by SBOs in business diversification. Business diversification is one of the strategies business leaders use to improve profit position and enhance market share of businesses. Diversification could serve as a target for making intelligent business decisions in organizations (Ansoff, 1958; Marouan, 2020). Researchers examine diversification strategies about business performance and technological capability and link the concept of diversification to the long-term objectives of businesses (Ansoff, 1958; Paut, Sabatier, & Tchamitchian, 2020; Yin, 2016). Diversification as a plan in designing business models provides business owners with a direction for making intelligent business decisions (Ansoff, 1958). Che and Liebenberg (2017) and Paut et al. (2020) discovered that when a focused firm diversifies, risks on assets increase relative to operation, and when a diversified firm refocuses, asset

risk reduced relative to firms that remain diversified. Kim et al. (2015) proposed that the corporate-specific advantages of new multinational enterprises (NMNEs) contribute diversely to firm profitability because they advance differently given strategic factor market transformations in host compared to home countries.

New product success as part of diversity strengthened the organization innovativeness and financial performance (Ammar & Boughrara, 2019; Zulu-Chisanga, Boso, Adeola, & Oghazi, 2016). Firms can be much more diversified regarding products than technologies, with the main products focused more on the exploitation of innovative knowledge (Ammar & Boughrara, 2019; Dosi, Grazzi, & Moschella, 2017). Weltin, Zasada, Franke, Piorr, Raggi, and Viaggi (2017) justified that diverse methods of income diversification represent a vital strategies of farmers to cope with the changing economic and weather conditions or to valorize given territorial opportunities. Results showed that under hypothetical conditions when economic support by the Common Agricultural Policy (CAP) is terminated, an increasing share of farmers would apply income diversification throughout all types of economic conditions, mainly using off-farm diversification as a survival strategy (Weltin et al., 2017). Leza, Rajan, and Kuma (2017) posited that product diversification among Micro and Small Enterprises (MSE) is known to contribute to risk mitigation and stable MSE sector for job creation across the world. Product diversification is an open-market strategy for entry into new markets and gaining more market share in a given industry space (Qiu, 2014). Manrai, Rameshwar, and Nangia (2014) commented that business practitioners using similar schools of thought believe that product diversification improves returns. Mendoza-Abarca and Gras (2019)

and Su and Tsang (2015) also asserted that product diversification improves firms' financial performance, which reflects the performance of clients' portfolio.

Di Maria and Ganau (2017) explored the relationship between SMEs' distribution strategies implemented overseas and their export performance, involving export intensity and diversification. The empirical outcomes suggested that commercial distribution has a higher effect on SMEs' export activities than the other distribution means in the regional market, compared to the means used by local traders (Di Maria & Ganau, 2017). SMEs' export strength in the global market appeared to be more beneficial than the local traders. Agreements-based distribution resources have the utmost influence on SMEs' export diversification. Both Deligianni, Voudouris, and Lioukas (2017) and Paut et al. (2020) focused their study on the lens of effectuation to product diversification and evaluated the regulating impacts of adapted processes on the connection between diversification and performance in new ventures.

Furthermore, Kim et al. (2015) examined the differences between corporate profitability among NMNEs venturing on geographic diversity into two diverse types of localities based on the growth of strategic factor markets. The corporate advantages of NMNEs subsidize diversely to firm profitability because they advance differently considering the strategic factor market transformations compared to enterprise in home countries. Kim et al. discovered that geographic diversification into resource-limited and poorer host countries have a successful outcome leading to positive relationship with firm profitability.

Deligianni et al. (2017) indicated that except for reasonable loss, the effectuation processes yield a positive result on the diversification-performance relationship. Mangani and Tarrini (2017) evaluated the empirical connection between specialization, diversification, and the survival rate in the digital publishing business. Mangani and Tarrini analyzed the advantages and disadvantages of specialization against diversification and applied the associated economic theories to the digital publishing industry utilizing management accounting analytical tools. Digital publishing entities who ventured with print and digital activities or operate other mass media businesses resulted in a greater likelihood of surviving in the market (Mangani & Tarrini, 2017). New product development, diversification into new industries, expansion into new geographic markets, discontinuation of product lines and termination of unprofitable customers are examples of such a strategy (Schoenberg, Collier, & Bowman, 2013).

Findings from finance researchers revealed that many leaders do not take advantage of the benefits of diversification (Jacobs, Müller, & Weber, 2014). The concept of diversification encompasses the framework of innovation (Ammar & Boughrara, 2019; Marouan, 2020; Urbancová, 2013). The competitive nature of evolving markets requires managers to invest continuously in innovation to remain relevant and competitive (Klingebiel & Rammer, 2014). Business leaders could introduce diversification through a market penetration strategy or a product innovation approach (Ansoff, 1957). Based on the need to diversify, business leaders have responded to the increasing levels of competition by expanding service and product offerings extended to their clients through creativity, innovation, and product diversification (Bowen, Baker, &

Powell, 2015; Mendoza-Abarca & Gras, 2019). Businesses cannot remain static, and managers must ensure that business grows. Business leaders must decide on when to grow and design a growth strategy informed by a growth method. Businesses can grow through specialization or diversification (Ortiz-de-Urbina-Criado, Angel Guerras-Martin, & Montoro-Sánchez, 2014). Groesser and Jovy (2016) argued the qualitative methodologies that currently exist are short of providing sound and effective guiding principle especially in dealing with uncertain, highly volatile conditions involving the rapidly developing technological environment and the existing agility of competitors, often encountered by business leaders. The more frequently SBOs evaluate their business performance using MAS, the higher chances that the organization can improve the overall operating results (Alkhajeh & Khalid, 2018).

Transition

In Section 1 of this study, I provided a foundation for the study appropriate to the problem and purpose statements, nature of the study, research question, conceptual framework, operational definitions, the significance of the study, and a review of the literature. In Section 2, I present the purpose statement, the role of the researcher, participants' overview, research method and design, population and sampling, ethical research, data collection and organization techniques, data analysis, and the reliability and validity of my study. In Section 3, I present the results of my study.

Section 2: The Project

Purpose Statement

The purpose of this qualitative multiple case study was to explore MAS strategies leaders of ancillary service providers use for business diversification. The targeted population for this study consisted of SBOs of motion picture ancillary service providers who successfully used MAS strategies for business diversification in California. The implication for positive social change may include job creation arising from business expansion. An enhanced small business sector can favorably affect local economies and communities through increased tax revenues, and new product and service offerings.

Role of the Researcher

The researcher is the primary data collection instrument in a qualitative research study (Denzin, 2014; Marshall & Rossman, 2016). Gunaydin and McCusker (2015) indicated that the researcher exhibits a key role in the study design to assure the quality of the results. The main purpose of a researcher in data collection is to collect and develop a meaningful understanding of all facets of the research through observation and a neutral interview (Berger, 2015; Mahnaz, Bahramnezhad, Fomani, Mahnaz, & Cheraghi, 2014). My tasks as the researcher involved understanding participants' perspectives. I gathered information through the interview process for analysis. As the primary data collection instrument, I collected data from participants involving their experiences and success using MAS strategies.

As a professional practitioner, I possessed over 25 years of public and private managerial accounting experience, at the time of this research, which included issues

addressing organizational problems and decision-making to accomplish business goals. Using effective interview processes, I performed financial and management accounting evaluation and support services for many businesses, including some in the film industry. Knight et al. (2013) advocated that a researcher's expertise on the study topic can serve as a valuable contribution to the phenomenon under review. Researchers must identify the data necessary to be collected and develop the tools to address the research question to achieve an in-depth understanding and interpretation of the subject (Moon, 2015; O'Sullivan, 2015). My objective was to conduct the interviews in a manner that enabled the participants to express insights on MAS strategies used in the organization.

The Belmont Report incorporates the ethical principles that must be observed by a researcher when conducting research. The Belmont ethical principles include (a) respect of persons, (b) beneficence, and (c) justice (U.S. Department of Health and Human Services, 1979). Respect for persons refers to the treatment of participants as autonomous representatives and ensuring that individuals with lesser autonomy always receive equal protection (Adams & Miles, 2013; Kara & Pickering, 2017). The principle of beneficence entails the responsibility of the researcher for protecting participants from any impairment or harm (Adams & Miles, 2013; Kara & Pickering, 2017). I completed the training on Protecting Human Research Participants presented by the National Institutes of Health Office of Extramural Research (Certification No. 1954503). I followed all ethical principles outlined in *The Belmont Report*. During the participant selection process, participants who met the criteria could volunteer to be part of the study and were expected to share their knowledge of the use of MAS. To ensure fairness during the

selection process, the researcher should provide prospective participants with an open opportunity to contribute valuable information in the study (Adams & Miles, 2013).

Although unavoidable conditions occur, a researcher must monitor the occurrence of bias and errors in the research (Leedy & Ormrod, 2013). Scholars must avoid personal biases during data collection and analysis that may impair the reliability of the study (Cairney & St. Denny, 2015). O'Sullivan (2015) recommended that the researcher design and develop necessary guidelines to elude ethical challenges and strengthen research integrity. I mitigated research bias by conducting member checking and triangulating data from multiple sources. Thomas (2017) justified member checking as useful for obtaining participant validations of quotations, statements, or case studies. Furthermore, a strong feature of case study research is the ability for triangulation of data from multiple sources through appropriate collection techniques such as interviews and review of internal documents (Archibald, 2016; Kern, 2018; Teshuva, Borowski, & Wells, 2016; Yin, 2017; Yu, Abdullah, & Saat, 2014).

In addition, I used a reflective journal during data collection and analysis of participants' responses. Applebaum (2014) recommended that scholars maintain a journal to keep track of all activities associated with the study. Maintaining a journal narrowed the potential for biases during the research process (Applebaum, 2014). Zauszniewski, Lekhak, Burant, Underwood, and Morris (2016) suggested that journaling is an essential part of qualitative research and can serve as an excellent modality to ascertain themes and patterns in data.

An interview protocol intensifies the level of effectiveness and efficiency in the interview (Alby & Fatigante, 2014; Jamshed, 2014; Yin, 2017). Yin (2017) articulated that a qualitative researcher should use an interview protocol as a guide to collect reliable data. Furthermore, Peters and Halcomb (2015) maintained that an effective interview protocol will enhance consistency during the interview. I followed an interview protocol (see Appendix) to facilitate the collection of relevant data. As part of the protocol, I used the same eight interview questions for each participant in the same order to ensure precision during the data collection.

Participants

As part of the eligibility criteria for choosing participants, I selected SBOs of motion picture ancillary service providers who successfully used MAS strategies for business diversification. To gain a holistic understanding of MAS strategies used for business diversification, the participants for this case study comprised at least 10 successful SBOs. According to Azzi, Battini, Faccio, Persona, and Sgarbossa (2014), using insights from 10 skilled participants as a sample size is adequate to explore data from SMEs in a multi-case study. The participants had to be operating a small business providing ancillary services to the film industry in California and must have used MAS strategies successfully for at least 5 years. Selection of participants is one of the most important processes to assure quality measures in research (Hoyland, Hollund, & Olsen, 2015). Hoyland et al. (2015) added that researchers should ensure that selected participants have sufficient experience to offer information regarding the study

phenomena. Researchers must identify the criteria for choosing participants to enable a proper assessment of transferability of the research findings (Elo et al., 2014).

I secured Walden University Institutional Review Board (IRB) approval before soliciting participants for my research study. I invited participants who met the eligibility criteria to address my research question. To be eligible to participate in this study, individuals had to be SBOs who (a) were engaged in providing services to the film industry, (b) had used MAS strategies in decision-making, and (c) had been in business for at least 5 years. Researchers can use public websites to find potential participants who meet the eligibility criteria (Freeman, 2014; Zhang, Zhang, Liu, Zhang, & Liu, 2013). I solicited participants who met the eligibility criteria through the local chamber of commerce and by accessing the SBOs' websites. Krohwinkel (2014) recommended accessing public records as a means of finding potential participants who meet the eligibility criteria in research. I invited participants who meet the eligibility criteria and who had interest in the study topic.

In preparation, my interview request included (a) an invitation to participate in the study, (b) an interview protocol, (c) a consent form, and (d) my contact information. I emailed a consent form for each participant to provide a clear understanding of the research criteria and ethical aspects surrounding the research question of my study. Participants emailed me back directly to confirm their intent to participate in this study. Before the commencement of the interview, a researcher can use the consent form to achieve the confidence of participants to establish a productive working relationship (Condit et al., 2015).

The researcher and participant must have a relationship that includes rapport and open communication during the interview (Collins & Cooper, 2014; Postholm & Skrovset, 2013). A mutual connection between the participants and the researcher will enable an open relationship and produce reliable results free from conditional restrictions (Collins & Cooper, 2014; Lewis, 2015). As soon as permissible, I introduced myself via email to establish a working relationship with potential participants. Upholding honesty and clarity in research involving human participants is an essential role of the researcher (Resnik, 2015). Lewis (2015) stipulated that research participants may be more motivated to share honest information when the interview condition is comfortable and free from conflict and judgment. I built trust with the research participants by explaining that all information will be treated with the highest confidentiality. Johnson et al. (2017) emphasized the importance of selecting a proper location in facilitating study progression when conducting on-site interviews to enhance the collection of study data. To encourage participants to share their experiences openly, I conducted the meeting in an office on site free from any distraction.

Research Method and Design

Research Method

Yin (2017) identified the qualitative, quantitative, and mixed methods as the three types of research methodology. In qualitative inquiry, researchers explore themes based on human experience, within real-life contexts (Marshall & Rossman, 2016). The participants' ability to express their ideas and provide information that can best answer the research problem is one advantage of a qualitative methodology (Anyan, 2013). The

qualitative research method was suitable for this study because I sought to explore human experiences.

Researchers use statistical measurement, testing, and comparisons of research variables guided by hypotheses in quantitative research (Odar et al., 2015). In a quantitative method, researchers examine variances and connections, and formulate results from a random sample of a target population after quantification of data gathered from a population (Brockington, 2014). The focus of a researcher in quantitative research is to make a prediction using numbers to confirm hypotheses about phenomena (Caruth, 2013; Johnson, 2015; Kaur, 2016). I did not choose a quantitative method because testing a hypothesis and analyzing variables are not the objectives of my study.

In mixed methods, the researcher combines quantitative and qualitative research techniques, methods, approaches, or concepts into a single study or set of related studies (Frels & Onwuegbuzie, 2013). Mixed methods researchers examine inferences, differences, or relationships among variables from a combination of participants' natural experiences and numerical analysis to prove reliability and validity of hypotheses (Green et al., 2015). Schutt (2018) postulated that mixed method researchers include questions and insights from available qualitative data to ensure the enhancement of findings from quantitative analyses. The mixed method approach was not appropriate for this study because I did not intend to examine the participants' natural experiences and the relationships or differences among combinations of variables from numerical analyses.

Research Design

I conducted a qualitative case study design. Researchers explore a multifaceted social phenomenon and identify numerous data sources, ensuring a complex view of the phenomenon in a case study design (Hoon, 2013; Yin, 2017). Scholars using a case study approach offer a powerful insight to research that creates the opportunity for using interview-based design, creativity, and rigor in exploring a phenomenon (De Massis & Kotlar, 2014; Robinson, 2014). Qualitative researchers employ a case study design when exploring complex data from participants to secure valuable results to comprehend, confirm and explain the phenomenon (Yin, 2017). A case study design was suitable because my objective was to collect data from multiple sources to understand MAS strategies used by SBOs for business diversification.

Researchers use an ethnographic design to study the cultural tradition or collective belief of one or more select groups, through observation and immersion (Wolcott, 2010). Uriely (2014) postulated that an ethnography research design involves inquiries and observations in which researchers focus on cultural groups in their natural habitat. An ethnographic design was not appropriate for this study because I did not observe or immerse myself in a group culture to explore the phenomenon.

In the phenomenological design, researchers seek to explore the meanings of participants' lived experiences to understand one or more phenomenon (Moustakas, 1994). A phenomenology design is appropriate for collecting information on an individual's lived experiences, opinions, and perceptions involving a phenomenon (Astalin, 2013). Because I focused on in-depth analysis of numerous data sources as

opposed to the lived experiences of the participants, the phenomenological design was not appropriate for this study.

Reaching the condition of data saturation represents an essential status to attain improved and verifiable validity in qualitative research (Yin 2015). Researchers achieve data saturation when no new theme emerges from the data collected (Bristowe et al., 2014). Attaining data saturation is significant in qualitative research because the results will advance the validity status of the findings (Morse, 2015; Yin, 2015). I continued interviewing SBOs until no new data emerges.

Population and Sampling

I used purposeful sampling to identify and select participants for this study. A researcher can identify the appropriate participants for the study based on experience and expertise using purposeful sampling (Emerson, 2016). Sonenshein (2014) defined purposeful sampling as the process of gathering data from participants. Researchers can locate a wide range of experiences which can result in rich causal information when using purposeful sampling (Armstrong et al., 2013; Palinkas et al., 2013). Researchers rely on purposeful sampling to obtain participants who possess knowledge about the phenomena which can address the research question (Benoot, Hannes, & Bilsen, 2016).

Collecting reliable information to gain an understanding of the research problem is the goal of researchers during the sample size planning (Button et al., 2013; Colombo, Froning, Garcia, & Vandelli, 2016). Scholars must focus on the participants' expertise and knowledge in qualitative research (Yin, 2017). Malterud, Siersma, and Guassora (2016) conveyed that a purposive sample of six to 10 participants with diverse

experiences can provide sufficient information power for descriptions of different practices of participants and accomplish data saturation. I interviewed at least 10 SBOs who provide ancillary services to the film industry in California to gain a holistic understanding of effective MAS strategies used for business diversification. Azzi et al. (2014) and Fuji, Abbott, and Galt (2015) affirmed that using insights from 10 participants as a sample size is adequate in exploring data from a research population in a multi-case study.

Achieving data saturation is crucial in research where researchers continue to accumulate information until the data collected shows signs of repetitive results (Colombo et al., 2016). I continued interviewing participants until I achieved data saturation. Harvey (2015) posited that case study researchers should continue to accumulate data from multiple sources to pursue data saturation. Data saturation is apparent in research when there are no indications of new data, evidence, or themes that are accessible from participants (Guetterman, 2015).

Scholars should locate an adequate setting that will allow interviewees privacy and an interview environment quiet and private (Johnson & Esterling, 2015; Shahian et al., 2013). Johnson et al. (2017) emphasized the importance of selecting a proper location in facilitating study progression when conducting on-site interviews to attain real-time results and accounts of events. The researcher should consider convenience and privacy when choosing the site of the potential interview to enrich the result of data collection in a study (Marshall & Rossman, 2014). Robinson (2014) recommended that researchers ensure that the interview location is suitable so that participants can feel comfortable in

sharing valuable ideas relating to the study topic. Furthermore, Robinson suggested that researchers need to select an interview setting that will enable participants to share information freely without concern for any confidentiality issues. I conducted all interviews in a private, convenient venue on site within the participants' business location.

Ethical Research

Maintaining ethical practice when conducting research is important in meeting research requirements, credibility, and protection of participants (U.S. Department of Health and Human Services, 2014). I complied with the guidelines set forth by the IRB to assure ethical compliance in my research. Upon receiving IRB approval, I selected and invited potential participants to participate in the study. Informed consent is part of the procedures used by researchers to provide participants with appropriate information to make an informed decision when participating in a study (Check, Wolf, Dame, & Beskow, 2014; U.S. Department of Health and Human Services, 2014). Researchers must ensure potential participants could raise inquiries and acknowledge voluntary participation during the informed consent procedure (Bristol & Hicks, 2013). I emailed an informed consent form to every participant as part of my research procedures that contained (a) a brief background and purpose of the study, (b) the participant's role, (c) confidentiality, (d) the risk and benefits of participating in the research, and (e) how to withdraw from the study. Informed consent is a voluntary agreement consisting of ethical standards used by the researcher to protect the participants (Chiumento, Khan, Rahman, & Frith, 2015; U.S. Department of Health and Human Services, 2014). As part of my

informed consent process, I provided participants with the confidentiality statements, the benefits of participating in the research, and the voluntary with no compensation clause for completing the study. Rashid, Caine, and Goetz (2015) stated that a consent form is a guarantee to participants that privacy and confidentiality of information will be highly preserved to support ethical practices in the research.

Research participants have the preemptive right to withdraw from a study (U.S. Department of Health & Human Services, 2014). The researcher must notify participants about the option to withdraw from the study without penalties or consequences (Mahnaz et al., 2014). The researcher must terminate any interaction or collaboration when participant elects to withdraw followed by extinguishing any data collected during the interview (U.S. Department of Health & Human Services, 2014). I advised research participants can withdraw from the study by providing notification through email. Participants can withdraw from the study until completion of the member checking procedure. I did not offer any compensations or incentives to participants for contributing to the study.

Scholars must establish adequate measures to protect the rights and maintain the privacy of the participants by safeguarding the information collected during data collection, organization, and analysis (Yin, 2015). Bailey (2014) recommended that researchers should provide participants with materials and information necessary to make an informed decision. I disclosed all information related to the study to ensure the ethical protection of participants in exercising informed decision. The names and any identifiable information of the participants in the study will remain confidential. I assigned unique

identifiers to each of my participants using alphanumeric codes (P1 through P10) to assure confidentiality and anonymity. The researcher must employ diligence in using technological tools and applications in the research process to preserve the privacy of the participants during the collection and dissemination of data (Teitcher et al., 2015).

Finally, as part of Walden University IRB requirements, I stored all data in a secured cabinet, of which I had sole access for 5 years. After 5 years, I will destroy all the data.

The Walden IRB approval number was 03-21-19-0601493.

Data Collection Instruments

Mahnaz et al. (2014) and O’Sullivan (2015) suggested that a researcher can perform as the primary research instrument in qualitative research. I served as the main data collection instrument in this study. Denzin (2014) and Marshall and Rossman (2016) posited that in qualitative research, the researcher serves as the primary data collection instrument because of the activities involved such as hearing, seeing, and understanding the data collected. I conducted semistructured face-to-face interviews with open-ended questions to gather in-depth data from business leaders who use MAS strategies for business diversification. Semistructured face-to-face interviews are an effective data collection procedure to discover a multifaceted view of the phenomenon from participants’ responses (Bowden & Galindo-Gonzalez, 2015). Face-to-face interviews are critical to data collection in qualitative research to promote efficiency and effectiveness during the interview process (Knepp, 2014). A semistructured interview format is a widely used qualitative instrument for gaining participants’ input (Asif & Rodrigues, 2015). Yin (2015) recommended that a semistructured interview is a suitable procedure

for the researcher to gather information to address the research question. Redshaw and Frampton (2014) regarded semistructured interviews as a guide to address questioning that can lead to a valuable contribution to the study topic. Furthermore, Anyan (2013) suggested that an interview is a commonly used practice that allows participants to talk candidly about experiences and accomplishments during data collection in qualitative research. Qualitative scholars explore phenomenon by gathering data from documents and interviewing participants from a target population (Marshall, Cardon, Poddar, & Fontenot, 2013).

After obtaining permission from participants, I utilized an audio recorder in the data collection process. Moylan et al. (2015) asserted the advancement in technologies involving mobile devices such as a Voice Recorder application on a smartphone could serve as the audio recording instrument. The researcher can store and access a large amount of data promptly and accurately using mobile devices with a Voice Recorder application (Moylan et al., 2015; Broadhurst, 2016). I also recorded data using separate audio recording equipment simultaneously as a backup instrument. I recorded my interview using the Voice Recorder application on my iPhone 6 and a microcassette voice recorder as a backup recorder.

To ensure reliability and validity, I used the same interview questions for each participant, and I eluded bias by not asking misleading questions or inquiries outside of the interview questions. Researchers should refrain from asking leading inquiries in research interviews to avoid any bias (Onwuegbuzie & Hwang, 2014). Hermanowicz (2013) noted that posing the same interview questions to participants help in identifying

themes. Yin (2017) recommended that posing similar interview questions to different participants allows for a diverse range of answers and interactions. Asking the same questions in a sequence allows for efficient data analysis and comparative response from participants (Brédart, Marrel, Abetz-Webb, Lasch, & Acquadro, 2014).

As part of the data collection process, I integrated member checking to enhance the reliability and validity of data collection. Member checking is the process of validating descriptions, interpretations, or transcripts of the interview conducted with participants to establish accuracy and credibility of data collected (Harvey, 2015; Houghton et al., 2013; Johnson, 2015; Rashid et al., 2015). Caretta (2016) contemplated that in mitigating research bias, member checking must supplement data triangulation. Furthermore, member checking should immediately transpire after transcription of an interview rather than after the analytical review of information which will enable participants to confirm their responses promptly (Houghton et al., 2013). I transcribed my interpretation of the responses to the interview questions from the participants. I emailed the individual interpretative summary of the interview back to each participant for review of accuracy. Participants confirmed the correctness of my interpretation following the interview through member checking.

As the interview instrument, I conducted and directed interviews with participants using an interview protocol (see Appendix). An interview protocol intensifies the level of effectiveness and efficiency during the interview process (Alby & Fatigante, 2014; Jamshed, 2014; Yin, 2017). An effectively formulated and organized interview protocol will support consistency during the interview proceedings (Peters & Halcomb, 2015). Yin

(2017) articulated that a qualitative researcher should use an interview protocol as a guide to collect reliable data.

Data Collection Technique

As part of my data collection technique, I used semistructured face-to-face interviews upon receipt of approval from the Walden University IRB. Yin (2015) suggested that interviews are an effective data collection technique when using a case study design. Ziebland and Hunt (2014) recommended that a face-to-face interview is a favored technique during data collection which can allow researchers to gather information efficiently from participants during the interview. Researchers used a semistructured interview classified as a primary data source of information followed by the review of organizational documents as the secondary sources (Oltmann, 2016). I conducted semistructured face-to-face interviews with open-ended questions to gather in-depth data from business leaders who use MAS strategies successfully for business diversification. Ziebland and Hunt recommended that a face-to-face interview can be an effective method in gathering data that will allow the researchers to validate responses immediately. Establishing trust and understanding of the roles of the researcher and the participant can ensure validity in communication (Call-Cummings, 2016). Face-to-face interviews are an intimate data collection process that requires trust from the research participants (von Unger, 2016).

Marshall and Rossman (2016) qualified that a disadvantage of using semistructured interviews as a data collection technique can be constrained by the participant's communication skill. Yin (2017) stated that in a semistructured interview,

reflexivity might cause the interviewee to offer responses believe the interviewer wants to hear. Research bias can be avoided by incorporating member checking and review of reflective research journal (Caretta, 2016; Elo et al., 2014; Harvey, 2015). I emailed my interpretative summary of the individual interview findings back to each participant to confirm the accuracy and validity of their responses. An effective data collection technique allowed me to establish efficient control over what information to expect and validate my inquiries to accumulate a robust set of data necessary for qualitative research analysis. Qualitative researchers who rigorously and efficiently collected qualitative data can establish more perspectives at the center of research (Ziebland & Hunt 2014).

To assure accuracy in analysis, researchers can apply triangulation techniques to assist in validating statements from multiple sources through cross-referencing results from interviews and review of organizational documents (Kern, 2018; van Dijk, Vervoort, van Wijck, Kalkman, & Schuurmans, 2016). Researchers can use two independent sources of data collection such as interview and document review originating from multiple sources which can promote credibility and reach data saturation (Yin, 2015). Researchers gather secondary resource to enhance and triangulate information collected from interviews (Othman & Rahman, 2014). Investigators can tailor information gathered to align with the research question using secondary data such as document review (Stage & Manning, 2015).

Researchers can confirm essential points that a participant is unable to articulate or overlook to share during the interview (Rubin & Rubin, 2012). Yin (2017) suggested that in the case study, document review support and corroborate evidence that researchers

obtain from other sources. Researchers have the advantage of using record reviews as a complimentary source of information originating from multiple data sources to increase the quality and accuracy of the study findings (Houghton et al., 2013). Documentation is a concrete resource which can allow repetitive access to reviewers when validating research data (Yin, 2017). Turner and Danks (2014) concurred that researchers use multiple data sources to gather pertinent information to validate findings for dependability and robustness.

Some of the drawbacks involving documents review include a condition where acquired resources may be inaccurate and can include a possible bias of the author (Yin, 2017). Business owners might purposely repudiate access to essential documents which can negate accessing data that are significant to the study (Yin, 2017). Furthermore, some materials can be unrelated or contain insufficient information to support the validity of the findings (Yin, 2017). Since performing documents review can enhance findings, I conducted data triangulation using interview results and review of the organizations' websites to ensure an accurate portrayal of study participants' input and intent.

As part of the data collection technique, I integrated member checking procedures to enhance reliability and validity upon accumulation of data in this study. Scholars use member checking to achieve reliability and validity in qualitative case study research (Andraski, Chandler, Powell, Humes, & Wakefield, 2014; Wang, 2015). Thomas (2017) suggested that securing participant's approval of the data interpretation in which results are doubtful and unclear can be a valuable process of member checking. Using member checking to validate data collected from interviews supports the researchers' practice of

maintaining accuracy and credibility (Andraski et al., 2014; Check et al., 2014). After the transcription of the interviews, I emailed the individual summary of my interpretations to each participant to confirm the accuracy and resonance of their responses.

Data Organization Technique

Data organization is an important tool when conducting research (Theron, 2015). Establishing a systematic data organization procedure will assist researchers in locating information in an efficient and timely manner (Merriam, 2014). Researchers use data organization techniques to manage data more effectively increasing the reliability and validity of the study (Check et al., 2014). I documented my observations and other notes arising from the interview using a reflective journal. According to Cengiz, Karatas, and Yadigaroglu (2014), reflective journaling is an instrument used by researchers to highlight notes surrounding experiences and conditions during the interview.

The use of computer programs, applications, and software in qualitative research has improved the effectiveness of data management (Moynlan, Derr, & Lindhorst, 2015). Gibson, Webb, and Lehn, (2014) suggested that researchers use software to assist in keeping track and organizing data. In qualitative studies, organizing data into categories assists researchers in identifying themes during data analysis (Merriam, 2014). I used NCH Software Suite Quick Launcher Text Converter and Microsoft® Word to transcribe and organize interview data by participant throughout this study. As part of my data analysis, I organized my interview results by category to establish themes.

After the interview, transcription, and member checking, I uploaded the data and archival documents into the NVivo 12 for coding and theme development. A researcher

codes data collected to assign clearer themes relative to the research question (St. Pierre & Jackson, 2014). Coding of data is essential to analysis which is a prelude to sorting and grouping of patterns leading to the themes in research (Theron, 2015). Kowal and O'Connell (2014) justified that researchers can achieve a better understanding and formation of themes in the research if data are organized during collection, transcription, and analysis. Integration of interview results from participants enable more powerful analysis and will facilitate the researcher's process of categorizing relationships among data collected (Dagobert, 2015). I organized and transferred all data into NVivo 12 which enabled me to code, sort, group, condense and generate reports towards the development of key themes for more rigorous analysis of findings.

Moylan et al. (2015) asserted that the advancement in technologies involving mobile devices such as a Voice Recorder application on a smartphone could serve as the audio recording instrument. A researcher can store and access a large amount of data promptly and accurately using mobile devices with a Voice Recorder application (Moylan et al., 2015). I saved all recordings from my interview in an encrypted external hard drive that was password protected and locked in a safe only accessible by me. Finally, as part of my data organization technique, I intended to extinguish all collected materials subsequently for confidentiality after 5 years.

Data Analysis

Data analysis comprises of exploring, merging, recombining, and processing the evidence to achieve realistic results in a study (Leedy & Ormrod, 2013; Yin, 2017). Employing an analytical technique of data collected from the interview will enhance a

clear interpretation and quality of the findings (Stuckey, 2015; Huang et al. 2014). To assure accuracy in analysis, researchers apply triangulation techniques to assist in validating statements from multiple sources through cross-referencing results from interviews and review of organizational documents (Kern, 2018; van Dijk et al., 2016). I conducted data triangulation using interview results and review of archival documents to ensure an accurate portrayal of study participants' input and intent.

Researchers use methodological triangulation to establish an understanding of the study topic and enhance the reliability of results arising from multiple resources (Graue, 2015; Mayer, 2015). Using methodological triangulation involves integrating interview results and the review of organizational documentation for verification of data (Kern, 2018). I used methodological triangulation to analyze my findings from the interview and physical documents to validate my research results and ensure the reliability of the study. I conducted semistructured interviews using open-ended questions and triangulated with information using archival documents determined during the interview with the participants. Applying methodological triangulation using participants' interviews and data from physical documents should enhance the validity of my study.

Researchers interpret and draw meaning from the data collected by comparing similar and contrasting information, cohesions, ideas, patterns, and themes formulated from the interview of participants (St. Pierre & Jackson, 2014). Yin (2017) identified the five steps involved in data analysis as follows: (a) arrange the facts in order, (b) identify patterns, (c) categorize data, (d) interpret single occurrences, and (e) synthesize and conclude. The formulation of themes is a fundamental procedure that a researcher should

accomplish during data analysis in case study research (Emmel, 2015). St. Pierre and Jackson (2014) suggested that a researcher organize and code data for analysis. I transcribed and coded interview responses to understand and analyze input from my participants. My analysis covered the identification of themes from information contributed by participants. I grouped and consolidated participants' words, phrases, and clauses that suggest similar ideas and meanings in the same category before coding. I conducted in-depth interpretations of the interviews and physical documents from the SBOs and formulate my findings and conclusions from the emerging themes.

Scholars recognized NVivo 12 as reliable software capable of categorizing key themes, coding, and mind-mapping data (Edwards-Jones, 2014; Franzosi, Doyle, McClelland, Rankin, & Vicari, 2013). Zamawe (2015) suggested that researchers can utilize NVivo 12 to formulate themes in an organized and expeditious fashion eliminating prospective human error during the coding and theme identification processes. After conducting member checking with all participants, I used NVivo 12 to organize the data. Thematic patterns may arise through the process of sorting and coding of participants' input (St. Pierre & Jackson, 2014). Using NVivo 12 enabled me to efficiently create words and phrases, which can lead to the generation of study topic thematic patterns arising from sorting and coding.

Noble and Smith (2014) corroborated that after collection of factual responses from participants, the procedures involved in data analysis are organizing and consolidating all the information in a meaningful fashion that is accurate, transparent, and detailed. The ability of the researcher to interpret the results accurately and prioritize the

views of the participants in understanding the phenomenon is an effective approach to data analysis (Starr, 2014). I ensured themes generated from my study using NVivo 12 are reliable and transparent purporting an effective data analysis. Exploring and correlating my findings using existing literature and through the lens of the CTMA could enhance the validity of my results.

Reliability and Validity

Reliability

Noble and Smith (2015) advocated that reliability in qualitative research represents the state of generating consistent outcomes over time. Researchers must evaluate the quality and appropriateness of the methods and integrity of the findings and conclusion to assess the reliability of the study (Noble & Smith, 2015). Furthermore, investigators seek to confirm the consistency of the research findings as a way of ensuring dependability (Lishner, 2015). O’Nyumba, Wilson, Derrick, and Mukherjee (2018) recommended interview results be verified with the participants to validate the accuracy of the information. Member checking is the process of allowing participants the opportunity to check the researcher’s discussion for accuracy and resonance (O’Nyumba et al., 2018). After completion of my interpretation of the interview, I emailed the individual interpretative summary of the findings back to each participant to confirm the accurate representation of their responses. I integrated member checking to enhance the reliability and validity of the data collected.

Thomas (2017) justified that member checking can be useful for obtaining participant validations of quotations, statements or case studies. Researchers performed

member checking by validating descriptions, interpretations, and transcripts of the interview to establish accuracy and credibility of data collected from participants (Harvey, 2015; Johnson, 2015; Rashid et al., 2015). Houghton et al. (2013) stipulated that member checking should occur immediately after transcription of the interview rather than after the analytical review of information to enable participants to confirm the accuracy of responses. Furthermore, Caretta (2016) recommended that researchers supplement methodological triangulation with member checking to mitigate research bias. I addressed research bias by conducting member checking and triangulating data collected from the interview and physical documents.

Dependability. Dependability is the level of stability and strategic simulation of research results that scholars use to ensure reliability in qualitative research (Harvey, 2015). Cope (2014) and Lishner (2015) suggested that dependability is the quality of consistent replication of data in identical research conditions. Researchers seek to confirm consistency and simulation among research results as a way of ensuring the dependability of findings (Lishner, 2015). Truglio-Londrigan (2013) recommended sharing the researcher's summary of the interview transcripts to participants to corroborate the accuracy of input. Researchers can convey the interpretations of collected responses to the individual participant for authentication using member checking (Marshall & Rossman, 2014). Furthermore, Leedy and Ormrod (2013) affirmed that member checking is a strategy for verifying the dependability of a study. I emailed my summary of the individual interview findings back to each participant to confirm the accurate representation of their responses.

Lishner (2015) recommended that researchers engage in reflexive journaling for an audit trail to ensure dependability in qualitative research. Documenting the audit trail using a reflexive journal to portray researcher's decisions and interpretations support credibility and dependability (Cope, 2014; Darawsheh, 2014; Lub, 2015). Researchers can attain dependability by exhibiting discipline and rigor in documenting the research procedures in detail (O'Leary, 2014). I assured dependability using member checking and maintaining a reflexive journal to confirm the accuracy of my research results from data collection and analysis.

Validity

In qualitative research, validity relates to compliance of the methodology, design, data collection techniques and analysis, sample size, and findings based on the research question (Leung, 2015). Dwork et al. (2015) emphasized that researchers can improve the quality of the study results by upholding validity in qualitative research. Cope (2014) advocated that researchers imply validity as the expanse of trust developed from the research findings which originated from the conveyance of participants' experiences in the research. Moreover, establishing trust and a clear understanding of the roles of the researcher and participants can warrant validity in communication (Call-Cummings, 2017). I ensured validity through member checking and methodological triangulation by confirming the summation of individual interview responses and reviewing physical documents from each participant.

Credibility. Nyhan (2015) postulated that scholars must achieve credibility to support the validity of the findings in qualitative research. Credibility refers to the

confirmation of the study results from the participants and the value of trust established with other researchers in going through the research findings (Nyhan, 2015).

Investigators display credibility when the authenticity of participant's visions are depicted accurately from the result of research (Cope, 2014; Theron, 2015). Researchers establish study credibility through the implementation of an audit trail of the research process and member checking (Yin, 2015). Cope (2014) emphasized that member checking is the most rigorous procedure for ensuring data credibility. Member checking is a process that researchers practice, assuring the credibility of interview data in research (Marshall & Rossman, 2016).

Other than member checking, establishing an audit trail of the research process can improve credibility. An audit trail is a process of documenting the researcher's procedures and interpretations to support credibility and dependability (Cope, 2014; Darawsheh, 2014; Lub, 2015). To ensure credibility, a researcher can exhibit discipline and rigor by documenting the research process in detail (O'Leary, 2014). I used member checking to assure the accuracy of the participants' responses to the interview questions. I emailed my interpretative summary of the individual interview findings back to each participant to confirm the accuracy and validity of their responses.

Transferability. Cope (2014) emphasized that transferability represents how pertinent findings can influence other research works in the future. Transferability pertains to the condition when research findings can relate to or go beyond the scope of the study (Cope, 2014). Researchers who convey a rich depiction of the study context can assist readers to understand and transfer the findings to other research at any time

(Yilmaz, 2013). To confirm transferability, researchers must integrate detailed descriptions of the research context to replicate the study results in other settings (Marshall & Rossman, 2016). Furthermore, an investigator can practice transferability of the findings by providing a detailed description of the procedures used in data analysis and research context in a study (Elo et al., 2014). I provided a detailed description of the data analyses' procedures and research context with individual research participants to improve transferability.

Confirmability. Confirmability occurs when other researchers can verify and validate the findings in a qualitative study (Korstjens & Moser, 2018). Furthermore, scholars should provide results that can align with other research through audit trails (Korstjens & Moser, 2018). Childers (2014) emphasized research community could challenge the validity of the study when the results presented cannot be verified. Researchers should exercise clarity and firm commitment to avoid biases to achieve confirmability (Matamonasa- Bennett, 2015). Cope (2014) highlighted that confirmability demonstrates the scholar's ability to prove that the research data and materials originated solely from participants and did not contain the researcher's opinions or dispositions. Strategies used by qualitative scholars to promote confirmability are member checking and triangulation (Korstjens & Moser, 2018). To implement member checking, Houghton et al. (2013) suggested that researchers must request participants to review the interpretation of the interview as a process of validating data for accuracy. I accomplished data confirmability by emailing my interpretative summary of the

interview findings back to each participant to confirm the accuracy and validity of their responses.

Data Saturation

Achieving data saturation is crucial in research where scholars continue to accumulate information until the data collected show signs of repetitive results (Colombo et al., 2016). Data saturation is the stage when no signs of new data, evidence, or themes are generated from participants in research (Bristowe et al., 2014; Guetterman, 2015). Scholars need to attain data saturation because reaching this stage will facilitate the validity status of the findings in qualitative research (Morse, 2015; Yin, 2015). Harvey (2015) recommended that case study researchers continue to accumulate data from multiple sources such as interviews and physical documents until gaining repetitive results. I achieved data saturation by collecting data until no new themes emerged from the (a) participants' responses to the interview questions, (b) analysis of organizational documents, and (c) member checking process.

Transition and Summary

Section 2 highlighted the full description of the project, the role of the researcher, and the participants in the study who are SBOs engaged in providing ancillary services to the film industry in California. I provided a discussion on the specific research method and design, highlighting the selected population, and an understanding of the selection of research participants. Also highlighted are the protection of the rights, privacy, and confidentiality of all selected participants. Finally, I included a discussion on data analysis and the process of establishing reliability and validity in my study.

Section 3 will contain the findings of this research. The presentation of the findings will cover a discussion of the themes and how they link to the conceptual framework. I will also provide a discussion of the findings and application to professional practice and the implications for social change. Finally, I will complete Section 3 by proposing my recommendations for action for further study, my reflections, and conclusion of the study.

Section 3: Application to Professional Practice and Implications for Change

Introduction

The purpose of this qualitative multiple case study was to explore MAS strategies leaders of ancillary service providers use for business diversification. Ten SBOs of motion picture industry ancillary service providers located in California participated in this study. I used interview responses and a review of organizational documents and websites (archival documents). The findings derived from the review and triangulation of the research data included a focus on the use of MAS strategies and the reliance on experiential learning for the SBOs to achieve sustainable growth and diversification leading to competitive advantage. The four themes that emerged were the need to establish (a) procedures to monitor production and business operation, (b) techniques to anticipate business growth and development using service diversity, (c) up-to-date information technology systems for diversity, and (d) measures to understand risks and uncertainties in decision-making. Each SBO indicated that employment of MAS strategies using financial and non-financial information as a primary decision-making tool led to successful operating results. Leaders acknowledged the spectrum of MAS strategies available in making decision to address uncertainties leading to sustainable growth of the business. Further, SBOs acknowledged errors and deficiencies of competitors and discussed corrective measures that may be valuable for business survival and profitability. Understanding and applying MAS strategies to make decisions and plans to address uncertainties can assist other SBOs in increasing success rates and operational stability (Brookschenhall et al., 2014).

Presentation of the Findings

The central research question guiding this study was What MAS strategies do leaders of ancillary service providers use for business diversification? To address this research question, I conducted semistructured face-to-face interviews with 10 participants. I followed an interview protocol (see Appendix), which included obtaining consent from the SBOs to participate in the study. I built rapport with the selected participants, which permitted the discussion on the use of MAS strategies in decision-making. I collected data from the participants' responses to the nine semistructured interview questions with an open-ended interview format and archival documents. All interviews were completed on-site in approximately 45 minutes.

While conducting the interviews, I took notes and recorded the interview responses. During the interview process, participants willingly shared their views, ideas, and experiences regarding the central research question. To verify my interpretations of each participant's responses, I emailed the interpretative summary of the individual interview back to each participant for member checking. Performing the member checking assured me that my interpretations of participants' comments accurately reflected the intended message during the interviews. Thomas (2017) suggested that securing participants' approval of the data interpretation in which results are doubtful and unclear can be a valuable process. I conducted data triangulation through cross-referencing the results from the interviews and the archival documents. I then coded the interview data and assigned each participant an alphanumeric identification from P1 through P10.

To complete my analysis, I uploaded the data into NVivo 12 for Windows to establish codes and find themes. Adopting an inductive technique, I used Otley's CTMA as my conceptual framework to compare and interpret research findings. The findings aligned with both the conceptual framework and literature after my review, comparison, and distinction of related frameworks. The four themes that emerged were the need to establish (a) procedures to monitor production and business operation, (b) techniques to anticipate business growth and development using service diversity, (c) up-to-date information technology systems for diversity, and (d) measures to understand risks and uncertainties in decision-making.

Theme 1: Procedures to Monitor Production and Business Operation

According to Shields and Shelleman (2016), repeated use of the MAS to evaluate product or service profitability and to measure customer profitability has a significant positive impact on return on investment. The process of monitoring and periodic evaluation of projects and operation encompassed several procedures involving MAS. All 10 (100%) study participants emphasized the importance of monitoring and evaluation of operation and on-going projects as a key strategy when using MAS. The tracking and monitoring of the financial information, as noted by the participants, set the foundation for implementing the key financial analysis. As commonly applied by all 10 (100%) study participants, monitoring and evaluation strategy consisted of (a) budget, forecast, and projections, (b) cash flow management, (c) product or service profitability analysis, (d) cost analysis, and (e) financial trend analysis. The leading platform for MAS application was the development and implementation of a budget, which also includes

product forecasting and planning. A key aspect of monitoring and evaluation procedure was the comparison of the budget to actual results where nine (90%) participants performed in their day-to-day operation. The practice of having the financial statements monthly outlining all of the activities and transactions of the business contributed to the strategies that foster the tracking of financial activities and performance of each project in progress. Lin et al. (2020) and Obeidat et al. (2014) suggested the need for business owners to include specific supportive strategies using data from the financial statements for competitive advantage. The more frequently SBOs evaluate their business performance using MAS, the more chances that the organization can improve the overall operating results (Alkhajeh & Khalid, 2018; Pedroso & Gomes, 2020). Block et al. (2017) found that SBOs possessing more business experience can identify and exploit more innovative opportunities.

SBOs who have sustained their practice and business for over 5 years incorporated budgeting, forecasting, and projections in decision-making. As an integral part of the cash-flow management strategies, the SBOs built a budget, which was used to project and forecast anticipating cash inflow and cash outflow of the business. Budget control was an essential tool for financial and operational planning and control in which managers set financial and performance goals as standards, compare the actual results, and adjust performance, as needed by the organization (Bedford & Malmi, 2015). Six (60%) of the SBOs implied that business leaders, whenever possible, should not make any purchase commitment or create an obligation that was not included in the budget. The assertion of the participants was aligned with the position suggested by Bellavitis et

al. (2017), who noted that small businesses need immediate access to funds to meet daily obligations. Budgeting and extensive planning are essential for instituting the monetary goals of the business (Albuquerque et al., 2016; Veledar et al., 2020).

Huang et al. (2015) posited that business leaders recognized key elements of small films' management strategy intended to help low-budget film ventures achieve profitability while confronted with uncertainties by predicting results using data from the production environment. All 10 (100%) participants implied that they used MAS to manage information uncertainties. P3 shared, "Because we have now a diverse intel which includes our management accounting system, we manage to meet a lot of challenges along our way and continue to operate with our project. We use budgets or forecasts." P5 contributed, "I also see myself as an architect not only through my creativity but also maintaining the financial viability of each job using budgets and analysis." P6 agreed, stating that getting together with staff at the very beginning and talked about all different types of factors surrounding the project. P6 stated, "We discuss everything from budget, how much, and how are we going to get the funding for the project." If SBOs comprehend how to apply MAS strategies to their business, operation and projects are more likely to be successful in any environment, even during periods of uncertainty (Bellavitis et al., 2017; Vahlne et al., 2017).

Elements of MAS are used to facilitate decision-making, which may include (a) computation of product/service profitability, (b) taking action on comparisons of actual to budgeted performance, and (c) assessment of customer profitability (Huang et al., 2015). Finally, business practitioners participating in this study had verified that there was a

positive connection between budget and organizational performance. The potential results arising from budget control as a MAS tool can provide knowledge into the relative importance of management accounting information for SBOs (Shields & Shelleman, 2016). P2 contended that the major contingent factor that led them towards the formation of an effective MAS had to do with spending too much money in a project, making mistakes, failing, and running out of money. P6 shared,

One of the main factors that are always coming to play, that I make sure we have is the set budget so that way we can be able to cover and provide all the main necessities of the project and also cover any contingencies.

As a follow-up comment, P7 added that if there's a need to make complicated decisions, the elements would typically include our cash flow, budgets, and cost/overhead analysis mainly dealing with the project. From the production standpoint, P8 emphatically added,

Another way I would use to diversify the business would be to increase the budgets to accommodate strenuous, unexpected, and unspecified cost so that we don't have to go back to the client and say we need extra money for this project.

Prediction is expressed by forecast or projection and is valuable to businesses so that SBOs can perform proactive sustainable decisions (Márquez-Chamorro, Resinas, Ruiz-Cortés, & Toro, 2017).

Cash flow management is a valuable part of MAS that integrated business reporting (Kaspina, Molotov, & Kaspin, 2015). All 10 (100%) participants in my study highlighted the importance of cash flow management in business management. To ensure a stable stream of cash in the organizations, participants had identified the importance of

performing regular cash flow analysis as part of the implementation of MAS. P10 mentioned,

I communicate once every two weeks to review with staff what's going on in our financial standing, cash flow, P&L and whatever other issues involving our operation. The survival and growth of businesses may be dependent on the cash flow management practices of the leaders.

Aren and Sibindi (2014) argued that proper handling and management of cash flow is an extremely important contributor to the stability and survival of the business. Aren and Sibindi added that poor cash flow management could lead to failures of small business in any industry. P2 shared that “if there’s a need to make complicated decisions, consideration would normally include our cash flow, particularly dealing with the projects”. As a standard procedure, P2 claimed that they try to keep a good cash buffer. They looked at their weekly change in the cashflow.

Most practitioners know that the source and application of cash flow comprised operations, financing, and investment activities of the organization (Katehakis, Melamed, & Shi, 2015; Shamsudin & Kamaluddin, 2015). Cash flow management, as an element of MAS was a key component of working capital. Business owners needed to maintain a positive level of working capital to operate and maintain the stability of business operation. SBOs should maintain the level of working capital in a balanced manner, where the level of current assets to current liabilities is not excessively low or high. As I noted from study participants, SBOs need to understand the importance of reviewing cash

flow regularly. Effective and efficient cash flow management has a direct impact on the success or survival and growth of the business.

Small businesses need constant access to funds to meet daily obligations and finance on-going projects (Bellavitis et al., 2017). P4 noted that “we analyze our cash flow requirements every time, which include performing ratio analysis involving working capital”. P5 followed through claiming to always do a little cash flow analysis, cost versus benefits of entering into a casting deal. P6 supported saying that cash flow status was another one that was needed every time before, during and the finalization of the project. Cashflow management was important for SBOs because they had limited resources. Although SBOs had different approaches to managing cash flow, all 10 (100%) participants stated that cash and cash management was the most important driver of their business operation. Dahmen and Rodríguez (2014) identified insufficient cash flow as one of the incidental reasons that contributed to the financial distress and complications experienced by business owners. Any SBO can diminish the financial challenges in the organization if they manage to implement sufficient cash flow management strategies. The internal cash flow management proficiencies that the SBOs developed encompassed the strength of MAS strategies for decision-making, financial management practices, and self-sustainability. All 10 (100%) SBOs who sustained their businesses for over than 5 years established an effective internal cash flow management systems and processes, which included MAS. The MAS and processes are key to their cash flow management strategies.

Small business enterprise used MAS strategies that include analyzing product/service profitability, calculating customer profitability, and assessing customer acquisition costs affecting ROI (Shields & Shelleman, 2016). Shields and Shelleman suggested that computation and analysis of product/service profitability assist businesses to provide a rational combination of products and services based on empirical evidence. Performing a regular comparative analysis as part of MAS strategy helps to establish the framework of identifying the relationship among products and services' variable to measure sales performance and profitability compared to forecasted sales. Eight (80%) participants agreed and instituted the product and service profitability analysis as part of their MAS strategies. When performing comparative analysis, P2, P3, and P9 highlighted the need for aggressive monitoring of results involving products and services. P2 explained, "We want to make sure to have the target amount of revenue. And so, for our business, we have information from the year before the historical rate that we signed on new projects." Other than using financial ratio, P2 used comparative market and business analysis to evaluate pricing of product and services, "We're constantly comparing how much did we do last year versus how we expect from our new results this year." P3 articulated of diversification by saying, "We've got to diversify, and we've got to look at other markets. By using market trend analysis of possible donors and supporters, we decided to translate our campaign into multiple languages." P3 continued, "We got to get beyond what we're just doing here in California. And so using our management accounting system tool, we perform key performance evaluation and business analysis of other market territories." P4 mentioned using price comparison of data offered by their

competitors and expectations from studios when developing pricing for services. Nicolò (2020) concluded that experiential network knowledge and knowledge on the important factors about customers and competitors could impact the value of business relationships in uncertain foreign markets.

Understanding the cost of goods and services in business operation give SBOs a solid financial basis to develop effective decisions and planning for the future (Ungureanu, 2014). Lin et al. (2020) and Mick and Shay (2016) confirmed that external and internal costs attributable to uncertainty are circumstantial factors that can impact business strategy. When executing an economic evaluation of an entity, business leaders must identify which cost categories require consideration in generating estimates of cost-effectiveness and decision uncertainty (Lomas et al., 2016). All 10 (100%) participants identified the benefits of performing a production cost analysis as a valuable MAS strategy in reviewing the strengths and weaknesses of activities within the organization. This finding is consistent with the conclusion of Burritt et al. (2019) when working towards complex sustainability and the value of fostering cleaner production practices. P1 and P5 highlighted the need to develop a proper cost strategy to assist in reviewing production cost. P2 stressed the importance of performing cost and effect analysis as a means of analyzing the decisions made by the organization. As a follow up, P2 further stated,

We are constantly thinking how are we performing. We verify if we are going to over-perform or under-perform. So extrapolating from what we know, we are

comparing results against two models. You pay money, and you expect something in return regardless if the condition is now or in the future.

P3 insinuated comparing actual production cost of each project with projected cost, manpower, and overhead needed to do a project. P3 further explained: “We have to analyze our cost using trend analysis and financial ratios. We need basically to evaluate our operation from month to month right now.” P4 added more details by checking and analyzing how much will be the cost for labor, gas, estimated energy needed, and then try to determine if the project is worth for us. P4 continued: “What's the profit margin on this project or is this just more work than we're going make a profit.” To amplify more on cost analysis as part of MAS strategies, P6 shared: “Our management accounting data file assist us in making decisions on selecting which is the most economical catering services or equipment rental providers that we should use for any of our projects.” P6 commented: “I think being aware of what all the costs are and other budgets allowed us to further grow in this industry.”

Consistent execution and performance of comparative analysis and financial ratios may set the framework for finding the association among product variables in determining the measures of generating revenue against forecasted sales, and actual expenditure results against projected expenses in making critical decisions for sustainable success. Faello (2015) concluded that financial ratios assist business owners and managers in decision-making. Financial ratio analysis is frequently applied financial metrics by professional practitioners considered as an effective MAS tool for decision-making when assessing the performance of the business (Delen, Kuzey, & Uyar, 2013).

As part of MAS strategies, practitioners used financial ratios to help explain the financial condition of a business's operations (Jezovita, 2015). Financial ratio analysis has emerged as an acceptable element of successful financial practices. P2 shared,

We are constantly thinking how are we performing. We verify if we are going to over-perform or under-perform. So extrapolating from what we know, we are comparing results against two models. We also apply financial ratio analysis and most recently, comparative market and business analysis.

P3 supported, "We have to analyze our cost using trend analysis and financial ratios. We need basically to evaluate our operation from month to month right now." P4 indicated: "We analyze our cashflow requirements, perform some of the ratio analyses (working capital, sales ratio, aging of receivables, account payable aging, or inventory analysis) with the help from our accountant." P4 further explained: "So what we do is well we analyze our profit and loss every month and we always go back to the year before and find out if a client hasn't been working with us and we reached out to them from the information, always clearing if there was an issue or something wrong with our services."

The key concept underlying financial ratio analysis is using ratios developed from accounting data (financial statements) to make comparisons and decisions for organizations of any size (Alo et al., 2016). Financial ratio analysis is a strategy that SBOs can use as an approach to improve productivity and profitability. As an effective tool to analyze and understand the financial condition of a firm, ratios can help predict and highlight the future of an organization (Oz & Yelkenci, 2015). A stakeholder should

be able to benchmark the probability of business success or failure by looking at the financial ratios of an organization (Dahmen & Rodríguez, 2014).

Trends in financial ratios exhibit how a firm is performing overtime in an upward or downward movement (Faello, 2015). Using comparative analysis of financial results, SBOs relied on trend in products and services to make administrative and financial decisions. P4 mentioned using price comparison of data offered by their competitors and expectations from studios when developing pricing for services. Nicolò (2020) suggested that experiential network knowledge and knowledge on the important factors about customers and competitors could impact the value of business relationships in uncertain foreign markets. For reviewing financial results, P4 indicated: “We used our accounting system to do variance analysis spreadsheets and smart spreadsheets that track for instance, project by project margin on a weekly basis.” P7 stated applying financial ratio analysis and most recently, comparative market and business analysis. P10 articulated looking at basic analytic or limited analytical resources which provided the trend in the amount of business that would be projected from quarter to quarter.

The results on trend analysis of accounts performed by P7 and P10 disclosed knowledge on possible increase or decrease in a financial period, which eventually influenced the preparation of the upcoming budget. P3 insinuated,

Using our internal management accounting system, we ask our staff for ideas.

And ultimately a couple of people formulate decisions after doing some comparative analysis of previous results. We also used cost comparison and trend analysis on a period to period case basis to look and review our operation.

P9 mentioned: “We look at projecting expenditures and manpower needed to do a project. We also apply financial ratio analysis and most recently, comparative market and business analysis.” Performing a comparative statement analysis as a MAS strategy helps to establish the understanding of financial and operating results of the firm at different periods or products and services. When performing comparative analysis, P2, P3, and P9 highlighted the need for aggressive monitoring of results involving products and services, production costs and overhead, and production time. Applying comparative analysis regularly may set the framework for establishing the association among product and service variables when determining the measures of income performance against forecast, and cost and expense performance against forecasted production cost and overhead in making critical decisions for continued success. P5 recommended that the key to an effective use of MAS is to keep internal information current whether the data pertains to the market trend, people or competitors. In Table 1, I illustrate the frequency at which participants mentioned the need for MAS strategy by monitoring and evaluation of projects and operation.

Table 1

Procedures to Monitor Production and Business Operation (Frequency)

Participant	Interview questions	Total number of references
P1	1, 2, 5, 6, 7	15
P2	1, 4, 5, 6, 7, 8	39
P3	1, 5, 6, 7, 8	20
P4	2, 4, 5, 6, 7, 8	25
P5	2, 5, 6, 7	15
P6	1, 4, 5, 6, 7	23
P7	1, 2, 5, 6, 7	35
P8	1, 5, 6, 7	23
P9	2, 4, 5, 7, 8	66
P10	1, 2, 4, 5, 6, 7	28

In many aspects, this theme aligns with the literature I found regarding the use and application of management accounting theories. All the strategies and processes identified in this study used for the success of the small businesses under review point to a clear indication of the integration of MAS strategies and processes that was necessary for SBOs to perform tasks in achieving the goals and objectives of the organization. The organizational practices I identified after analyzing data aligned with the literature I found about the successful management in an organizational transformation.

Archival document analysis. I reviewed the internal financial reports (archival document) displaying profitability and diverse project accomplishments associated with

the organizational strategic plan. My review of two entities' physical documents reflected an increased trend in revenue and profitable results. P5 posted over 10 percent increase in net profit in the past three years of operation. The cash and liquidity information (availability of current assets over current liabilities) of P7 were align with strategic plan following my examination of the internal financial report. Similar with P5, P7 displayed sufficient cash balance available to meet any obligation in several years of operation. Records of the financial transactions of a business such as books of accounts are useful instrument to make competent managerial decisions to increase profits (Annan, Doe, Anyamadu, & Ahiale, 2016). Furthermore, four (40%) SBOs provided physical documents confirming the use of MAS in developing strategies for decision-making. Proper recordkeeping such as consistent updating of cash flow was evident from the internal financial reports which set the foundation for implementing the key financial analysis for diversification. Proper record keeping is a positive driver for the success of small businesses (Annan et al., 2016). Orobia, Padachi, and Munene (2016) resounded the positive impact of financial records in making effective decisions using MAS.

Theme 2: Techniques to Anticipate Business Growth and Development Using Service Diversity

Another MAS success strategy of the SBOs was the ability to adopt growth and development strategies. An understanding of growth strategies that are necessary for continued success allowed SBOs to embrace processes, ideas, and plans that have the potential to increase, improve, or diversify operations. The growth and development strategy of this study focused on diversification using MAS. In many aspects, this theme

aligns and confirms with the literature I found regarding the foundation of CTMA. The organizational practices I identified after analyzing data aligned with the conceptual framework for this study. The level of creativity, knowledge, and ideal development skills of the SBOs is an asset for achieving competitive advantage through innovation (Prajogo et al., 2016). Small businesses can be more flexible in adapting their knowledge and resources, mainly human competencies, into innovative products or services (Martins & Fernandes, 2015). As an effective tool to analyze and understand the financial condition of a firm, ratios can help predict and highlight the future of an organization (Oz & Yelkenci, 2015). A stakeholder should be able to benchmark the probability of business success or failure by looking at the financial ratios of an organization (Dahmen & Rodríguez, 2014).

Focusing on diversification using MAS strategies allows SBOs to increase or redirect their attention to additional products and services for organizational success. All 10 (100%) participants discussed the strategy of planning for the future was what makes the business sustainable. Eight (80%) participants talked about predicting what is going to be beneficial in the future and how to stay one step ahead of the competitors by using diversification. As part of their diversification process, SBOs under review were able to expand business operations to include new product and services needed by their clients and patrons. P1 articulated using MAS strategy in deciding to form a non-profit subsidiary company to help promote and market the films produced by the production company. P2 strategized by creating another private equipment rental company which was a major support to the production company in terms of savings in production cost. P3

who was film producer noted: “We've got to focus on getting a good campaign program to encourage younger people and younger supporters to become our member because a lot of our present donors and supporters are now getting old and retiring.” P3 also added: “We got to get beyond what we're just doing here in California. And so using our management accounting system tool, we perform key performance evaluation and business analysis of other market territories.”

As an alternative, SBOs can make their brand into a unique and effective source of competitive advantage if they developed their brand identity (Muhonen, Hirvonen, & Laukkanen, 2017). P9 moved into a successful printing service diversity by offering franchise of the business. P9 noted: “One of the strategies I've used recently to diversify is the idea of franchising my business to other people who might be coming from a background in print production or print producing.” P9 continued: “The main purpose of this strategy is, of course, to generate more revenue for my business.” Dant and Grünhager (2014) stated that the franchising business model allows the franchisor to expand to a new business territory without being confronted with any barriers to entry, facing minimal financial or business risks, and providing an additional income channel to the entity. Entrepreneurs with more prior business experience identified and exploited more innovative and diverse opportunities (Block et al., 2017; Lin et al., 2020). In Table 2, I illustrated the frequency at which participants mentioned the need for MAS strategy through growth and development using product or service diversity.

Table 2

Techniques to Anticipate Business Growth and Development Using Service Diversity (Frequency)

Participant	Interview questions	Total number of references
P1	1, 2, 5, 6, 7	19
P2	1, 4, 5, 6, 7	39
P3	1, 4, 5, 6, 7, 8	23
P4	1,2, 4, 5, 7	25
P5	2, 3, 4, 5, 9	17
P6	1, 2, 5, 6, 7	26
P7	1, 2, 5, 6, 7, 9	37
P8	1, 2, 5, 6, 7	22
P9	4, 5, 6, 7, 8	57
P10	2, 5, 6, 7	26

Another practice offered by P2 was the continued building and maintaining a good relationship with customers, creditors, and competitors to benefit future success. Leaders of successful business organizations recognize the strategy involved in building and maintaining relationships (Nicolò, 2020; Xesha, Iwu, & Slabbert, 2014). Xesha et al. (2014) clarified the importance for business owners to approach strategizing efforts based on established relationships with stakeholders. P1, P2, P5, and P7 all shared that you start with the relationships that you have and the people that you want to work with or you

trust. You will know how to start a new business in those markets by having an excellent network.

Trust enhances an organization's ability to change effectively and efficiently that can facilitate the organization's competitive advantage (Fainshmidt & Frazier, 2017). P4 added,

There's so much competition and uncertainties. Try and make a positive relationship with other competitors. That's the only way you can communicate and address a problem when you're overbooked or need special services requested by our customers. Always assume that you need something or be short of your resources.

P7 mentioned: "Having a good relationship with the companies we service gives us a good idea of what their future project plans are, which helps us make decisions about our own company." P5 recommended that the key to an effective use of a MAS is to keep internal information current whether the collected data pertains to the market trend, people or competitors.

Archival document analysis. Regarding the techniques to anticipate business growth and development using service diversity, I reviewed the organizations' strategic planning manual (archival document) which included current and new product offerings of product and services to film production companies. I noted that business leaders did not only designed a strategic plan but consistently updated the document with project highlights and financial results. Further review of the organizations' strategic planning manual highlighted the stability, diversity, and success gained from projecting profits and

cash flow for the organization. The strategic approaches of the organizations were aligned to the need of using MAS tools when planning for expansion and diversification. As an effective tool to analyze and understand the financial condition of a firm leading to strategic planning, financial ratios can help predict and highlight the future of an organization (Oz & Yelkenci, 2015). A stakeholder should be able to benchmark the probability of business success or failure by looking at the financial ratios of an organization (Dahmen & Rodríguez, 2014). Application of MAS by implementing business analytics for planning and decision-making on internal cost management and operational control for performance measurement was an effective tool for competitive advantage.

Theme 3: Up-to-Date Information Technology System for Diversity

Technology decisions are fundamentally valuable to firms focused on innovation and diversification. Developments and continued augmentations in information technology system have assisted business leaders in the use of data to run business reports and processes for decision-making (Alaeddin et al., 2019; Appio et al., 2019; Jasim & Raewf, 2020; Relich & Pawlewski, 2018). Formulation of effective and high-quality decisions originating from MAS is possible to generate high quality results (Leitner, 2014). Kauffman, Liu, and Ma (2015) described how significant uncertainties related to decision-making on investment activity for information technology (IT) which is a problem that leaders have been apprehensive about for a long time. Uncertainties from technology can impact a firm's operational and transactional performance, technology standards and competition, and future market conditions. Ryu and Lee's

(2016) determined that other than recruiting highly qualified employees, developing information technology are important in improving the financial performance of small businesses.

All 10 (100%) participants acknowledged the value of keeping and maintaining information technology in their business operation. Information technology encompassed the participants accounting system, projects and social networking application, and electronic communication system. Nine (90%) of participants used information technology when applying MAS to generate prospective projects, product profitability, networking, and communication. P1, P3, P5, P6, P7, and P8 all mentioned the importance of their information technology system when dealing with networking and cross-service resources when searching for products and services or prospective projects online. P1 commented on how valuable the information technology to support the networking activity which was a huge factor in the firm's operation. P5 indicated that a lot of my business as an independent casting director is through word of mouth and networking using information technology. P6 contended that one of the MAS strategies in place was to network with fellow practitioners listed in the database of network service providers of ancillary services to the film industry to gain more diversity and opportunities. P8 shared, "The execution of MAS strategy entails an excellent information technology system when finding another partner or competitor from the list of providers that can find the time and resource to accommodate the service to my client."

Except for P5 and P9, eight (80%) members of the study population commented using information technology for communication through emails and regular team meetings. P2 shared,

We have an executive two-hour weekly finance meeting attended by myself, our chief operating officer, our controller, our head of originals as well as an executive producer, and the head of the production. We used a PowerPoint presentation and reports from our accounting system.

P4 added,

Using our advanced information technology, we performed our team analysis, that allows us to make a group decision to let go of the job or take on the feature or show that bid will be profitable upon us. My team also meet regularly to discuss our financial performance for the month and for the year.

P6 noted: “We load most of our data whether budgets, analysis, quotes, contracts, or proposals in “google doc” to provide access to my team members to alleviate delays and come up with quick actions.” This finding was consistent with the conceptual framework in that the SBOs were continuously striving to improve the performance of their organizations to remain competitive by implementing the latest information technology model. In Table 3, I illustrated the frequency at which participants mentioned the need for MAS strategies using up-to-date information technology system for diversity. Table 3 shows that there were 97 references to maintaining up-to-date information technology when using an effective MAS for diversification.

Table 3

Up-to-Date Information Technology System for Diversity (Frequency)

Participant	Interview questions	Total number of references
P1	1, 7, 8	8
P2	1, 7, 8	9
P3	1, 3, 7, 8, 9	12
P4	2, 3, 9	7
P5	1, 2, 3, 8, 9	8
P6	4, 5, 6, 7	12
P7	1, 2, 3, 6, 9	18
P8	1, 2, 3, 6, 8	9
P9	1, 2, 3, 7, 9	7
P10	4, 5, 6	7

P10 indicated using information technology to communicate online to present the financial reports, receivable aging, and payable reports, “I communicate once every two weeks to review with them what's going on such as our financial standing, cash flow, P&L and whatever other issues involving our operation.” A business organization is more likely to attain sustainability if accounting information system generates relevant, reliable, and up-to-date financial and non-financial information to management for decision-making (Ahmad & Al-Shbiel (2019); Bruwer & Yolande, 2015). The key to an effective use of a MAS is to keep accounting information system current and accurate

pertaining to the financial information, market trend, people or competitors (Bruwer & Yolande, 2015; Jasim & Raewf, 2020). The consensus of participants to achieve an effective use of a MAS was to keep the internal information system current involving the financial information, market trend, people or competitors.

Archival document analysis. I reviewed the information technology (IT) operation policies and procedures manual (archival document). My analysis of the physical document highlighted the requirement of an appropriate IT knowledge and training among support staff to improve business innovation and performance. I validated the business success and longevity after reviewing the organizations' IT operating policies and procedures manual at which participants used as the basis to apply MAS tools to develop strategies in decision-making. P7 included a project status program designed in house to alleviate access to product information, collections, and support the accounting information system of the organization. One notable observation was the speedy access of the participants to current information technology and infrastructure which demonstrated contribution to the business success. The IT operational policies and procedures manual focused on maintaining procedures to accommodate new business deals, project offerings and prospects through the organizations' websites and the accounting information system. A participant shared reliance on information technology to correspond with staff and clients on line using product offerings, prospects, financial reports and project analysis. Appio et al. (2019) and Relich and Pawlewski (2018) posited that developments and continued upliftment of the information technology system have assisted business leaders in the use of data to run business reports and processes for

decision-making. The development in information technology system had assisted business leaders in the use of data to access financial reports and applicable business information using MAS for decision-making (Alaeddin et al., 2019; Fuzi et al., 2019).

Theme 4: Measures to Understand Risks and Uncertainties in Decision-Making

SBOs' risk management function plays a critical role in monitoring and managing risks and uncertainties stemming from internal and external forces, which if not addressed properly and timely could affect the firm's profitability, success, or survival (Brustbauer, 2016; Burritt et al., 2019). If SBOs understand how to apply MAS strategies, their business operation is more likely to be successful in any environment, even during periods of uncertainty (Bellavitis et al., 2017; Vahlne et al., 2017). By implementing the attributes of MAS and addressing the divergence and fixity of uncertainties, an SBO can potentially attain sustainable competitive advantage. All 10 (100%) participants raised concerns about experiencing risks and uncertainties and using MAS strategies to minimize or eliminate the negative impact on their business operation. Seven (70%) participants made use of extensive professional expertise and experience in addressing uncertainties. For instance, P1 talked about having film bonds to assure all of film production in the past. P1 shared: "You're stuck trying to raise money for a project that is pretty much a finished product, but without that important necessity of the film bond to protect your ownership and rights, your film faced another uncertainty." P2 articulated: "It is our intelligence approach that allows us to understand the kind of risks that we are taking or not taking and whether or not those things are high-risk decisions or whether they're smart decisions. We say there are two possible outcomes if we keep, what we

have right now and say we're below compared to the models. So we can expect that we can be 30% below or 40% below, then we're going to have x amount of a shortfall. The higher the shortfall is, the scarier the situation will be. And the more we have to pound on the pavement or lower our prices or whatever alternative to address the shortfall.”

P3 talked about the expectation when doing business in another country. The political status and society of a country is a major contingency affecting operation. P3 indicated,

All the situation and condition in another country became those contingent factors that made us formulate and use our management accounting system to develop our strategy for the project. We have to learn how to adapt. We continue adapting to new rules and new regulations to the best we can. We treat the situation like a game that is changing all the time. The condition is not always consistent.

Boso, Oghazi, and Hultman (2017) indicated that small business use relationship networks in distant countries to accomplish insider position, overcome unexpected liabilities, and mitigate risks of failure. P3 insinuated of looking at other markets to diversify. Using market trend analysis of possible donors and supporters, P3 decided to translate marketing campaign programs into multiple languages.

Concerted communication, shared understanding, and transparency is fundamental to relationship integration factors in an organization that can help reduce risks and address uncertainties (Fayezi & Zomorodi, 2015). Close, collaborative, long-term relationships increase stakeholders' inclination to share risks and rewards (Prajogo & Sohal, 2013). P4 offered a way of addressing uncertainties, noting: “There's so much

competition and uncertainties. Try and make a positive relationship with competitors.

That's the only way you can communicate and address a problem say when you're overbooked or need special services requested by our customers. Always assume that you need something or be short of your resources.” P6 shared: “One of the management accounting strategies that I have been using that is helping me diversify and gain success is definitely management information that I used in networking and making sure I access my needed resources from fellow practitioners.”

The existence of uncertainty in purchasing and supply management added to the varying condition over time (Gadde & Wynstra, 2018). SBOs, like other business leaders are exposed in exerting efforts and skills in handling the consequences of uncertainty which impact the buyer-supplier relationships in the organization (Gadde & Wynstra, 2018). Gadde and Wynstra concluded that leaders could not evade uncertainty in managing the business operation. However, using MAS strategies and processes reduced the impact of certain types of risk or uncertainty, rather apply modification steps that can increase profitability and competitive advantage. All 10 (100%) of the study participants agreed with the position of Gadde and Wynstra (2018). The study participants demonstrated that with the availability of resources from MAS, they had developed and used internal resources, skills, and capabilities to sustain their businesses for longer than 5 years. P6 highlighted,

As a film producer, you do not only focus on the pre-production phase, but sometimes uncertain things happen in the production or sometimes things will happen in post-production that required us to come up with more funds than

originally planned. You can't really take pauses or stop as soon as the production starts. We're constantly keeping track of everything like cost and quality of services so in a way we're always ready for any contingency or uncertainties. Therefore, the impact of any uncertainty in making effective decisions is not that crucial in our operation because of the management accounting records.

P6 further suggested: “New phenomenon pushed many filmmakers to adjust and diversify to stay competitive in the film industry.

In many characteristics, this theme aligns and confirms with the literature I found regarding the foundation of CTMA. The organizational practices I identified after analyzing data aligned with the conceptual framework for this study. SBOs were continuously striving to improve the performance of their organizations to remain competitive by using MAS strategies.

P5 explained that by continuously updating their database, which includes the management accounting system allowed them to use appropriate information in making valuable decision to stay engage and profitable. Finally, P5 recommended that the key to an effective use of a MAS is to keep the internal information current whether the pertinent data relates to the market trend, people or competitors. In Table 4, I illustrated the frequency at which participants mentioned the need for MAS strategy by understanding risks and uncertainties in decision-making.

Table 4

Measures to Understand Risks and Uncertainties in Decision-Making (Frequency)

Participant	Interview questions	Total number of references
P1	2, 5, 7, 8	4
P2	2, 3, 5, 7	4
P3	2, 3, 5, 7, 8, 9	13
P4	2, 3, 5, 7	4
P5	2, 3, 5, 7, 8, 9	10
P6	5, 7, 8, 9	6
P7	2, 3, 5, 7, 8, 9	12
P8	2, 5, 7, 8, 9	8
P9	2, 5	2
P10	2, 5, 7, 8	6

Archival document analysis. I reviewed the strategic planning manual (archival document) shared by the business leaders containing strategic results and profitability validating the participants' abilities in addressing risks and uncertainties. My review of the physical document emphasized the use of MAS tools (comparing project results) to address the negative impact of risks and to identify opportunities beneficial to business operation. For instance, P5 strategic planning manual included legal and regulatory framework to ensure high standard of compliance with workers' union and governmental regulations. The physical document was also supported with emails of project proposals

and postings of project accomplishments displaying the consideration estimated by SBOs to address risks and uncertainties. Discussion emails, minutes, and memos validated participants' team discussion in addressing risks and uncertainties with competitors, suppliers, and other service providers. Gadde and Wynstra (2018) determined that business leaders could not avoid risk and uncertainty in managing the business operation. Further evaluation of selected firms' websites showed posting of other ancillary service offerings diverting from possible uncertainties but focusing on diversification of services aligned with the strategic plan of the organizations. All participants raised concerns about experiencing risks and uncertainties such as shortage of funds or manpower which validated the provision for contingences included in the strategic planning manual.

Findings Aligned with the Contingency Theory of Management Accounting

The CTMA framework can increase the understanding of the strategies that emerged from the data collected in this study. Otley (1980) developed CTMA to provide a plausible explanation for the different types of management accounting practices and tools business leaders may use in environments of operational and economic uncertainty. CTMA is a structure for management to measure the different procedures of handling information uncertainty, encouraging coordination among groups of decision-making participants and for potentially using MAS (Nielsen et al., 2015). To attain optimal business success, leaders should consider the contingent elements involving the operational environments when using management accounting tools (Otley, 1980).

Participant responses supported the conceptual framework for this study: CTMA. The findings of this study exhibited that all 10 (100%) SBOs considered the contingent

elements involving the operational environments and diversities in formulating strategies to attain optimal business success using MAS. Eight (80%) of the study participants acknowledged the importance of MAS in developing strategies when making decisions for competitive advantage and diversification. The outcomes from this study indicate the prevention of early failure and sustain growth beyond the first 5 years of operation. Business leaders can identify the best practices through the application of MAS in developing strategies, along with the operational and financial processes adopted by the organization. SBOs must address the challenge of diversification with an innovative approach after careful evaluation of the risks and uncertainties versus the gains using MAS. Scholars and practitioners have used CTMA to identify significant issues for assisting business leaders in adopting appropriate management accounting practices (Feeney & Pierce, 2016; Hutahayan, 2020).

All 10 (100%) participants recognized key elements of small films' management strategy intended to help low-budget film ventures achieve profitability while confronted with uncertainties by predicting results using data from the production environment. All 10 (100%) SBOs experienced contingencies as a business owner and used management accounting to alleviate the challenges of risks and uncertainties when formulating strategic decisions. Venturing into the business environment, where many uncertainties exist, can be a difficult task for entrepreneurs (Camenzuli & McKague, 2015; Hutahayan, 2020; Wang & Huang, 2015). McLaren et al. (2016) postulated that to understand the process of CTMA, business owners should not ignore the technical characteristics of

change and external uncertainties but must unilaterally include in the analytical processes.

The research findings and the significance of the study were consistent with the recommendations from Shields and Shelleman (2016) and Pedroso and Gomes (2020). The performance framework for small businesses includes an in-depth assessment of strategies to match the contingent condition of the business organization while maintaining competitiveness and sustainability using MAS (Shields & Shelleman, 2016). The perceptions of business climate vary across business owners, depending on their firms' sector and stages of development. Burns and Stalker (1961) explained that management accounting practices differ from one organization to another due to differences in organizations' environment, sizes, and sectors. In principle, the leadership of an organization will implement the organization's management accounting practices. The main concern of business leaders is engaging in a profitable, sustainable and competitive business (Rule & Tskhay, 2014; Waldman & Bowen, 2016).

Findings Aligned with Existing Literature

The themes discovered in the research findings were consistent with information collected from the literature review. The findings in this study might assist practitioners and address the gap in the literature regarding the use of MAS strategies to assist leaders of ancillary service providers towards business diversification. Addressing the gaps in the existing literature concerning the management accounting skills required for SBOs to succeed in diversifying business operation is significant (Naia et al., 2014; Ammar & Bougheaea, 2019). All 10 (100%) of the study participants blended the use of MAS tools

that best applied to the different and unique product and services they offered in the film industry. Motoyama and Hui (2015) indicated that the perceptions of business climate vary across business owners, depending on their firms' sectors and stages of development.

Shields and Shelleman (2016) and Pedroso and Gomes, 2020 provided that MAS refers to the methodical use of management accounting to accomplish organizational goals. Regular and repeated application of MAS tools were applied by nine (90%) of the study participants. The sole role of the SBO is to act as the decision-maker and generate the strategic decisions that will impact the performance of the organization (Francioni et al., 2015). The strategy and direction of the organization is influenced by the talent and business proficiencies of the SBO (Francioni et al., 2015). Karadag (2015) added that SBOs would encounter the challenges of operational uncertainties resulting from poor financial management that eventually can contribute to failures in SMEs. However, Shields and Shelleman (2016) and Hutahayan, 2020) justified that repeated use of the MAS to evaluate product or service profitability and to measure customer profitability has a major positive impact on return on investment.

By implementing the attributes of MAS and addressing the divergence and fixity of uncertainties, SBOs can potentially attain sustainable competitive advantage. The most common tools include (a) ratio analysis, (b) comparative analysis of financial statement, (c) trend analysis, (d) common size analysis, and (e) cash flow statement analysis (Collier, 2015). Other literature also postulates that sales, profit, and growth analyses are the common measurement of performance applicable to small businesses (Karadag, 2015;

Mazzarol, 2014; Patten & Patten, 2014; Veledar et al., 2020). Nine (90%) of participants applied financial trend analysis, product and service profitability, comparative analysis and budget, forecasting, and planning. Financial ratios are commonly used financial metrics by practitioners that are powerful tools for decision-making used when evaluating the performance of the business (Delen, Kuzey, & Uyar, 2013).

The findings from this study indicate the prevention of early failure and sustain growth beyond the first 5 years of operation. Business leaders can identify the best practices through the application of MAS in developing strategies, along with the operational and financial processes adopted by the organization. Though four themes emerged, each participant had some divergent elements in their strategies. There was a link between the findings in this study and existing literature published on small businesses and SBOs. Management accounting system is a valuable asset and tool to business decision-making processes (Pedroso & Gomes, 2020; Zafar et al., 2017). 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 which led to the development of MAS. All 10 (100%) SBOs supported the findings that the use of MAS and digitally uploaded data increased timeliness and availability of the information needed for decision-making. Furthermore, 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; Leitner, 2014). Profitability, firm growth, and diversity are challenges for small businesses (Haron et al., 2014). Alam and

Dubey (2014) and Jasim and Raewf (2020) asserted that one key to business success and survival is through innovation.

Applications to Professional Practice

The most significant contribution from the study findings may be the identification of the MAS strategies SBOs utilize to achieve diversification and sustainable growth. Recognizing the best practices that SBOs need to address uncertainties and increase diversity may prove instrumental for organizational success. Business leaders may be able to cultivate valuable workplace practice to improve business performance by considering the research findings within this study. The crucial role in ensuring the continued firm competitiveness, formulating strategies, and monitoring the execution has caused the SBOs to become increasingly prominent (de Abreu & Alcântara, 2015). SBOs may attain insights about the internal issues, external challenges, and risks involved in business diversification and use of strategies provided to reduce the vulnerabilities.

Collaborative communication, dialogue, mutual understanding, and transparency are fundamental to relationship integration efforts in organizations that help reduce risks (Fayezi & Zomorodi, 2015; Nicolò, 2020). SBOs must be assertive to deal with the risks involved in uncertainties when developing strategic decisions. Block et al. (2017) found that being innovative had a positive effect on both business performance and firm survival. For instance, Zulu-Chisanga et al. (2016) and Lin et al. (2020) found that new product success as part of diversity strengthened the organization innovativeness and financial performance. A clear understanding of implementing MAS tools may allow

SBOs to evaluate risks and the economic consequences of formulating their decisions within the organizations. SBOs can identify investment opportunities and aid in making sound decisions using MAS for continued success.

In my findings, I introduced potential applications to professional best practice by detecting the gap that existed between the relationship of MAS and strategic business decision when addressing signs of failures in business performance. The emerging themes from the study included information on the relevance and use of MAS tools to develop strategies required to manage a successful business diversification. The findings of this study are rooted in SBOs who provide ancillary services to the film industry and use financial and non-financial information to demonstrate the connection between business decisions and activities. From the monitoring and evaluation perspective, the use of historical financial data and trend analysis may allow SBOs to follow the movements of each project or group of products. Using financial and trend analysis can help SBOs determine future performance for continued productivity or more product diversification consideration. The systematic approach to measuring the performance of operational activities through the production analysis framework may allow SBOs to measure the effectiveness of their business decisions. Consistent execution and performance of comparative analysis may set the framework for finding the association among product variables in determining the measures of generating revenue against forecasted sales, and actual expenditure results against projected expenses in making critical decisions for sustainable success.

The results from this study might provide an additional resource for SBOs to use in approaching potential risks and uncertainties within their organization. SBOs may also apply the findings from this qualitative case study to identify the methods to exploit on firm characteristics that can facilitate competitive advantage through business diversification. Business leaders may use the results of this study to address uncertainties and improve business practices in small businesses diversification. Understanding the relationship between trend analysis, projections, and estimates involving budgets and measurement of financial performance may help business leaders improve their decision-making process and increase the likelihood of successful operation.

Furthermore, business leaders can use the results of this study to evaluate the procedures involved in financial planning and the importance of using budgets for planning and control. The outcomes of the study may contribute to any industry and educational research. Awareness on the use of strategic operational tools that connect the financial and non-financial information in implementing business decisions may pave the way for business leaders to take advantage of the frameworks that contribute to a better appreciation of the MAS strategies in making clear and accurate decisions.

Implications for Social Change

The results of this study may help SBOs of motion picture ancillary service providers to be aware of the importance of using MAS strategies for business diversification in California. SBOs who implement MAS can achieve sustainable growth for the local business community and consequently contribute to the economic progress of the country. As noted by Koens and Thomas (2015) and Nwobu et al., (2015), the

overall health and welfare of the society are dependent upon the contribution of SBOs in the form of employment and taxes that sustain the economic outcomes of the community. Leaders of small businesses has a major role in contributing to the economic sustainability of the society (Neagu, 2016). Local societies expect business owners to balance business performance, sustain and improve employee wellbeing in parallel with contributing to the social needs and welfare (Krainz, 2015). Business organizations must not only stabilize business objectives and operation but be mindful of social needs as deemed necessary in the local community (Lin et al., 2020; Yang, Huang, Huang, & Huang, 2016). Applying the learnings from the knowledge accumulated involving MAS strategies can help business leaders improve the firm's overall competitive advantage (Brookschenhall et al., 2014; Lin et al., 2020). Data from this study may affect societal change by enhancing job creation arising from business expansion.

The possibility of economic growth through fewer business failures has the potential for a positive effect on society and the overall economy. Small business longevity and growth attributable to innovation initiatives and increase firms' competitiveness could lead to the prosperity of local economies and communities (Castaño et al., 2016). With the potential increase of continuous economic activity as businesses become sustainable, the increases in tax revenues can strengthen the societal frameworks of California. Furthermore, a decline in unemployment rates stemming from the enhanced financial health of small businesses after using MAS is visibly a contributor to positive social change (Healy et al., 2014; Kim et al., 2015). Financially viable and productive small businesses may continue to generate additional jobs, facilitating the

sustainability of the economic health and welfare of local communities. The outcome of this study may be useful to reduce business failures and job losses by assisting SBOs enhance the financial health of small businesses using MAS.

Recommendations for Action

The findings from this study suggested that SBOs who provide ancillary services in the film industry can use the identified strategies and processes to implement MAS to address uncertainties for business diversification. The implementation of MAS when developing strategies and processes can assist SBOs in making critical financial decisions for continued success. As their business grows and matures, SBOs should learn to incorporate MAS by reviewing their organization's budget process and consider expanding the types and complexity of their budgets. SBOs need to assess the current financial condition using internal financial reports to determine their challenges then learn to modify strategies and solutions as applicable. Applying MAS as an integral part of planning and strategic processes is valuable and essential for businesses' performance (Brinckmann & Kim, 2015; Hofer et al., 2015; Karadag, 2015; Wei & Yao, 2020). Planning based on MAS is an important procedure used in business projections, budget preparation and cash flow analysis used in most organizations. While the findings of this study were generated from the conditions of SBOs involved in the film industry, other sectors can embrace the strategies and processes identified and apply them to the conditions in their business environment to address uncertainties and for continued success. Economic developers and others in local and state government can use the results of this study to assist SBOs. These officials can help small businesses succeed by

emphasizing the importance of MAS and the significant role of MAS tools such as budgeting and financial planning in that process. In a similar way, business educators, trainers, and consultants can help small business leaders understand the relationship between effective financial planning and financial performance. Providing information and training to small business leaders on how to implement better planning and budgeting practices can improve their businesses' financial performance and likelihood of success.

The results of this study indicate that SBOs should use analytical skills when attempting to deal with uncertainties and diversification. For instance, (a) be aware of cash flow status, (b) be flexible and open-minded, (c) communicate consistently with staff, customers, suppliers, and other service providers, (d) hiring of skilled employees, and (e) staying connected with other stakeholders. SBOs must expand their knowledge and establish which MAS strategies are suitable for their business model. Another recommendation involves developing monitoring guidelines by establishing key indicators to assess the impacts of the implemented MAS strategies. Strategic planning and preparation will allow SBOs to confront any uncertainties and remain aligned with the organization's strategic goals. Furthermore, careful attention should be placed on the financial and operational processes identified in the study. As the critical necessity of this study, the SBO's need is to improve the effectiveness and efficiencies by prioritizing the production of up to date financial statements for sound decision-making and continued success.

Recommendations for Further Research

The findings of my study may contribute to completed and future research involving best practices needed by SBOs to employ MAS tools for effective resource management and strategic decision-making. A limitation in this study was the small size of research participants in which the outcome may not apply to a wider population. Although I was able to reach data saturation with a sample size of 10 participants, I would recommend future research to take place in other geographical locations, other industries, and other business environments. Further researches may include multiple SBOs situated in different regions across the world. Future research can consist of a multiple case study approach for a broader focus on the phenomenon and the exploration of other sectors.

Furthermore, I would also recommend a study to explore the financial implication of not applying MAS tools to achieve sound strategies and processes in implementing financial analysis for continued business success. Subsequent research might include an examination of the timing, scale, and usage of financial and non-financial information. Thematically, my study findings showed a need for SBOs to be champions of their organizations' MAS initiatives. SBOs should promote a positive outlook on the application of MAS tools to address uncertainties during business diversification.

I recommend a quantitative or mixed-method study to complement the findings of this qualitative study and the evaluation of the effectiveness of managerial strategies. Quantitative researchers may examine the extent and nature of the relationship between multiple sample size. Expanding the targeted population to include a larger geographic

area and use a random sampling method rather than a selective sample may result in effective conclusive results. For instance, future researchers could develop a standardized survey for measuring budget planning and financial performance. As noted in the literature review, no standard measure for budget planning exists.

Researchers could focus on the effect of instituting MAS tools when addressing uncertainties or developing decisions on business diversification. Business leaders may maximize performance and improve the reliability of information for analytical processes by maintaining a working knowledge and active role in implementing MAS. Further study should analyze the role of MAS in other transition and post-transition industries in order to understand the level of MAS development and value in greater depth. The adaptation and flexibility to changes in the environment, and the effect of MAS information on organizations' performance as a by-product of strategic decision-making warrant an in-depth study.

Reflections

My experience within the DBA Doctoral study process had been challenging yet rewarding. I entered the program expecting to complete coursework, just to discover that the dissertation process was cumbersome and spherical, which required attention to detail, patience, flexibility, and extensive communication skills. As part of my personal aspiration to see SBOs succeed, I developed a profound interest in exploring the strategies to attain continued success and establish competitive advantage. Personal experience and the review of the literature confirmed my belief that there was a positive benefit when using MAS tools in developing strategies for decision-making. My

perception about the relationship between the proper application of MAS and the financial performance of a business entity were more tenuous, until the research study added to my knowledge about the role of management accounting tools to promote diversification in small business. I gained a deeper understanding of when and how to apply MAS strategies that are necessary for implementing financial and non-financial analysis for business success through diversification. As a practitioner, I gained useful insights about the strategies that contributed to continued success of the organization under review. My study afforded me to understand first-hand the challenges and obstacles confronted by many SBOs. As an educator, I strengthened my understanding on the importance of training and education and the extensive benefit knowing MAS application. The results of my study were well rewarding to confirm that the potential to drive positive results when making changes in operational behavior can be developed using MAS tools. The most gratifying experience for me was to validate that MAS strategies is a valuable factor in developing sound decisions for the small business owners. I can now fully appreciate the value of what was involved in a doctoral research work and the potential impacts to social change. Through the DBA process, I became more mindful of the concept of positive social change. The emphasis on positive social change affects those within the program, but more notably, the course affects those who completed the program.

Conclusion

The purpose of this qualitative multiple case study was to explore MAS strategies leaders of ancillary service providers use for business diversification. Employing

semistructured interview procedures with open-ended questions and review of organizations' websites, I collected and triangulated data to answer the research question. High risks and challenges discourage SBOs from venturing to a new environment and causing failures to deal with problems attributable to uncertainties. The findings of this study show the results of strategic and innovative application of MAS tools to maintain and improve business performance. SBOs should establish procedures as a sound basis for the examination of trends, comparison of budget estimates versus actual, and improving processes. Using MAS to measure whether or not decisions made are consistent with appropriate benchmarks while eluding the negative impact of risks and uncertainties was a valuable result of this study.

Four main themes emerged after I completed the transcription, member checking, and data triangulation to address the research question: (a) monitoring and evaluation of projects and operation, (b) growth and development using service diversity, (c) developing information technology for diversity, and (d) understanding risks and uncertainties in decision-making. The themes discovered in the research findings were consistent with information collected from the literature review. The outcomes of this study show that SBOs should use MAS tools in developing strategies for decision-making involving diversification for business success. Furthermore, the findings from this study indicate achieving sustainable growth when business owners use MAS tools in developing strategies for decision-making.

Business leaders should identify the best decision using MAS involving the operational and financial processes adopted by the organization. The results of my study

illustrate a need for SBOs to understand all aspects of MAS, by maintaining accurate financial data needed for information collection, analysis, and reporting. Business owners must take the initiative to identify innovative opportunities through service diversification after careful evaluation of the risks versus the gains using MAS. Finally, SBOs must embrace the implementation of MAS to address risks and uncertainties by analyzing all aspects of alternatives and opportunities leading to successful diversification outlined in this study.

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Appendix: Interview Protocol

Introduction: Welcome the participant and explain that the scope of the interview is to collect data regarding the main research question and sub-questions.

1. Introduce self to participant(s).
2. Present consent form, go over contents, and answer questions and concerns of participant(s).
3. Give participant copy of consent form.
4. Turn on recording device.
5. Follow procedure to introduce participant(s) with pseudonym/coded identification; note the date and time.
6. Begin interview with question #1; follow through to final question.
7. Follow up with additional questions.
8. End interview sequence; discuss member-checking with participant(s).
9. Thank the participant(s) for their part in the study. Reiterate contact numbers for follow up questions and concerns from participants.
10. End protocol.

Main Research Question: What MAS strategies do leaders of ancillary service providers use for business diversification?

Interview Questions:

1. What MAS strategies do you use to increase business diversification?
2. What contingent factors contributed towards formation of an effective MAS?
3. What MAS practices do you use to mitigate external environment challenges to business diversification?

4. What information technology control systems do you use for efficient management accounting?
5. How do you use MAS to manage information uncertainty?
6. How do you use MAS to foster interaction amongst decisions makers for business diversification?
7. How do you use MAS as a tool for decision-making for diversification?
8. How can business leaders use MAS to increase business growth?
9. What more can you add regarding this study?