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Walden University 2020

Abstract

Bidding Strategies for Winning Construction Bids in South Africa

by

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MBA, American InterContinental University, 2014

BSc, Fourah Bay College, University of Sierra Leone, 1992

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

Student ID: A00531430

January 2020

Abstract

The failure of small business managers to understand various bidding strategies leads to losing construction bids. The lack of management skills, limited access to markets, weak customer relationships, lack of appropriate technology, and government bureaucracy are problems small business managers face when preparing to bid for construction contracts. The purpose of this qualitative multiple case study was to explore bidding strategies small and medium enterprise business managers use to win construction bids. The participants comprised 5 business owners of small- and medium-sized construction enterprises in Johannesburg, South Africa. The conceptual framework was the theory of constraints. Data were collected using semistructured interviews, direct observation, and company documents. The data analysis technique was the thematic analysis. The 7 themes that emerged from the data were basic bidding principles, factors of success, estimating accuracy, market conditions and competition, efficiency and specialization, highlight past projects, and technology. Business owners may use the results of this study to identify and implement new strategies for successful bids. The implications for positive social change include the potential to provide social services for residents of local communities through increases in tax revenues from growth in the local economies.

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Dedication

I dedicate this study to my late dad, Mr. Geoerge Lamin Vandi, and my mother, Mrs. Abie Vandi. Your passion for acquiring knowledge and education inspired me to pursue this higher education.

Acknowledgments

I must, first of all, thank God Almighty for keeping me alive and given me the strength to go through this academic exercise successfully. To my doctoral committee chair, Dr. Michael Lavelle, I want to say special thanks for your guidance, support, and timely feedback. I would also like to thank Dr. Gregory Uche, my second committee member, for your timely feedback and notable suggestions in the review process. Let me also thank Dr. Matthew P. Knight, university research reviewer, for your patience and absolute dedication to detail in this study. Your passion for accuracy gives me great pride in the outcome of this study. I would also like to recognize Dr. Susan Davis, Director of the Doctor of Business Administration program, for your leadership.

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1: Foundation of the Study

Small construction businesses constitute an integral part of the South African economy, and they contribute immensely to the increase in gross domestic product, poverty reduction, and stimulating job growth (Beck, Demirgüç-Kunt, & Singer, 2013). Because small and medium enterprises (SMEs) involve almost 97.5% of all registered businesses in South Africa, they are an essential instrument for the creation of sustainable jobs (Ahiawodzi & Adade, 2012). Ahiawodzi and Adade (2012) stated that in South Africa, SMEs contribute between 52% and 57% of the gross domestic product and provide about 61% of employment. In South Africa, construction SMEs have a crucial role to play in stimulating growth, generating employment, and contributing to poverty alleviation (Aigbavboa & Thwala, 2014). With their significant contributions to economic growth, SMEs in South Africa still encounter several challenges that inhibit entrepreneurial growth (Aigbavboa & Thwala, 2014).

Background of the Problem

The failure rate of small businesses in South Africa was between 70% and 80% in 2007 (Aigbavboa & Thwala, 2014). The problems small businesses encounter are numerous and include environmental, financial, or managerial issues. There is a lack of management skills, problems with finance and obtaining credit, limits to access to markets and developing relationships with customers, lack of appropriate technology, low production capacity, limited recognition by large companies, government bureaucracy, and insufficient support for the role SMEs play in economic development (Aigbavboa & Thwala, 2014). The instruments for economic growth and development are SMEs.

Aigbavboa and Thwala (2014) explained that small business enterprises have not been able to advance because of poor management knowledge and practices, lack of a transparent organization set up, insufficient entrepreneurial skills, absence of a strategic business plan, and the issue of inappropriate time or delay in budget implementation as a factor constraining investment and trade decision.

Problem Statement

SME business owners in most countries set up their businesses as pillars of economic growth, employment, and income generation (Akinsola & Ikhide, 2019). SMEs make up more than 90% of private enterprises and account for more than 50% of employment and of gross domestic product in most African nations (Simo Kengne, 2016). The lack of growth in some SMEs has had a negative effect on South Africa (Amoah-Mensah, 2013). The general business problem is that some construction SMEs do not gain new work, which could lead to small businesses' failure. The specific business problem is that some SMEs business managers lack bidding strategies to win construction bids.

Purpose Statement

The purpose of the qualitative multiple case study was to explore bidding strategies SME business managers use to win construction bids. The target population comprised general managers, financial managers, and project managers of five SMEs in the construction business located in Johannesburg, South Africa, that have a history of successful bidding on construction contracts. Implications for potential positive social change may include helping SMEs win contracts, which in turn could help to improve the

livelihoods of the owners, their employees, local people, communities, and possibly the economy of South Africa.

Nature of the Study

I used a qualitative method for the study. Exploring bidding strategies SMEs business managers use to win construction contract bids to drive business growth required in-depth interviews with those managers who have a successful experience in bidding for construction contracts. The qualitative method is useful to gain insight into the participants' experiences that cannot be measured by variables (Almalki, 2016). When identifying and interpreting experience, quantitative methods are not appropriate because they cannot be used in exploring different situations that involve multiple levels, and have dynamic, and symbolic components (Turner, Cardinal, & Burton, 2017). Researchers combine quantitative and qualitative research techniques when it comes to the mixed methods approach (Almalki, 2016). Using the mixed methods approach, researchers combine the quantitative and qualitative research techniques, methods, approaches, concepts, or language into a single study or set of related studies (Almalki, 2016). The purpose of this study was not to examine or compare variables, relationships, or differences, and therefore the mixed methods approach was not appropriate.

Multiple case study design was appropriate for the study. Researchers use case study designs in many situations to collect information about an individual, group, organizational, social, political, and related phenomena (Yin, 2018). A multiple case study contains more than one case unit that involves several sites (Yin, 2018). Researchers use phenomenology to explore the meaning of participants lived experiences

(Moustakas, 1994). The purpose of the study was not to explore lived experiences, and therefore, phenomenology was not appropriate. Ethnography includes a cultural dimension, which was not appropriate for the study because the research focus was not to observe or interact with the study's participants in their real-life environment (Hoolachan, 2015).

Research Question

The overarching research question for this study was:

RQ: What bidding strategies do SME business owners use to win construction contracts?

Interview Questions

- 1. What strategies do you use to win construction bids?
- 2. How do you assess the effectiveness of the strategies for winning construction contract bids?
- 3. What is the maximum contract threshold you bid for annually?
- 4. What are the formal or informal networks that you rely on to win bids?
- 5. What barriers did you encounter in implementing the strategies from winning construction bids?
- 6. How did you address the barriers to winning construction bids?
- 7. How do you identify projects to bid on?
- 8. How do you develop construction bids?
- 9. How do you submit construction bids?
- 10. What other information can you provide on how to bid contracts successfully?

Conceptual Framework

The conceptual framework supporting the study was the theory of constraints (TOC). Goldratt developed the TOC in 1984. According to Ikeziri, Souza, Gupta, and de Camargo Fiorini (2018), when business owners see constraints as business obstacles, they may not attain their desired goals. The key propositions underlying the TOC are that constraints, like bottlenecks in production, are the main obstacles that hinder a small business owner's achievement and management's objectives. The application of the TOC can support the study in that by understanding constraints somewhere in the bidding process and better managing these bottlenecks to create an efficient process flow, small-and medium-sized construction enterprises can develop strategies to use to win construction bids.

Operational Definitions

Business failure: A business failure results from the inability of the business owner to make a net profit for the previous 2 years, which may and usually does conclude in business dissolution (Frid, 2015; Sheng & Lan, 2018).

Business practices: Business practice involves all activities of operation that promote a business's desired results to output (Balfanz & Verran, 2015).

Entrepreneurship: Entrepreneurship is taking the risk of time and money in the creation of new products or services (Andersson & Evers, 2015; Robinson & Stubberud, 2015).

Entrepreneurial skills: Entrepreneurial skills are the managerial capabilities such as planning, decision-making ability in marketing and accounting, innovation, risk taking, with persistence to succeed (Kollmann, Stockmann, & Kensbock, (2017).

Indigenous group: Indigenous groups are peoples defined in the national and international world as having a set of specific rights grounded in their historical ties with certain territories (Torres, 2016).

Innovation: Innovation occurs when business owners apply a different mindset to change work routine and job functions to make a positive impact on the business (Lin, Wu, & Cheng, 2015; Banu, Dumitrescu, Purcarea, & Isarescu, 2016).

Knowledge management: Knowledge management is the methodical process of capturing, coding, and managing information for improved interaction and replication in business (Alawneh & Aouf, 2017).

Performance-bond: A performance-bond is an instrument executed, after award by a successful bidder that protects the public entity from loss because of the inability to complete the contract (Small Business Administration [SBA], 2016).

Small business: A small business is a firm with fewer than 500 employees (Small Business Administration [SBA], 2016).

Assumptions, Limitations, and Delimitations

Assumptions

Assumptions are the evidence that is appropriate to the study that the researcher cannot substantiate or has little control over (Nkwake & Morrow, 2016). According to Leedy and Ormrod (2015), the researcher should not neglect the assumptions set out for

the research. To guide my focus to explore the strategies for winning construction bids in South Africa, I had four assumptions. They included that there were strategies that drove people to establish their businesses, participants were accurate in their responses concerning the strategies, a sample of small businesses was adequate to reflect an appropriate sample of the population, and each respondent willingly accepted to participate in the research process. The honesty and accuracy of the responses from participants can help establish reliability and validity in the findings of research (Marshall & Rossman, 2016).

Limitations

Limitations are the potential weaknesses of a study that might help in the evaluation and analysis of the research (Farooq, 2017). Even though the research might be useful in understanding strategies for winning construction bids in South Africa, several limitations existed in the study. The limitations of this study included that the views of the participants might not represent the views of many small business owners in South Africa, each participant's unique situation might lead to their successes, and the participants may not provide sufficient information.

Delimitations

Delimitations are restrictions that researchers enforce to focus on the scope of a study (Marshall & Rossman, 2016). The geographical location includes small businesses in Johannesburg, South Africa. For the scope of this study, I selected five SMEs doing business in Johannesburg. The delimitation was to focus the study on small businesses as defined by the SBA based on annual sales and the number of employees.

Significance of the Study

SMEs are vital in most economies, which necessitates exploring the strategies that will allow more to succeed. The findings and recommendations from the study could be useful as an opportunity for business managers to employ new strategies that could help them win contract bids. The results of the study can be of value to small businesses trying to win bids by raising awareness of strategies that could help some of the failing small-and medium-sized construction businesses in Johannesburg, South Africa. The results of the study have the potential to contribute to the practice and knowledge in the small business environment by offering an understanding of the factors needed for the sustainability of the operation.

(a) Contribution to Business Practice

By identifying the strategies needed for business success, the study may assist new start-up business owners in preparing adequately before embarking on business operations. Business owners may gain information to support efforts to improve the economy, generate employment, alleviate poverty, and enhance support activities for small businesses. SME managers can gain insights into the strategies other business managers use to increase the effectiveness of their bidding processes and their profitability.

Implications for Social Change

The survival of small businesses and the growth of the economy in South Africa is a potential implication for positive social change. Business owners may use the results of this study to identify and implement new strategies for successful bids, which may

directly affect all stakeholders. Additionally, the results of this study may positively affect communities and the South African economy.

A Review of the Professional and Academic Literature

The purpose of this qualitative multiple case study was to explore the strategies for winning construction bids in South Africa. In this section, I contrasted, compared, and summarized information from the professional and academic literature. The purpose of this professional and academic literature review was to consider previous studies related to this study. The literature review includes (a) historical contributions of small enterprises, (b) SME financing problems, (c) small business growth, (d) challenges SMEs face, (e) management skills, (f) determinants of SMEs growth, (g) technology, (h) SMEs failure, and (i) business environment in South Africa.

The following literature review consists of peer-reviewed articles I used for the study. The literature review covered the following sources: (a) peer-reviewed studies (a) websites, (b) dissertations, and (d) other educational books. The primary source of the full-text, scholarly, and peer-reviewed articles in this review was the Walden library databases. There is a need for researchers to carry out literature review to comprehend, evaluate, and blend existing information relating to the research topic (Shaikh & Karjaluoto, 2015).

Table 1 Source Material

Source	Outside 5 years of graduation date	Within 5 years of graduation date	Total
Peer-reviewed journal articles	20	141	161
Websites	0	2	2
Dissertations	0	4	4
Books	3	4	7
Total	23	151	174

Table 1 presents the information I collected from searching business and management databases in the Walden University Online Library. Of the 174 articles making up the literature review, 151 or 87% represent sources published within the last 5 years. I searched the following database: (a) ProQuest, (b) Emerald Management Journal, (c) Science Direct, (d) Business Source Complete, (e) government databases, (f) Google Scholar, (g) Sage Premier, and (h) SBA in South Africa. The keywords used in these database searches included *construction bids, ethics, proposals, entrepreneurial skills, small medium enterprises (SMEs)*, and *strategy*.

(b) The Theory of Constraints

The TOC was the fundamental theory underlying my research. Goldratt developed the TOC in 1984 to suggest on the principle that managers can recognize the weakest point in an organization to improve performance processes. The TOC has been one of the evolving philosophies to demonstrate how to manage organizations effectively

and comprises systems thinking and constraints management as assumptions (Ikeziri et al., 2018). Researchers focus on continuous improvement to enhance performance in an organization. Based on past studies researchers have conducted, using the TOC concepts will help in the implementation of a business strategy, which can benefit all stakeholders. Goldratt and Cox (1992) posited the value of using the TOC to implement a business strategy to achieve desired results. Ikeziri et al. (2018) endeavored to explain why business efforts fail by using the thinking processes of the TOC and provided insights on the effective implementation of business programs. Schilke (2014) reviewed the application of the TOC applications and reported on how dynamic capabilities positively influence a firm's competitive advantages.

Accordingly, a growing number of companies in South Africa and abroad are implementing the TOC-based operations management philosophy. According to Goldratt (1984), organizations such as a small business, having one or more constraints can prevent that system from achieving its goals to the greatest extent possible. Panizzolo (2016) explained the TOC as the process to assist managers in finding the constraints in their systems, guide them in the decision-making process, and systematically lessening the challenges. The key concept of the TOC is that constraints are the main obstacles that hinder small business owners' achievement and management's objectives (Simsit, Gunay, & Vayvay, 2014). Business owners and managers should, at the initial stage, identify constraints that have impact on the survival of their businesses (Akaeze & Akaeze, 2017).

The TOC is an example of an operations management approach successfully used in practice; however, it is not based on a scientific body of knowledge. Managers attempting to solve real-life structural problems have used the TOC (J. Q. Wang et al., 2014). Company leaders need to seek the next constraint continuously once a constraint breaks, and managers can use the TOC to maximize the system's performance (Naor & Coman, 2017). Naor and Coman (2017) posited that the three global measures identified for the TOC for evaluating organizational performance toward the goal of the company are throughput, inventory, and operating expense.

The introduction of TOC has helped improve the performance of some organizations. Goldratt and Cox introduced the TOC on the premise that a minuscule number of constraints prevent any organization from achieving its goals (Dalci & Kosan, 2012). Any organization management can improve its performance and move toward its goals by improving the weakest operating activity (J. Q. Wang et al., 2014). The TOC has several steps, beginning with identifying the constraint and other processes focusing on the capacity of the constraint (Dalci & Kosan, 2012). The TOC is a system improvement approach focused on the way constraints limit the system performance and supports a cause-and-effect approach to problem-solving to improve the overall system performance (Dalci & Kosan, 2012). The theory applies to many organizations, ranging from big multinational enterprises to small local companies, and its methodology can help small business managers identify and remedy the main cause of performance problems.

Some constraints have a major effect, and business owners need to grow with them. In the analysis of the TOC, small business owners have a few major constraints that keep complex processes such as business functions from reaching optimized performance concerning winning contracts (Akaeze & Akaeze, 2017). The small business owners must identify the constraints that affect their business and work to ease their impact or remove these constraints (Hakkak, Hajizadeh Gashti, & Nawaser, 2014). By using the TOC, small business owners can reduce the consequences of these limitations as the owners identify these limitations to guide in continuously improving company performance (Maes & Sels, 2014). In the identification of these limitations to develop a strategy, small business owners can mitigate the challenges (Simsit et al., 2014). The TOC focuses on small business owners not spending time and wasting resources on problems that are not critical to the success of the company (Simsit et al., 2014).

Small business owners need to improve profitability, which will require the elimination or reduction of business constraints. According to Goldratt (1984), a business constraint is anything that interferes with the profitability of a company or business endeavor. Common business constraints include time, financial concerns, management, and regulations (Simsit et al., 2014). The main constraint in the South African construction industry is a lack of strategies and failure to win contract bids. Thorough understanding of the constraint and analysis of the problem is a way forward to finding the solution.

To manage constraints, managers must have an inquisitive mind, ask questions, and actively seek answers. If a company aims at achieving higher profits, it has to focus on the impediments to get the constraints out of the way. Goldratt (1984) suggested five focusing steps for managing resource and market constraints: (a) identify the system's

constraint(s), (b) decide how to exploit the system's constraint(s), (c) elevate the system's constraint(s), (d) decide on the goal of the system, and (e) determine the system's performance measures.

Identify the system's constraint(s). In identifying the constraints of the system, small business owners must be proactive in preventing them from reaching their full potential and analyze the weaknesses that limit their performance and output as a business. The weakest point or constraint defines the maximum capacity of the entire system (Simsit et al., 2014). The weakest point can have a great impact on the overall performance of the organization in winning bids.

Decide how to exploit the system. Small business owners make the task a nonconstraint by reducing the load or demand on it, for example, by bidding on small contracts within a specific threshold. This constraint is the most expensive step in a system or process because it restricts the throughput of the entire system (Hakkak et al., 2014). Because of the common failures, small business owners need to identify the constraint so that they will be able to discover future constraints. When business owners can lessen a constraint, it results in the emergence of a new constraint; thus, any work done toward solving a future constraint is a waste until the current constraint is removed (Hakkak et al., 2014).

Elevate the system's constraint(s). To increase the chances of winning bids, managers must adhere to standard processes when bidding for contracts. These processes will help reduce the load or demand on preparing accurately in responding to a request for proposal or invitation for bids. Small business owners have these internal and external

constraints (Schilke, 2014). The major tenets of the TOC are key to relating local decisions to the performance of the entire system (Opata, 2015). Childs (2017) advocated that all improvement opportunities be prioritized by their effect on the measure such as throughput, for which the only limit on how high it can increase is the market size.

Decide on the goal of the system. The goal is to figure out options and strategies to identify and win bids. Small business owners must study the system to understand it in principle and comprehend how all the pieces go together, even if the small business owners have never won construction bids (Schilke, 2014). Many small businesses are competing for small construction bids, but the strategies and the goals of the system to adhere to all bidding rules will determine the contract awardee.

Determine the system's performance measures. To determine the performance of the system, small business owners must look for work-in-process such as various thresholds of contracts, the types of contracts available, and stakeholder expectation of the contracts (Simsit et al., 2014). Understanding the past performance and areas that need improvement should be based on the analysis of previous performance indicators (Simsit et al., 2014).

The focus of the TOC is alleviating constraints, which improve the speed of production and service delivery (Goldratt, 1984). Alleviating constraints will reduce waste, increase production volume, and improve quality by reducing the variation of the production process (Goldratt, 1984). Small business owners need to recognize that system constraints limit the performance of a system, and thus, Goldratt suggested a unique approach to managing these constraints (Kaptein, 2015).

The small business owner should begin by evaluating the constraint because every business or system has a constraint preventing it from reaching its full potential, which can be a weakness that limits its performance and output (Hakkak et al., 2014). In applying the TOC to this research, I expected the suggestions made by Goldratt (1984) would allow managers to adequately explore strategies small- and medium-sized construction enterprises use to win construction bids. In recent research on applications of the TOC to small businesses, Schilke (2014) illustrated how the TOC applies to small business organizations like health centers and manufacturing companies. Childs (2017) used the TOC to explore strategies that logistics leaders used to implement process improvement in the aviation industry. In the study, Childs elaborated on how organizations fail to achieve the expected savings and return on investment for process improvement because of leaders' inabilities and experiences in integrating critical success factors into process improvement.

The TOC serves as the basis for building a collaborative communications network to manage efficiently and mitigate supply chain risk and its impact on business performance (Opata, 2015). Opata (2015) utilized the contingency theory in a similar view on risk mitigation by identifying how internal and external risk aligns and selecting strategies to resolve a problem. Opata stated that unexpected variation and disruption in supply chains regarding risks such as natural disasters will affect supply chain management and business performance. The increasing uncertainty in the business environment has increased the vulnerability of the supply chain, and managers need to start using distribution and logistics partners to minimize the risk exposure (Opata, 2015).

To achieve organizational goals, researchers using the TOC need to measure operating expenses and inventory to ascertain the costs and benefits (Hakkak et al., 2014). Simsit et al. (2014) explained that continuous improvement in business is the responsibility of every employee, but there should be a methodical or logical way of improving performance in a business setting. Small business managers can also use the TOC to increase the competitiveness of a business. Maes and Sels (2014) supported the claim based on the framework for improving efficiency in the service industry. The use of the TOC can help business owners focus on various constraints in a system and how to improve on them.

One of the primary reasons for the failure of small business enterprises is because of poor management, and managers need to improve on the operational functions and the financial health of small business enterprises by applying the concepts of the TOC (Hyytinen, Pajarinen, & Rouvinen, 2015). Simsit et al. (2014) reviewed the business and operations strategy of a SME, which requires an understanding of the environment and competitive forces to make informed decisions. Small business enterprises can have several competitive advantages, including large market share, when managers identify micro and macro forces (Goldratt & Cox, 1992). Maes and Sels (2014) developed a TOC-based performance measure that includes output, inventory, and cost of operations for the small business company to analyze various management decisions regarding the measures.

The major focus of small business managers is to analyze the processes to identify the constraint process and explain how five focusing steps could be applied to generate practical solutions and put the firm on a continuous improvement process (Ikeziri et al., 2018). Small business enterprise applications appear to be a growing area that focuses on business strategy and implementation (Maes & Sels, 2014). Although the achievement in real-life applications of critical chain project management is significantly impressive, still there is not enough study about project management. Ikeziri et al. (2018) showed inadequate analyses of some important issues in small business enterprises.

The success of the TOC depends on certain factors. Accordingly, the success depends on actions initiated holistically across the organization and not in one department in isolation (Olowu & Aliyu, 2015). According to Agwu and Emeti (2014), there is a big challenge in managing change, which includes the change in the mindset of the people within small business organizations. Wamuyu (2015) posited that even though the tools and techniques are available in the TOC to manage change within organizations, it would be helpful to check their relevance in the case of small business enterprises. Pretorius (2014) explained that the manufacturing system employing the TOC techniques produce a greater level of output while reducing inventory and manufacturing lead-time resulting in a substantial increase in the bottom line. Agwu and Emeti further revealed that implementing the TOC requires significant changes in the processes, policies, and behaviors of workers within the organization. To ensure a successful and lasting implementation of the strategy for SMEs, there is a need to have an implementation plan, as well as to keep and to manage implementation documentation (Pretorius, 2014).

Alternate Theories

There are alternative theories I could have chosen as the conceptual framework for this study. Two of the theories described here are the systems theory and the knowledge spillover theory frameworks. Provided below is a description of the theories and how they compare with the TOC.

Systems theory. Systems theory is a complex of mutually interacting components in a mutual relationship that they affect each other (von Bertalanffy, 1972). Von Bertalanffy (1972) explained the importance of the external environment in a system or organization, emphasizing the influence of the specific and general environment on organizational leaders. Van Lier (2013) posited that the approach that results from general systems theory is not limited to material entities, but also applies to partly immaterial entities with largely heterogeneous make-up, such as organizations. Systems analysis is a tool used for systems thinking, and it involves multiple analyses of several characteristics of a system, such as (a) the adjoining and interacting systems in the environment, (b) the characteristics involved, and (c) the actions that will occur because of taking decisions (Hughes, Newstead, Anund, Shu, & Falkmer, 2015).

The application of systems theory and systems analysis can be essential for small business owners to understand and focus on strategies to align many different processes and components in starting up and sustaining their businesses. Kumar and Antonenko (2014) explained that if small business owners fail to attain minimum efficient size for their specific organization, they will be possibly susceptible to closing because of rivalry from other businesses, which are operating at or above the minimum efficiency. Nguyen and Bosch (2013) revealed that general systems theory requires numerous factors

working together as a whole to ensure success. Systems theory associated closely with exploring all the elements that come together for small business owners in winning construction bids in South Africa. In addition to the general systems theory, there are other alternatives to systems theory. Systems theory applies to the studying of diverse situations. Researchers use systems theory as an evolutionary theory to apply the concept to different domains (Colangelo, 2016).

Systems dynamics is an aspect of systems theory and has a wide range of applicability. Researchers also use other theories such as complex adaptive systems, which replicate different information for decision making (Ponsiglione, Quinto, & Zollo, 2018). Nguyen and Bosch (2013) posited that the approach to systems thinking by managers in resolving complex sustainability issues prove that there should be no restriction for researchers in the applicability of the theory. On a higher level, systems theory encompasses systems thinking theories and the theory of complex adaptive systems. The common theme in all the variants of systems theory is that the interactions of system parts or agents influence system outcomes. Asah, Fatoki, and Rungani (2015) explained some of the limitations of systems theory, which made it inappropriate for this study.

The knowledge spillover. The knowledge spillover theory embroils constant knowledge that flows within the firm and can generate higher performance (Ghio, Guerini, Lehmann, & Rossi-Lamastra, 2015). The theorist of endogenous growth assumes that when there is an investment in the new knowledge, there is a general economic benefit (Block, Thurik, & Zhou, 2013). Using new knowledge will generate

strong competition and economic growth (Block et al., 2013). The theory of knowledge spillover is about how managers can benefit from knowledge to create technological opportunities that entrepreneurs may exploit for economic growth and development (Block et al., 2013). Knowledge spillover is the effect by which decision-making can influence one's ambition for business growth (Acs, Audretsch, & Lehmann, 2013). Knowledge spillover that relates to the TOC supports setting goals that will affect future valued outcomes (Acs et al., 2013). When SMEs learn new ways of effective management and change business practices, they can progress to compete with large companies as knowledge could improve performance (Acs et al., 2013).

Researchers suggested the following factors that face small business owners in South Africa. V. Wang, Lou, Wang, and Guo (2015) reviewed that entrepreneurship contributes to economic growth by acting as a conduit through which knowledge created by incumbent firms spilling over to agents who endogenously create new firms. Ramdani, Chevers, and Williams (2013) explained that opportunities abound when incumbent firms invest but do not commercialize new knowledge. In this theory, entrepreneurship is a response to these opportunities. Ramdani et al. suggested that entrepreneurial activity will be greater where investments in new knowledge are relatively high since start-ups will exploit spillovers from the source of knowledge production. According to Karabulut (2013), in an environment with relatively low investments in new knowledge, there will be fewer entrepreneurial opportunities based on potential spillovers.

The major feature of the knowledge economy is the increased importance of knowledge as a factor of production. Block et al. (2013) pointed out that there is

something particular about knowledge as a factor. Acs et al. (2013) revealed that it is essential for policy to stimulate knowledge creation and exploitation in small businesses. Some of the ideas driving economic growth may be the result of scientific breakthroughs in large firms and universities, but the capacity of entrepreneurs to commercialize this type of invention through spin-off enterprises and knowledge transfers is critical. Others may be small ideas, but they still require entrepreneurs and small and medium enterprise workforces that can generate and exploit them by applying creativity and problemsolving approaches.

Small and Medium Enterprises

The growth of a country's economy may, to a large extent, depend on the success of SMEs. SMEs vary in size and represents in all sectors of the economy, including manufacturing, services, farming, and other sectors (V. Wang et al., 2015). SMEs comprise employer firms with fewer than 500 employees and nonemployer firms (V. Wang et al., 2015). SMEs account for a large share of both employment and number of enterprises but only a small share of exports. There are costs to exporting, however, that may fall disproportionately on small firms limiting their ability to participate in global trade. SMEs' inability to realize scale economies in gathering and maintaining market information can increase the costs of finding and retaining markets abroad relative to a larger firm (Ramdani et al., 2013). Bhaskaran (2013) explained that following a foreign sale, firms must cover the costs of delay between shipping merchandise and receiving payment, as well as the risks associated with damage or loss and order cancellations.

internally and to reduce its risk by diversifying its overseas customers. However, according to Ramdani et al., SMEs may have to find external financing, which may be particularly costly because of its relatively small sales volume and limited overseas customer base, particularly during periods of tightened credit markets. Some SMEs appear to overcome such impediments by either exporting through wholesalers or associating their business operations with larger firms by integrating with global supply chains or franchising (Karabulut, 2013).

SME managers that bring innovations to their businesses claim that they are the most pressing problems they face. Innovation in small business will involve changes that will enhance performance so that existing products will offer superior value to consumers (Mazzarol, Clark, & Reboud, 2014). In a survey conducted among European Union SMEs for the level of innovation, 17% of innovator SMEs in the United Kingdom reported the need for innovation as the most pressing problem, 42% in Slovakia reported the need for innovation as an extremely pressing problem and followed by Greece at 28% (Vasilescu, 2014). Innovation is significant for SMEs in the manufacturing, construction, and service sectors, but the high-interest rate makes it difficult for young innovative companies (Vasilescu, 2014). Innovative SMEs tend to generate a high production rate and maximize profit, but financial constraint hinders innovation (Vasilescu, 2014). SMEs face the problem of strategic management, which enables managers to make decisions and take actions to determine the long-run growth of their businesses (Karadag, 2015).

Lack of Access to Finance

Despite the major role SMEs play in every economy, they still face financing problems. Globally, the SME sector has been reporting difficulties in getting access to finance. Many factors hinder SMEs access to finance, and researchers measure the success of a business based on finance (Campbell & Park, 2016). Stringent conditions attached to credit by financial institutions hinder SMEs access to funds to develop their businesses (Karabulut, 2013). The demand for collateral security and credit information from small firms inhibit access to loans to expand their businesses (Karabulut, 2013). Collateral is the security of the loan borrowed, which the borrower can use as an assurance to the lender to obtain a loan as a source of repayment (SBA, 2015). The main causes of SMEs having problems with financing include the inability to have collateral and records that indicate future growth (Karabulut, 2013). The reasons for the stringent conditions giving to SMEs by financial institutions are the lack of standard in the SMEs accounting system and mismanagement by business owners (Karabulut, 2013).

The approach of entrepreneurs to get access to financial resources is a serious problem in both developed and emerging economies. The most pressing constraining factor of SMEs is access to finance. In Croatia, small entrepreneurs are dissatisfied with many barriers that make it difficult to get access to loans for their businesses (Viducic, Viducic, & Boras, 2014). Higher collateral and creditworthiness are the main barriers to bank loans. Moreover, banks need more transparent information about the businesses as the banks tend to be cautious in decision-making concerning loans to SMEs (Viducic et

al., 2014). Croatian banks favor granting loans to support households than small businesses (Viducic et al., 2014).

The determinants of financial institutions granting loans to SMEs in Malaysia include record-keeping, operational strategies, financial statements, cash flow collateral, and plan for the company (Yildirim, Akci, & Eksi, 2013). The determinants of the banks in the Mediterranean region to grant credit includes the size of business assets, the sustainability of sales volume, and the ability to expand globally (Yildirim et al., 2013). SMEs then turn to business angels, trade credit, venture capital, and non-financial institutions for funds, but the lack of records hinder access to finance (Hasan & Jamil, 2014). In South Africa, 75% of SMEs fail within two years of their establishment for lack of funds (Khaleel, Abuhamdah, Sara, & AL-Tamimi, 2016). Managers of financial institutions are reluctant to give credit to SMEs because most business owners cannot plan a business model to define their objectives (Alimo, 2015). Small business owners may prefer self-financing to avoid stringent banking regulations and eliminate the credit cost (Wamba, Hikkerova, Sahut, & Braune, 2017).

Financiers look at the smooth flow of revenue to grant credit, and the lack of business model among most SMEs makes it difficult to get access to funds (Alimo, 2015). A financial institution that is willing to grant loans will usually require higher interest rates and fixed assets as collateral from SMEs (Insah, Mumuni, & Bangiyel, 2013). Many borrowers, however, cannot get the loans even though they have the willingness to pay a higher interest rate (Insah et al., 2013). The problem of SMEs local financing and external funds are the causes SMEs cannot sustain their businesses and the

reason for high failure among SMEs (Yildirim et al., 2013). The financial challenges of small businesses do not encourage innovation and sustainability, and the effect is the decrease in performance (Alimo, 2015). Lack of financing is a hindrance for SMEs to acquire a high level of human resources to compete globally (Karabulut, 2013). SMEs indeed face financial challenges, but the utilization and management of available funds are also challenges for most small businesses (Karadag, 2015). Global market survival depends on skills and high caliber of human resources (Hayat, 2014). Survival in the global market needs strong leadership skills to identify and use opportunities to bring positive changes (Koledoye & Adeola, 2014).

Managers must identify employees with skills and develop them for effective performance to compete in the global market since global performance needs strong managerial skills. Access to the market, both local and global, is another challenge for SMEs in the developing economies around the world (Kiveu & Ofafa, 2013). Effective access to market needs a modern technology that dictates the business environment for decades (Jaoua & Radouche, 2014). It becomes a problem for SMEs that cannot use modern technology because of lack of financing to procure modern technological equipment, which will enable SMEs to gain access to information (Kiveu & Ofafa, 2013). As a result, many small businesses cannot advertise their products and services using modern technology to bring awareness to their customers (Kiveu & Ofafa, 2013).

In the modern competitive business environment, strategic management is very important for the sustainability and growth of SMEs. The problem of strategic management among the SMEs is the lack of funds to get access to qualified and skillful

management team (Karadag, 2015). SMEs face some challenges such as lack of managerial skills, lack of trained personnel, non-availability of modern technologies, and lack of financial resources to compete in the global business environment (Karadag, 2015). In South Africa, some of the most challenges SMEs face includes incompetent employees, lack of business skills, lack of technical skills, and lack of pricing skills (Aigbavboa & Thwala, 2014).

SMEs owners/managers sometimes encounter uncertainties before making decisions because culture plays a significant role in the small business' decision-making process. Culture influences attitude towards risk-taking among SMEs in Africa since most employees are family members, and culture determines the individual's attitude towards every activity (Yeboah, 2014). Culture has a tremendous impact on specific ethnic groups than others in Africa, and this influence some decisions that come from owner/managers (Yeboah, 2014).

Determinants of Small and Medium Enterprises Growth

Most small construction firms in South Africa are less than 4 years in existence, and that makes it difficult for them to win bids because they lack performance history. Alhassan, Hoedoafia, and Alhassan (2016) defined growth as an increase in business size or other factors of production regarding quantity, operations, or improvements. Since some small contracting firms are not in existence for many years, it is difficult to assess their growth (Insah et al., 2013).

Managers identify growth in financial performance. Growth in itself generates employment and economic development. SMEs success includes skillful management,

quality products or services, access to the local and global market, and entrepreneurial quality (Insah et al., 2013). Alhassan et al. (2016) argued that one measures small business growth by economic growth indicators such as profitability analysis, sales ratio, and value of assets. Export is a key strategy for SMEs survival and growth. Larimo (2013) indicated that knowledge related to export strategy and performance is crucial in the management of export firms. International trade has many advantages that can help SMEs development (Larimo, 2013).

For growth to take place in a small business, it is important to develop a strategic framework to increase sales by finding new markets for the existing products. SMEs must manage available resources effectively and adopt a new market development strategy. For growth to be effective, managers or owners are to identify the need and recognize when change is appropriate for growth (Mazzarol et al., 2014). SMEs may do well in an emerging market. The market-specific knowledge and customer-specific knowledge are essential for SMEs entering an emerging market (Sandberg, 2014). The higher the degree of market-specific knowledge and customer-specific knowledge the firm gathers, the more likely the firm is set up to succeed (Sandberg, 2014). The small firms entering an emerging market may face initial problems, and that is reason general global information is essential for a new entrant to an emerging market (Mazzarol et al., 2014).

There is a significant difference between the performance of SMEs that use traditional marketing and nontraditional marketing strategies. Marketing is one of the critical strategies SMEs use to survive beyond 5 years but face the challenge of how to market their products and services (Hussain, Farooq, & Akhtar, 2012). Traditional

marketing involves advertising through the media, and since SMEs lack financial support, they tend to engage in non-traditional advertising such as Facebook, emails, and websites which are cheaper than the traditional method (Hussain et al., 2012). There is a significant statistical relationship between marketing strategies and performance.

Marketing through networking enhances market planning, and easy access to existing customers as well as generating an avenue for new customers (Hussain et al., 2012).

Networking also enables information gathering about customers and competitors more easily. Most small contracting firms lack the capital to expand their businesses or set a performance bond. Also, the delay in government payment affects their operations and as a result hinders their ability to win government contracting bids because the small businesses might be lacking enough capital to set as a performance bond (Campbell & Park, 2016). SMEs play a vital role in both developed and emerging economies around the world and contribute greatly to employment and income of the poor and middle class, and as well as the gross domestic product (Alhassan et al., 2016). Prompt payment enables businesses to meet their commitments on time that eliminates late fees to suppliers. SMEs growth is important as they bring competition and are the source of innovation and development of new products (Malebana, 2014). The contribution of SMEs is enormous as they generate more new jobs than larger and well-established companies (Alhassan et al., 2016).

The reason entrepreneurs start a business is for the business to grow and make a profit. The goal of any manager or business owner is for the business to grow and be successful. The increase in the business size that brings improvement regarding quality,

quantity, and profit is growth (Alhassan et al., 2016). One important element that determines growth is the measure of progress made over the years towards the long-term objective of the business (Alhassan et al., 2016). Businesses measure their growth with performance regarding production units, the percentage of the market share, value of assets, and savings (Alhassan et al., 2016). SMEs owners consider growth with the number of employees they have at a point in time (Alhassan et al., 2016). Sometimes business growth is determined when it starts to produce more than local consumption and begins to increase profit. On the other hand, the inability to earn a profit and expand the business for a long period may indicate failure or lack of growth (Gjini, 2014).

Growth becomes possible when business owners begin to get new ideas to improve products and services to win potential customers. New customers increase the market share that creates opportunities to increase the size of the business. Business owners who provide financing for their businesses have growth intentions and make it a priority rather than those owners who get their financing from the bank (Neneh & Vanzyl, 2014). N. Lee (2014) argued that government policies and taxation hinder their growth. Stringent regulations in the United Kingdom, according to N. Lee, makes it difficult to launch new products. Higher taxation lowers the growth rate and reduces incentives to motivate employees to increase productivity (N. Lee, 2014). Regulations also deter businesses from hiring skillful workers, and business owners perceive government policies as a significant problem to grow (Neneh & Vanzyl, 2014).

Lack of Strategies in Negotiations

The lack of strategies in negotiation contributes to small contracting businesses finding it difficult to win bids. Managerial skill is a key to the growth of a small business since decisions that affect growth rest on the owners or managers. To win bids, managers need the strategies to negotiate since the decision-making process of SME has greater discretion than the large organization; and for this reason, SME leadership has a strong impact on business behavior and results (Koryak et al., 2015). The success of any business entity depends on, to a large extent, the ability to manage the available resources (Alimo, 2015).

Good managerial skills in any organization may improve productivity and efficiency. Also, it may bring increased profits and economic growth. Owners and managers of SMEs normally make strategic decisions based on informal planning for projects rather than involving the whole organization (Mazzarol et al., 2014). The growth of SMEs requires action and leadership capabilities to risk and adapt quickly to change (Mazzarol et al., 2014). The growth of SMEs depends on leadership that makes use of opportunities to bring changes that will improve competitiveness and differences in a chosen market (Mazzarol et al., 2014).

Some SME owners focus on decisions relating to short-term performance and growth rather than focusing on the decision to sustain their businesses or enter into the global market (Alimo, 2015; Mazzarol et al., 2014). Owners and managers also tend to focus on achieving personal goals that affect how they make decisions (Huhtala, Feldt, Hyvönen, & Saija, 2013). Managers' personal goals can influence the organizational

ethical culture, which influences some decisions on business growth and sustainability (Huhtala et al., 2013). SMEs successes depend on the business leadership that has the vision to focus on profit maximization and growth (Mazzarol et al., 2014). Managerial strategies, vision, and setting and accomplishing goals are critical for small businesses.

There is a positive relationship that exists between personal values and managerial skills of SME owners that impact performance. Personal values are qualities that enable an individual to endure and follow a unique pattern of feeling and thinking that affects behavior (Asah et al., 2015). Values serve as standards that guide a person's action or behavior towards a desirable goal (Asah et al., 2015). Asah et al. (2015) argued that values are the keys to comprehending the connection between the business owner's attributes and the firm's performance.

When SMEs owners integrate values with managerial skills, it brings an opportunity to take a course of action for a better chance of survival because values influence choice, the strength of mind, and performance. SMEs performances are the reflections of the values held by the owners, which guide their choices and actions. SMEs owners with such values as resourcefulness, honesty, reliability, and accomplishment are more likely to survive, grow, and succeed (Asah et al., 2015). Managerial skills are vital for small business owners to succeed in a competitive business environment (Asah et al., 2015). Asah et al. (2015) found out from their study that owners of small businesses that are doing better have education, managerial competencies, and knowledge of the industry.

Some developing economies have unethical practices, which include corruption, lack of commitment, and non-allocation of money to promote corporate social responsibility (CSR). Promoting CSR in a proactive way may engage stakeholders in a constructive and significant organizational behavior, which will enable the survival of organizations (Abugre, 2014). Organizational leaders must commit to the value-driven approach for the successful implementation of CSR (Abugre, 2014). In Ghana and most of the developing countries, the managerial role in the practice of CSR is restricted and ineffective (Abugre, 2014). The problem of effective CSR implementation is mainly from poor leadership regarding negligence and corruption (Abugre, 2014).

Challenges of Small and Medium Construction Firms

Winning bids are the most challenging problem facing small construction firms in South Africa. Since small businesses do not have enough capital, they depend on prompt payment from the government for work done and to enable them to pay their suppliers. The government, however, delay in payment, which affects the completion of contracts on time (Campbell & Park, 2016). The delay in payment causes late completion of projects, which eventually increases the cost and affects future winning bids. The condition for winning bids depends on previous early completion of jobs that meet the budget of the project. Small construction firms adopt a strategy to win bids through early completion of jobs and efficiency, which comes with modern technology (Gonzalez-Benito, Gonzalez-Benito, & Munoz-Gallego, 2014).

Despite the numerous contributions that SMEs make and some advantages they have over large companies, SMEs do have many challenges. The numerous and complex

problems are the reason most SMEs cannot survive (Gonzalez-Benito et al., 2014). SMEs have a start-up and survival challenges such as global competition, financing, managerial skills, access to the market, and the non-availability of external investors (Mutoko, 2014). Many small construction firms lack the managerial skills to decide to expand into international markets since business owners going into the international market need to understand the opportunities and threats associated with the international business (Wamba et al., 2017).

Some SMEs lack the basic infrastructure and entrepreneurial activities that are vital to improving performance and competitiveness in emerging economies. As a result, many SMEs fail even though they contribute immensely to national economies around the world. Over 70% of SMEs fail in South Africa (Ngcobo, 2017). Global competition regarding quality and innovation is one of the challenges SMEs face, which affects their success and development (Abdulazeez, Hakeem, & Bisayo, 2014). Globalization of SMEs is not an option since it is the means to survive in this present competitive world of business (Ocloo, Akaba, & Worwui-Brown, 2014). Growth and sustainability of SMEs depend on how strong they can break and access the global market (Ocloo et al., 2014). Globalization increases competitive advantage and improves SMEs' operational processes to enhance growth and profit maximization (Ocloo et al., 2014). Financial difficulties faced by SMEs act as a hindrance for SMEs to acquire a high level of human resources to compete globally (Karabulut, 2013). SMEs indeed face financial challenges, but the utilization and management of available funds are also a challenge for most small business (Karadag, 2015). Global market survival depends on skills and high caliber of

human resources (Hayat, 2014). Survival in the global market needs strong leadership skills to identify and use opportunities to bring changes (Koledoye & Adeola, 2014).

Managers must identify managerial skills and develop them for effective performance to compete in the global market since global performance needs strong managerial skills. Access to markets, both local and global, is another challenge for SMEs in the developing economies around the world (Kiveu & Ofafa, 2013). Effective access to market needs modern technology that dictates the business environment for decades. It becomes a problem for SMEs that cannot use modern technology because of a lack of financing to procure modern technological equipment to get access to information (Kiveu & Ofafa, 2013). As a result, many small businesses cannot advertise their products and services using modern technology to bring awareness to consumers. SMEs that bring innovation to their businesses claimed that they are the most pressing problem they face. Innovation in small business involves changes that will enhance performance so that existing products will offer superior value to consumers (Mazzarol et al., 2014). Innovation is significant for SMEs in the manufacturing, construction, and service sectors, but the high-interest rate makes it difficult for young innovative companies (Vasilescu, 2014). Innovative SMEs tend to generate a high production rate and maximize profit, but financial constraint hinders innovation (Vasilescu, 2014).

SMEs face the problem of strategic management that enables managers to make decisions and actions to determine the long-run growth of their companies (Karadag, 2015). In the modern competitive business environment, strategic management is very important for the sustainability and growth of SMEs (Karadag, 2015). The problem of

strategic management among the SMEs is the lack of funds to get access to qualified and skillful management team (Karadag, 2015). SMEs face some challenges such as managerial skills, lack of trained personnel, modern technologies, and financial resources to compete in the global business environment (Karadag, 2015). In South Africa, some of the challenges SMEs face include incompetent employees, lack of business skills, lack of technical skills, and lack of pricing skills (Aigbavboa & Thwala, 2014). The owners and managers of SMEs sometimes encounter uncertainties before making decisions because culture plays a significant role in small business' decision-making process. Culture influences attitude towards risk-taking among SMEs in Africa since most employees are family members, and culture determines the individual's attitude towards every activity (Yeboah, 2014). Culture has a tremendous impact on specific ethnic groups than others in Africa, and this influences some decisions that come from the owners and managers (Yeboah, 2014).

Small Business Ethics

One of the criteria in winning bids in South Africa depends on the ethical practices of the small contracting firms. Ethical practices in a small business may enhance business growth and sustainability (Greenwood & Freeman, 2018).

Development business principles are one of the forms of pragmatic ethics, which surveys ethical ideologies and ethical or principled difficulties that can arise in a business environment (Sharma & Sharma, 2014). The demand for more ethical business processes and actions is increasing because business survival and growth depends on the adherence to principles guiding the organization (Sharma & Sharma, 2014).

Organizational ethics have a great effect on business winning bids. Sharma and Sharma (2014) argued that companies that adhere to CSR are responsible businesses that achieve sustainability. The quality of business ethical issues reflects the degree to which business is perceived to be at odds with business non-economic values. Businesses bring ethical training to help employees make ethical decisions when answers are unclear (Sharma & Sharma, 2014). Organizational culture relates to the goals, and ethical organizational culture is becoming crucial in the business environment because the process of daily work is as important as getting the work done (Sharma & Sharma, 2014).

Corporate ethical scandals in the United States started were not limited to any specific industry or profession but across most of the business environment. Over the 20 years of investigating corporate ethics and compliance programs, scholars found various external pressures exerted through governmental regulations (Weber & Wasieleski, 2013). Weber and Wasieleski (2013) indicated that there was a strong ethical motivation along with legal compliance that could bring benefits to the organization. Baden (2014) argued that the awareness that a business complies with all ethics improves profitability and increase self-efficacy in the business domain. The findings of the Baden study have some impacts on business practices; however, there is a need to have more case studies of ethical business practices that affect business growth and profitability. Increased awareness may give rise to a more positive attitude towards ethical business behavior (Baden, 2014). Ethics enhance business success as ethics give employees a regular pattern of behavior in what they do. Business ethics may improve productivity as

employees adapt to positive change through the ethical principles of the organization (Baden, 2014).

Technological Resources

Bids are awarded to businesses with modern technology for efficient work because technology plays a significant role in the success of every business, including SME contracting firms (Oluwaseun, Opeyemi, & Oluwaseun, 2016). Companies may not be able to embark on innovation without technology (Oluwaseun et al., 2016). Because of the stiff competition in the business environment, it may be difficult for SMEs to survive and compete without technology (Oluwaseun et al., 2016). 2016). The survival of SMEs depends on both technological and nontechnological innovations (Oluwaseun et al., 2016). As SMEs pursue innovation, which enables sustainable growth and profitability, technology becomes a priority. Technology brings innovation, which plays a significant role in business growth because innovation will yield better performance (Oluwaseun et al., 2016).

Information technology (IT) plays a pivotal role in business growth and development. In this modern business environment, a company's products and services, development, innovation, customer services, and general operations depend on technology (Oluwaseun et al., 2016). Technology is essential to improve business existence and growth. However, the environment of the business, location, and the target consumers may influence the type of technology in business. Some of the benefits include cost savings, efficiency, disaster management, and proactive management (Oluwaseun et al., 2016). Lack of applicable technology hinders the growth of SMEs

despite the significant contributions small businesses make to national economies. Some of the barriers include the high cost of using technology, lack of internal capabilities, poor infrastructure, financial constraints, complexity to use technology, time-consuming, limited information about suitable technology solutions, and lack of knowledge concerning technology (Agboh, 2015). IT is now part of some human activity.

Understanding technology encourages its adoption and practice, but most SMEs have not understood how the technology works and, therefore, need to understand it to promote their businesses.

Technological innovation is a process a firm uses to comprehend the adoption of the new design to create a new product that is unique in the market and combine factors of production that will result in increased productivity. When SMEs use both technological and nontechnological innovation, it has a significant impact on productivity and growth (Oluwaseun et al., 2016). There is a significant correlation between relational capital and product innovation, but for businesses to expand, managers must be able to drive product innovation (Dorrego, Costa, & Fernández, 2013). Dorrego et al. (2013) argued that the better the innovative SMEs and their relational capital, the more successful would be the product innovation efforts.

Small Business Environment in South Africa

Entrepreneurship and small businesses are very important for policymakers and governments around the world because SME establishment is an important tool to create jobs and improve the living standards of rural communities. In 2002, the unemployment

rate in South Africa was 45%, and the poverty rate was 71%, and there has been no improvement as of 2014 especially in the rural areas (Lekhanya & Mason, 2014).

Despite SMEs' economic and social significance to communities, many SMEs fail because they operate in an unstable environment. SMEs face different kinds of environmental challenges, which make them difficult to survive and grow. Some of these factors include frequent power outages, unavailability of high-speed internet, unavailability of business networks, lack of customer demand, poor infrastructure, and no access to the market (Lekhanya & Mason, 2014). Other challenging factors of SMEs in rural South Africa are insufficient resources, government regulations, inexperience in managing the business, poor cash management, inflation, and lack of directions on business development (Lekhanya & Mason, 2014). Lekhanya and Mason (2014) argued that these factors might have a serious effect on the development of SMEs, and as such, owners of small businesses need research to ascertain how these environmental factors affect the general growth of small businesses and the economy.

Challenging economic and environmental factors have significant and uneven effects on the survival and development of SMEs. Difficulties SMEs face because of environmental factors enable scholars to understand the reasons SMEs fail (Omer, Van Burg, Peters, & Visser, 2015). Omer et al. (2015) believed that knowing the factors responsible for the failure of SMEs should motivate owners to avoid those constraints that hinder growth. Omer et al. suggested that owners are capable of avoiding challenges such as competition, corruption, financing, poor cash management, and lack of managerial skills by doing something different. Competition can drive managers to adopt

effective strategies, and owners can employ new technologies and marketing strategies to overcome any competition (Agwu & Emeti, 2014).

Business financing is a serious challenge to SMEs because of stringent rules attached to loans from the banks. Omer et al. (2015) suggested that managers can seek financing externally. Internalization is one of the best solutions for SMEs challenges regarding financing since international investors are willing to invest in developing countries where taxation is lower than in developed countries (Omer et al., 2015). Mthimkhulu and Aziakpono (2015) agreed with Omer et al. that power outage and corruption are the main challenges SMEs face in South Africa. However, Mthimkhulu and Aziakpono indicated that general crime is the most serious constraint of SMEs development in South Africa and followed by a frequent power outage.

Small Business Failure

Small businesses fail at a high rate during the first 2 years of their establishment. Many scholars attempted to research the main causes of SMEs failure, which tends to be the foundation for sustainability. Mazzarol et al. (2014) argued that owners of SMEs make strategic decisions based on informal planning for projects rather than involving the whole organization, which can lead to success or failure. SMEs fail because they lack access to the international market and finance. SMEs also fail because they face court proceedings or involuntary action that involves losses to their creditors (Lussier & Corman, 2015).

Incompetence might be the key factor in the failure of SMEs, but other factors such as inaccessibility to the market, political instability of the country, limited resources,

and the general infrastructure can affect the survival of SMEs. Detailed research on SMEs failure by Armstrong (2013) revealed that small firms that focused on competence strategies survived as they managed the limited resources effectively at their disposal. SMEs fail to focus on the business plan, financial management, competent management, internal consumption, and apathy, which are some barriers that hinder survival and growth (Alimo, 2015; Mazzarol et al., 2014). SMEs cannot identify opportunities in both local and international market. The lack of knowledge related to export strategy and performance is crucial for the survival of SMEs since international trade has many advantages that can help SMEs development (Sandada, Pooe, & Dhurup, 2014). To avoid failure and to anticipate growth to take place in a small business, it is important to develop a strategic framework to increase production and sales by finding new markets for the existing products (Sandada et al., 2014).

Some scholars may have a problem agreeing to the causes of failure in small business and whether the failure tends to benefit the future development of the business. R. Khanna, Guler, and Nerkar (2016) argued that though many organizations learn from their past experiences, only a few can ascertain whether their past experiences were a success or failure. The reason small businesses find it difficult to realize whether their experiences were a failure or success is because of a lack of sufficient information about failures (R. Khanna et al., 2016). When a small business has proper documentation about their operations, failures may lead to a process of improvement, reduce future failures, and decrease failure-related costs, which will bring about sustainability and growth (R. Khanna et al., 2016). While successes may lead businesses to be on the same path,

failures will lead firms to look for solutions and provide firms with information search to focus on new ways of doing things (R. Khanna et al., 2016). Failure may be an important source of learning and motivation towards innovation. R. Khanna et al. (2016) argued that failures encourage learning and improve the decision-making process of the business as owners search for causes and solutions. Small business failures in the production process may provide an opportunity to learn from the failures (R. Khanna et al., 2016).

Small business failures may become the foundation for quality and growth if businesses learn from their experiences, identify causes for their failures, and find solutions since many failures may lead to great success. Bishop (2015) argued that failure is the lack of skills training for small business owners and this problem has been an issue for small business owners and policymakers around the world. Bishop emphasized that small business managers focus on on-the-job training rather than formal training to equip employees with the necessary skills to do their jobs. Job training may be costly, but the benefit outweighs the cost.

The failure of businesses does not apply only to small businesses since the size of a business does not matter in an unfavorable business environment. Small organizations have a diversity of resources and can absorb fixed costs, which can make success a reality; however, there are external factors that can hinder success and growth (Jaoua & Radouche, 2014). The delays in payment affect small businesses more than larger businesses. Jaoua and Radouche (2014) discussed that the lack of resources among SMEs would cause failure, but the lack of resources is not the only reason SMEs fail. Jaoua and Radouche indicated that although firms that had access to more resources and were able

to increase production and make profits, still failed. Lack of proper infrastructure, such as open roads and transportation, can affect business development and lead to failure (Jaoua & Radouche, 2014). A poor road network can impact the supply of goods for customers, which can be a reason for businesses in the urban areas to have a higher survival rate than those in the rural areas (Jaoua & Radouche, 2014). Unsatisfied customers may find different suppliers if there is irregular supply because of poor infrastructure.

The four factors that bring about failure among SMEs in Finland are: (a) poor management, (b) high debt, (c) poor economic environment, and (d) government policies, and addressing these could make a turnaround for survival (Colletta, Panditb, & Saarikkoc, 2014). Poor management will make it difficult for any government program to turnaround any struggling small business in Finland (Colletta et al., 2014). However, good management may turnaround small businesses that are on the verge of collapse (Colletta et al., 2014). Colletta et al. (2014) argued that when management is poor, financial, marketing, and human resource management will also be poor, which impacts employees' morale and productivity.

Teaming and Partnering with Established Businesses

Selecting an appropriate competition strategy in bidding is the ambition of small business owners, and there are multiple requirements for clients to encourage small business owners to understand other strategies to provide additional benefits besides offering a low-priced bid. According to Larimo (2013), small businesses offering low bids reduce their profits and potentially make development less attractive. Small business owners should understand and explore their specific resources to create competitive

advantage and hence improve strategies to win bids. Larimo also explained that companies must have the capability to deal with various bidding situations successfully in today's highly competitive construction market. Several factors affect and influence small business bidding strategy.

Large businesses have one of the greatest advantages over small businesses in the area of longevity; for small business to succeed, the business owners have to borrow credibility by teaming up with businesses that have already earned the trust of clients. Small businesses need not enter into partnerships that are long-term or legally complicated. However, the target of these small business managers should focus on establishing themselves with companies that complement their skills and product line and offer to promote their products or services in exchange for an endorsement (Mazzarol et al., 2014). According to Larimo (2013), the secret to winning bids is not about more workforce but rather how to get prospects to trust small business owners who understand to jump-start their success potential and credibility.

Small business owners can implement a successful branding approach from the inception by ensuring that all visual assets are present across all marketing communications since branding lends an air of credibility and professionalism to any small business company. Mazzarol et al. (2014) suggested that working with marketing companies can help address the inconsistency in design and also understand the importance of using a specific tone in all marketing companies. Small business owners find a niche within the competitive spectrum in winning bids, which have become

increasingly difficult. Most of the small business owners try to compete with larger businesses that have ventured into smaller contracts.

Small business owners winning bids continue to give priority for business growth and economic development, and most of these small businesses are under increasing scrutiny regarding small-business utilization. These owners have the burden of proof and must justify not using a set-aside for certain requirements. Mazzarol et al. (2014) explained that the government should help to shape the path with policies that address small business competition in winning bids. While guidelines and directives help in the level playing field, it is up to small business owners to sharpen their business development skills to winning bids in a controlled market endorsement (Mazzarol et al., 2014). Small business owners focusing on short-term strategies can be both tempting and necessary to stay competitive. There are market conditions that increasingly require small business owners to develop a more strategic mindset to facilitate long-term growth in winning bids.

In the areas of high win rates and a well-structured pipeline management system, small businesses may not need the same tools and convention as larger businesses; but small business owners do need structured processes in place to select opportunities and determine the health of their pipelines in winning bids and deliver value for money. Most small businesses need resources to vet opportunities and respond to solicitations because some of the small businesses trading in that excel spreadsheet for an entry-level customer relationship or capture management system may help increase efficiency. According to Karabulut (2013), either in government or commercial contracts, there are shrinking

budgets and contract consolidations, and teaming is critical for all small businesses, especially small businesses that want to obtain both government and commercial contracts.

Branding, Communication, and Negotiation

Successful teaming requires two essential ingredients: contribution and self-reflection. Clients want small business owners who can bring niche skills, opportunities, and innovation to the table; and it is critical that small business owners appraise their value schemes and make a clear difference between their core capabilities and proficiencies. Companies want partners capable of being excellent in an area in which they are only sufficient. According to Jaoua and Radouche (2014), whether evaluating an opportunity, or a partner, or a project, small business owners should take advantage of the vast amount of information available to help them understand the environment for venturing into that bidding or business environment. Clients often complain about the lack of agency or company knowledge that small business owners should focus on to deliver the value they may want (Bailey, Dittrich, & Kenneally, 2013).

Negotiation is the interplay required to win a bid as a small business. Salyakhov, Zagidullina, Fakhrutdinova, and Aleshina (2015) revealed that success is measured by how close small business owners are to the desired outcome they achieve. Jaoua and Radouche (2014) also explained that the most successful outcome is one vigorously obtained during the negotiation that gives everyone at the table an equally advantageous deal. In such a situation, even a lack of a deal can be a success if, through negotiation, both sides discover that doing business makes little sense for either of them. Small

business owners need to be collaborative in their negotiation. Jaoua and Radouche explained that better negotiation outcomes are when business owners share something about themselves, even something as small as your favorite food, with the other party. This technique helps small businesses start building trust, which fosters a positive negotiation environment (Jaoua & Radouche, 2014). According to Jaoua and Radouche, for small business owners, forthcoming a market of this size would be costly, time uncontrollable, and inefficient. The first step towards building a full pipeline of business customers is to develop a clear publicizing plan and then work with the plan. In a busy work environment, it is essential to map out companies' target because companies are striving to optimize efficiencies not only in project delivery but also in business development. Small businesses should produce the highest results using the least resources. Small business development teams face challenges both internally and externally because of the reduced allocation of bid preparation funds and increased competition as fewer opportunities are available for bidding (Vasilescu, 2014).

The success of small businesses is about balance and developing business development sophistication without sacrificing agility. There are abundant of contracts available, but the smallest slice of the federal contracting pie could be the most extended breaks in commercial markets (Vasilescu, 2014). To identify commercial clients, business owners serve best and look for ways to apply those same strengths to government customers (Yeboah, 2014). Small business owners knowing their competitors, allow them to maximize their competitive advantages to identify the decision-makers and tailor their strategy to their needs (Karabulut, 2013). Small business

owners often alarm that the process for procuring bids from different government agencies and from earning commercial business does not worth the time and risk to pursue (Vasilescu, 2014). Certain clients do require small businesses to navigate additional challenges in compliance, but the business development process is essentially similar to that for winning commercial bids (Yeboah, 2014).

Small business owners may be able to generate more revenue if they compete for and win bids directly. However, it could also be easier, at least initially, to earn subcontracting work by building the types of business-to-business relationships to which the small business owners are comfortable with (Jaoua & Radouche, 2014). The small business owners do not have to commit exclusively to being a prime contractor or a subcontractor, but clarifying and choosing one avenue could provide the most opportunity early and help them win bids by focusing their efforts (Vasilescu, 2014). For small business owners trying to serve a commercial or government client, they must provide value by delivering a better service or product at a reasonable price while meeting their requirements (Vasilescu, 2014).

Commercial Experience and Market Knowledge

Small business owners having adequate knowledge of government work could be advantageous in winning bids because government buyers price value as much as their commercial counterparts regarding wanting to maintain the same level of functionality by doing it efficiently. Small business owners are likely to appreciate deeper knowledge and understanding in the competitive commercial arena to make them innovative, flexible, responsive, and appropriately priced to boost their commercial successes (P. Khanna,

Jones, & Boive, 2014). Small business owners need to communicate with clients inward and downward as well as upward and outward in formulating a holistic view of challenges and opportunities. According to Vasilescu (2014), investing in additional resources and business development could help small business owners secure more prime contracts or other opportunities for subcontracting. Karabulut (2013) suggested that small businesses need time on a project to build relationships, including buyer representatives, other vendors involved in the contract, and government procurement agencies who may also frequently visit the worksite. Karabulut explained that small business success in government contracting will depend on how well they serve their customers.

Transition

Section 1 of the study contains information relating to the research problem. The basis of the problem for the failure of the small construction business in winning bids in South Africa is in the foundation and background for the study. The problem statement included a statement of the general and specific business problem, and the purpose statement included a rationale for the research method, design, and participant sample. The TOC is the conceptual framework for the study. In Section 2, I discussed the purpose statement, the researcher's role, participants, the research method and design, the population and sampling, ethical research, data collection instruments, data collection technique, data organization technique, data analysis, reliability and validity, and transition and summary.

In Section 3, I analyzed the themes for professional practice and the implications for change. In this section, I presented the findings, its applicability to professional

practice, focusing on implications for social change, recommendations for action, recommendations for further research, reflections, and conclusions.

Section 2: The Project

In this section, I discussed the purpose of the research, my responsibilities, and my role as it pertains to exploring the strategies for winning construction bids in South Africa. According to Koledoye and Adeola (2014), some challenges face SMEs owners that contribute to their failure in the sector. The information in Section 2 includes (a) participants of the research and the selection method, (b) methods and design of the research, (c) ethical considerations, (d) collecting data, (e) data organization and analysis, and (f) reliability and validity.

Purpose Statement

The purpose of the qualitative multiple case study was to explore bidding strategies SME business managers use to win construction bids. The target population comprised general managers, financial managers, and project managers of five SMEs in the construction business located in Johannesburg, South Africa, that have a history of successful bidding on construction contracts. Implications for potential positive social change may include helping SMEs win contracts, which in turn could help to improve the livelihoods of the owners, their employees, local people, communities, and possibly the economy of South Africa.

Role of the Researcher

The researcher is the main instrument in the data collection process and the interpretation of data in qualitative research (Ferreira, Buttell, & Ferreira, 2015). In qualitative studies, the researcher becomes the research instrument, and the roles include

data collection and the interaction with study participants (Henderson, 2017). Leedy and Ormrod (2015) explained that researchers engaging in qualitative research take the role of a data collection instrument. Leedy and Ormrod revealed that researchers should gather reliable and valid data through interviews, review documents, and provide sample observations. Even though I do not have any experience in SMEs or with the participants in the research, as the researcher, I tried to foster trust with the participants by open communication to have them make an informed decision concerning their participation. I conducted ethical research by following all guidelines set forth by *The Belmont Report* (The National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research, 1979), specifically the principles of respect of persons.

In qualitative research, personal bias affects the credibility of the research because it relates to the human instrument (Bengtsson, 2016; Elman, Gerring, & Mahoney, 2016). Galdas (2017) revealed that biases might arise from personal values and beliefs, past exposure to the research, and even demographic paradigms. Wallace and Sheldon (2015) also explained that the biases in research result from the human instrument as the participant or the observer. I ensured the integrity of the research by avoiding research conducted in an environment in which the researcher already holds another role.

I mitigated the participant and my observer biases and increased the trustworthiness of the research by using the interview protocol (see Appendix B), which was within the boundaries or limits of the interview. The rationale for the use of an interview protocol is to provide consistency, coherence, and dependability, and minimize

any possibility of problems arising during the interview (Chung, Hong, Kim, Yang, & Yoon, 2017).

Participants

The criteria to be eligible as potential participants were business owners that were managers of SMEs that are located in Johannesburg and have a history of successfully winning construction bids. A researcher may recruit participants through online means, print advertising, or face-to-face strategy (Carter-Harris, 2016). All participants were at least 18 years old, signed the informed consent form, and willingly participated in this study. The participant selection criteria included screening for the possible vulnerable population. The use of inclusion criteria to define the sample universe helps to ensure sample homogeneity (Carter-Harris, 2016). I ensured all participants met these requirements through their self-report of eligibility and consent to participate in the study.

Building a working relationship with the participants is important in qualitative research. One way to establish a good working relationship with participants is to create a rapport with the initial call (Carter-Harris, 2016). I solicited participants through e-mails by searching for email addresses through business journals. I established trust by reassuring the participants of confidentially concerning the study and by explaining to them the use of the consent form. I ensured the participants knew that involvement in the research was voluntary and that they could choose to withdraw at any time during or after the interview process by sending an email or making a phone call to me.

Research Method and Design

Researchers use different approaches to understand the problems and determine the appropriate method and design suitable for research (Leedy & Ormrod, 2015). Leedy and Ormrod (2015) stated that qualitative, quantitative, and mixed methods are the common research methods. This section will include the research method and research design.

Research Method

There are three research methodologies: (a) qualitative, (b) quantitative, and (c) mixed methods (Bristowe, Selman, & Murtagh, 2015). I used a qualitative method for the study. Qualitative research has been essential in business research for a long time for data collection, analysis, and interpretation (Neal Kimball & Turner, 2018). I used a research method that is most appropriate for building a holistic understanding of complex processes or realities where there is no precise measurement or a predetermined hypothesis. The choice of the qualitative approach is suitable for a pragmatist worldview (Yin, 2018) and was appropriate to understand bidding strategies for winning construction bids.

Research that involves statistically testing hypotheses and examining variable correlations is what quantitative research entails (Park & Park 2016; Yazan, 2015). However, quantitative analysis is not effective for analyzing or explaining the human experience (Letourneau, 2015; Savela, 2018). I did not use mixed methods because it involves both qualitative and quantitative methods in tandem. I used a qualitative research method that was appropriate to answer the research question and the objectives

of the research. The choice of the qualitative approach is suitable for a pragmatist worldview (Moustakas, 1994; McCusker & Gunaydin, 2015) and was appropriate to understand bidding strategies for winning construction bids.

Research Design

I used a case study design because it allows for the exploration of cases through detailed, in-depth data collection involving multiple sources of information such as observations, personal interviews, and reports. Qualitative research designs include (a) case study, (b) ethnography, (c) phenomenological design, and (d) narrative analysis (Neal Kimball & Turner, 2018). A phenomenological study was not appropriate for this study because according to Lewis (2015), a researcher would describe events and lived experiences of participants. A researcher employing an ethnographic design focuses on how a culture works, including extended observations of people (Bristowe et al., 2015), which was not suitable for this study. I did not use narrative design because according to Moustakas (1994), it is for researchers who intend to examine the experiences and stories of individuals for a period and restore them into a readable, chronological format.

I interviewed five participants to reach data saturation. I was going to stop at any point when I achieve data saturation. If the sample size of five were insufficient to reach data saturation, I would have interviewed an additional participant until I achieved data saturation, and this would have been with the full understanding of the participants' perspective. It is important to recognize the data saturation point, which is a challenge in qualitative research. Researchers can reach data saturation when continuous research will

not yield any new information (Fusch & Ness, 2015). I kept interviewing participants until responses became repetitive.

Population and Sampling

The participants in the study were business owners who were either general managers, financial managers, or project managers in small- and medium-sized construction enterprises in Johannesburg, South Africa. I used purposeful sampling of those small- and medium-sized construction enterprises. Researchers using a purposeful sampling can select participants who would be rich in providing in-depth knowledge of the phenomenon under study (Marshall & Rossman, 2016). An important part of a rigorous research design is to establish the appropriate sample size (Yin, 2018). Yin (2018) suggested a sample size of five as often sufficient for a case study research. According to Marshall and Rossman (2016), researchers need to have a comfortable interview setting, which should be a quiet location free from distractions and use quality audio recording equipment.

Ethical Research

Researchers need to consider ethical issues in every scholarly research that involves the human population to protect the participants (Ferreira et al., 2015; Tomkinson, 2015). Ensuring research is done ethically is a critical role of the researcher (Yin, 2018). I followed the three basic ethical principles in *The Belmont Report* (National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research, 1979), respect for individuals, beneficence, and justice.

To assure proper ethical procedures and protection of the human subjects in the case study, I gained approval from Walden University's Institutional Review Board (IRB). My IRB approval number was 12-04-18-0531430. I did not provide any incentive to the participants, and I strictly adhered to ethical practices to protect and minimize any harm and increase trustworthiness and integrity. The protection of the individuals in research is critical (Oye, Sorenson, & Glasdam, 2016; Hammersley, 2015). Risks and burdens assessed against potential benefits determine if individuals are protected (Oye et al., 2016). Measures taken to protect the rights of the individuals include storing information collected, protecting the names of the individuals and organizations for confidentiality (Oye et al., 2016). I adhered to the guidelines in the consent form, which is the established ethical practice. I began to collect data after I received approval from the IRB, and I have kept all information private and confidential. To maintain the confidentiality of the participants, I used an alphanumeric designation to identify the respondents. I have kept all information regarding the study on an encrypted passwordprotected external hard drive that I will retain for 5 years.

Data Collection Instruments

There are several data collection instruments in qualitative research, but the suitability is crucial to high-quality research (Değirmenci Uysal & Aydin, 2017). The highest consideration in qualitative data collection is the depth and quality of data (Castillo-Montoya, 2016). A semistructured interview was the primary data collection instrument in this study. According to Pierre and Jackson (2014), the words of the interviewee in the interview are the data being collected. Interviews are the most common

data collection instrument in qualitative studies, and it is the responsibility of a researcher to interpret the experiences of the participants sufficiently for accuracy (Harvey, 2015). I used member checking. According to Madill and Sullivan (2018), member checking is a process that the researcher takes the information gathered back to the participants so they can confirm the accuracy or clarify the information. To achieve qualitative research standards, I used member checking, which helped increase the trustworthiness and completeness of this qualitative study.

Yin (2018) identified six sources of evidence: (a) documentation, (b) archival records, (c) interviews, (d) direct observations, (e) participant-observations, and (f) physical artifacts. I used three methods of data collection: semistructured interviews, direct observations, and review of company documents. The interview is the most critical source of data collection (Harvey, 2015). Well-informed interviewees can provide critical insight into the phenomenon of inquiry in addition to leading the researcher to additional sources of evidence (Yin, 2018). However, a disadvantage of the interview is it can be time-consuming (Yin, 2018).

Direct observations can range from formal to casual data collection activities (Yin, 2018). Formal observations can include observation of (a) meetings, (b) factory work, and (c) training sessions; and less formal observation activities include fieldwork and observing the condition of a specific work environment (Yin, 2018). One advantage of using direct observation is that it can be made in real-life situations, allowing the researcher access to the context and meaning surrounding what participants say and do (Yin, 2018). Another advantage of using direct observation is that it can be strong on

validity and in-depth comprehension (Yin, 2018). The disadvantage of using direct observation is that it can be subjective, time-consuming, and depends on the researcher's role (Yin, 2018). I used both formal and informal methods; a formal method to include observation of meetings and training sessions, and an informal method to include observing the condition of a specific work environment.

After I finished the data collection process, I allowed participants to review the information I collected to ascertain the accuracy of the data. I used member checking to confirm my interpretations of the participants' responses. Member checking is a process of establishing the accuracy of a statement or an account of a situation (Hadi & Closs, 2016; Thomas, 2017; Iivari, 2018). I confirmed my interpretations of the participants' responses using member checking. I used the interview protocol, which consisted of opened-ended questions to get a deeper understanding of the strategies managers of small- and medium-sized construction enterprises use to win construction bids.

I used an additional data collection instrument, which was collecting documentation from the company, including previous bidding contracts documents. I collected documents used in daily work, such as internal manuals, written procedures, wall posters, and other public postings in a workplace to gather information about the research. One of the key advantages of using documents is gaining access to information that would be difficult to get in any other way, such as people who might not be willing to talk in a formal research interview or might be difficult to track down (Yin, 2018). By using documents, effects that the researcher might have on a person or situation when collecting data are eliminated. Another advantage of using documents in research

includes the fact that such research is relatively low in cost, particularly when the documents are easily accessible and already located in the workplace (Yin, 2018). One disadvantage is that the information recorded may be incomplete in the document (Yin, 2018).

Data Collection Technique

A face-to-face interview was the main data collection method for this study. The purpose of using the interview to collect data was to gain insight into small- and medium-sized construction enterprises in Johannesburg, South Africa. According to Cairney and St Denny (2015), the researcher needs to interview conversation between the researcher's participants for answering the research question. In a meeting with participants, I first introduced myself to them and then told them about the devices I will use to collect data.

Communication exchange between the researcher and the participant occurs in real-time, which brings about flexibility and control in helping the researcher to obtain detailed information from the participants (Kegler et al., 2018). I used the face-to-face technique to explain and make clarifications if any question was not clear to the participants. An advantage of a face-to-face interview is to help the researcher to observe the nonverbal communication of the respondent (Cairney & St Denny, 2015).

Data Organization Technique

Yin (2018) discussed four components relevant to data organization: (a) field notes, (b) case study documents, (c) tabular materials, and (d) new narrative compilations. Qualitative data from interviews, either written or recorded, may produce various themes from different respondents (Saldana, 2015). I created an Excel database

with different columns to store the information of the data which included: (a) participants, (b) interview notes, (c) direct quotes from respondents, and (d) interview data. In the study, I engaged the efficient organization of data to help the proper storage of data and analysis for effective communication.

I organized the data for analysis by using a Microsoft database. I did put the data together for analysis. According to Naeem (2018), putting data together for analysis helps in verification. I recorded every interview into audio tapes with a unique coding system to include the time and place of the interview. I will store all the notes, recorded interviews, research log, and flash drive in a locked container for 5 years before destroying them.

Data Analysis

Thematic analysis is one of the most common forms of analysis in qualitative research. It emphasizes pinpointing, examining, and recording patterns within data (Percy, Kostere, & Kostere, 2015). Themes are patterns across data sets that are important to the description of a phenomenon and links to a specific research question (Percy et al., 2015). The themes become the categories for analysis. Thematic analysis is performed through the process of coding in six phases to create established, meaningful patterns (Percy et al., 2015). These phases include familiarization with data, generating initial codes, searching for themes among codes, reviewing themes, defining and naming themes, and producing the final report (Percy et al., 2015).

I made a comparison of the themes, codes, field notes, and reflective journal to validate the information to achieve accuracy. Using the themes and codes identified, I

concluded from the data collected. The conceptual framework served as a lens to view the conclusions of the data analysis (Leung, 2015).

According to Taguchi (2017), data triangulation is used in case studies and was an important part of the data analysis process for the study. Data source triangulation is using evidence from different types of data sources, such as interviews, documents, public records, photographs, and observations (Desmond et al., 2018). Researchers use data triangulation to compare, contrast, and confirm information collected from multiple sources to verify the existence of a phenomenon (Yin, 2018). Case study researchers collect and analyze multiple sources of evidence to augment the value of information collected from a single source (Yin, 2018). Therefore, in multiple-case studies, the researcher needs to explore data connecting to individual components first, before making comparisons across cases (Yin, 2018). The technique for data analysis in this study began with an exploration of interview data; a thematic analytical method is appropriate. Yin (2018) recommended the use of multiple rather than single sources of evidence, because of the opportunity to check and recheck the consistency of findings from different as well as the same sources.

I evaluated the data and transcribed the information into NVivo 12 data software to establish the data and categorize patterns to develop emerging themes for classification. The analysis included (a) observation notes, (b) field notes, (c) recorded interviews, (d) literature review, and (e) member checking data and emerging themes and codes to explore the strategies for winning construction bids in South Africa. I analyzed the data using the four steps recommended by Rowley (2012), which shared some

similarities to the five steps noted by Yin (2018). Yin discussed (a) collecting data, (b) grouping data, (c) regrouping data based on themes, (d) evaluating the information, and (e) recognizing emergent themes. Rowley offered four similar steps to the data analysis, as follows. The first step of the Rowley analysis method is organizing the data set. The second step recommended by Rowley involves getting acquainted with data. The third step of Rowley's method includes processes to classify, code, and interpret data.

According to Rowley, the last step is to present the write-up of the findings. Data analysis indicates the opinions and perceptions of participants involved in the research study (Raskind et al., 2018; Lowe, Norris, Farris, & Babbage, 2018). Phillips and Lu (2018) explained that researchers use different strategies for analyzing data, which includes coding. Once the participants confirmed the accuracy of the data, I uploaded the interpretations into NVivo 12 data software for coding and analysis.

Reliability and Validity

To meet the acceptable standards of a qualitative study, I explored the reliability and the validity of the data by making use of interview protocol, the actions in the data collection process concerning ethical considerations, and the key areas to assuring reliability and validity. In this section, I discussed transferability. Consistency and dependability are essential for qualitative research (Yeong, Ismail, Ismail, & Hamzah, 2018). Yeong et al. (2018) explained that reliability is the degree of all data and valuation is free from fault. In research, the biases of the researcher can influence the reliability of the study, which can affect the reliability of the research (Yin, 2018).

I used an interview protocol as a consistent technique, which, according to Bengtsson (2016), will ensure the reliability of a study. Researchers reach data saturation when there is sufficient information to reproduce the study when they have acquired additional new information, and when further coding is no longer attainable (Fusch & Ness, 2015). Researchers can use the following criteria to ascertain the rigors of qualitative research: (a) dependability, (b) credibility, (c) confirmability, and (d) transferability. Yeong et al. (2018) explained that validity is about accuracy in the outcome of the research that relates to reality.

Reliability

Reliability is the level of consistency in the result obtained at all times when there is a repetition of a similar case study using the same procedure and methods of data collection (Yin 2018). As an objective of reliability, research should be free from bias and errors (Yin, 2018). The dependability of the research is when another researcher uses or follows the decision of another researcher, which is a vital component in qualitative research (Anney, 2014; Bolognesi, Pilgram, & van den Heerik, 2016). The participants can validate their responses for accuracy (Yeong et al., 2018).

Validity

Validity is about the degree of accuracy of the data (Yeong et al., 2018). The sign data is reliable, trustworthy, and secure (Cypress, 2017). The measures for addressing quality issues of credibility, confirmability, and transferability in this study are what encompassed validity. The elements of validity comprise of confirmability, credibility, and transferability (Ricci et al., 2018). Researchers using qualitative research often use

credibility, transferability, and confirmability to validate the study, which brings some element of truth (Yeong et al., 2018). I ensured the validity of the research by engaging in a transparent and systematic approach to data collected from interviews and company documents. I maintained an audit trail and document the flow and processing of the data.

Credibility. Credibility is the quality or power of inspiring belief (Harvey, 2015). Credible sources, therefore, must be reliable sources that provide information that one can believe to be true. I used audit trails also to ensure credibility where participants can validate and authenticate their responses. As a researcher, I was neutral to ensure the outcome of the study. By using triangulation of data, I was able to compare and analyze all data transcribed, observation, notes, and recordings. Credibility concerns the match of source data with researchers' interpretations (Bengtsson, 2016). Use of an adequate sample size, triangulation, and member checking heightens the credibility of the study (Harvey, 2015). The credibility of a qualitative study is dependent on the interview protocols, data gathering procedures, and skills and knowledge of the researcher being the data collection instrument (Yeong et al., 2018). I collected documents from participants to support and augment the interview data. The use of interview data and data from the document review enhanced the credibility of this study. I ensured the credibility of the study by transcribing the responses from the participants exactly and neutrally.

Confirmability. Confirmability relates to objectivity, and researchers need to establish confirmability to ensure the accuracy, objectivity, and neutrality of the data. Confirmability encompasses neutrality, the absence of bias, and accuracy of the data

collection and analysis procedures (Amankwaa, 2016). Triangulation will improve confirmability, and the use of NVivo will mitigate the effect of researcher bias.

Admission of limitations, assumptions, and possible sources of bias through in-depth descriptions within the final report allow others to scrutinize the integrity of the research process (Anney, 2014). I enhanced confirmability by using audit trails and keep the records and preserve the data for potential inspection by readers.

Transferability. Hagaman and Wutich (2017) explained that transferability relates to the trustworthiness of the research, and transferability happens when a reader can reapply the findings or methods from one study to another. By using an interview protocol, I mitigated biases or prejudice as a researcher in the process of data collection. Transferability involves probing and assessing the qualitative findings regarding generalization outside the context of the study (Forero et al., 2018). However, transferability depends on the prudent judgments of readers (Anney, 2014). This report includes the detailed descriptions of the context, population, sample, method, and steps applied to help readers make informed assessments. I enhanced the transferability of the study by given details that allow the readers to decide if the results were transferable to their organizations.

Transition and Summary

Small and medium enterprise business owners use substantial resources preparing proposals to win technically complex government contracts but do not win many of the contracts. The segmented population included small- and medium-sized construction enterprises in Johannesburg, South Africa. Grounded in the TOC, the purpose of this

qualitative multiple-case study was to explore strategies for winning construction bids in South Africa. I used a qualitative case study as the data collection method, and I used semistructured, face-to-face interviews as data collection instruments. I have also described how I ensured data techniques for ensuring the reliability and validity of the study findings through dependability, credibility, confirmability, transferability, and data saturation.

In Section 3, I analyzed the themes for professional practice and the implications for change. In this section, I presented the findings, its applicability to professional practice, focusing on implications for social change, recommendations for action, recommendations for further research, reflections, and conclusions

Section 3: Application to Professional Practice and Implications for Change Introduction

The purpose of this qualitative multiple case study was to explore strategies for winning construction bids in South Africa. The specific problem that prompted this study was the high rate of failure among small businesses in Johannesburg winning construction bids. The participants for this study consisted of five small business owners in Johannesburg, South Africa. This section includes a review of findings from data collected for this case study. The results of the research are related to both the research question and the conceptual framework of the study.

The conceptual framework supporting the study was the TOC. I conducted semistructured interviews with small business owners in Johannesburg, South Africa, to have them answer the overarching research question for this study. The interviews took place in an environment convenient to five participants who provided detailed information on their experiences after signing a consent form. Participants responded to 10 main questions and two probing questions. I used NVivo 12 qualitative analysis software to organize the data to identify patterns and develop themes.

Presentation of the Findings

In this subsection, I discussed and presented the findings of the study. In using the exploratory multiple case study, I addressed the research question: What strategies do small businesses used to win construction bids? The purpose of the qualitative multiple case study was to explore bidding strategies SME business owners use to win

construction bids. I identified the themes based on the findings from the information gathered from the participants, observation, and documentation.

Seven findings emerged from the study that informed the strategies adopted by the participants in their bidding strategies for construction bids. Many of the responses from participants supported the main assumption of the TOC. According to TOC, organizations such as a small business, having one or more constraints can prevent the company from achieving its goals to the greatest extent possible (Goldratt, 1984). Business owners may gain practical insights from the results of the study regarding the identification, evaluation, and management of the firm's resources in winning construction bids (Shibia & Barako, 2017).

The findings supported the Wach, Stephan, and Gorgievski (2015) suggestion that most small business owners should adopt different bidding strategies to win construction bids. Wach et al. also found that although small business owners may have a wide source of financing to meet insurance requirements, small business owners need to embrace technology and understand market conditions to be successful. The themes gathered from the five participants were as follows: (a) basic bidding principles, (b) factors of success, (c) estimating accuracy, (d) market conditions and competition, (e) efficiency and specialization, (f) highlight past projects, and (g) technology.

Theme 1: Basic Bidding Principles

The first finding from the study was basic bidding principles. According to Dakhli, Lafhaj, and Bernard (2017), applying basic bidding principles will help business owners to win bids. The bidding process should include transparency, integrity, openness,

fairness, competition, and accountability; if bidders fail to follow these basic principles, competitive bidders may protest prior to or after the bid is awarded (Marzouk & Mohamed, 2018).

The participants placed emphasis on the significance of the strategy on following basic bidding principles. However, the participants identified not following basic bidding principles as constraints, which has significantly affected them not winning construction bids in some instances over the years. A thorough understanding of the constraints and analysis of the problem is a way forward to finding the solution. The small business owner should begin by evaluating the constraint because every business or system has a constraint preventing it from reaching its full potential, which can be a weakness that limits its performance and output (Hakkak et al., 2014). Consistent with the TOC, identifying noncompliance with these basic bidding principles as constraints may help business owners and managers to improve the bidding process performance.

P1 stated, "Competitive bidding is the accepted form of obtaining construction contracts. If a person or group has the position of an estimator for a company, it is this person's responsibility to put together an accurate bid for a construction project." For example, P2 and P3 stated, "A construction bid consists of two components: the direct cost of the construction and the markup." P2 further stated, "The direct cost consists of five factors: labor, plant, materials, subcontracts, and on-cost." P3 further stated, "The markup covers company overheads, profit, and risk."

The completed bid must strike a delicate balance. To win the project, a bid must be low enough to be low bidder but must not be so low that no profit can be earned.

Essentially, constructing the bid is the job of the estimator. P2 and P3 stated, "A systematic approach is necessary for successful bid planning and execution." Without a methodical approach, the bidding preparation and process can become disorganized and chaotic, leading to poor bids. P5 said, "An inaccurate bid can have several consequences." Regarding the consequences, P5 further said, "If too low, the company may win the contract but make no profit; and if too high, the company may not win the contract." The profitability of a construction company depends largely on its bidding process.

P4 said, "Their company takes step-by-step from obtaining the bid information and deciding whether or not to bid to submitting and completing the bid." P4 further stated, "The step-by-step process will aid the estimator in making an accurate estimate." P2 said, "The most important step their company takes is the decision to bid." P4 was careful to point out that while the decision to bid occurs at the beginning of the process, the decision is not final at that point. P4 said, "As information is gathered and processed, a "yes" decision is reviewed and possibly overturned; and changing circumstances can also reverse an initial "no" decision." P3 gave similar bid preparation steps taken by their company by stating that, "The process starts again by obtaining the project information and deciding to bid, then going through various estimating steps, and finally submitting the final bid." P3 further said, "The decision to bid a specific project is the most important decision, as all of the subsequent steps are essentially pricing the parts, labor, and profit."

Table 2

Participant Responses on Basic Bidding Principles

Emergent theme	Participants in agreement	% of responses
Competitive bidding	P2, P3, P4	60
Planning, strategy and execution	P2, P3	40
Transparency, integrity, openness, fairness, competition, and accountability	Р3	20
Lowest bid	P5	20

Theme 2: Factors of Success

The second finding in the study was factors of success, which are tools for winning construction bids. The factors that can affect the construction bidding process can impact the success of a bid (Sardana, 2016). The difference between winning and losing a bid can be associated literally with few percentages (Sinesilassie, Tripathi, Tabish, & Jha, 2019). Small but important things may significantly affect a business' chance of winning bids (Sinesilassie et al., 2019). Glas and Eßig (2018) outlined the following success factors for winning bids: understand the client's main reasons for the project, maximize the use of the client interaction session, enclose your winning strategies and themes throughout the document, address all the tender requirements, use a suitable case study, and balance people and tasks.

Participants stressed the need for every business owner and manager to identify and implement success factors to enable them to win construction bids. These success factors, according to participants, had not been fully utilized; thus, they believed these factors of success were constraints that needed evaluation. The small business owner should begin by evaluating the constraint because every business or system has a constraint preventing it from reaching its full potential, which can be a weakness that limits its performance and output (Hakkak et al., 2014). Consistent with the TOC, these success factors, if not adopted, may be a constraint to a firm, which may prevent business owners and managers from accomplishing their company's goals to the greatest extent possible.

P1 stated, "A bid is successful if it meets the following criteria: be the lowest bid, cover all construction costs, and earn the required profit." P4 stated, "These factors determine a bid's chance of success: estimating accuracy, the mark-up, market conditions, competition, efficiency, and specialization." P2, P3, and P5 stated, "The relevant experience, resource availability, and previous relationship with the client are the factors that determine a bid's chance of success."

Table 3

Participant Responses on Factors of Success

	Participants in	
Emergent theme	agreement	% of responses

Understanding clients project	P2, P3, P4	60
Lowest bid	P1, P4	40
Specialization	P4	20

Theme 3: Estimating Accuracy

In responding to interview questions 1 and 8, participants identified the need for estimating accuracy, which was the third finding of the study. In every bidding process, a firm should ensure an accurate estimation to a large extent (Hatamleh, Hiyassat, Sweis, & Sweis, 2018). The best estimator will not win against an inaccurate bidder, and neither of them will make any money (Hatamleh et al., 2018).

Participants highlighted the need for estimating accuracy. Business owners and managers should prepare their bids in a manner wherein all figures are estimated accurately to win construction bids. Participants believed that most business owners and managers fail to maintain accuracy when submitting bids; consequently, they reduce their chances of winning bids. These are constraints that business owners and managers should deal with to enable them to improve operational functions. One of the primary reasons for the failure of small business enterprises is because of poor management, and managers need to improve on the operational functions and the financial health of small business enterprises by applying the concepts of the TOC (Hyytinen et al., 2015). The theory grounding this study included the TOC, which aligned closely to challenges identified by the participants in estimating the accuracy of bids for construction in a small business

environment. Identifying failure to estimate accurately as a constraint may help business owners and managers to improve performance processes.

P2 stated, "Poor estimation leads to unrealistic bids, and that if these bids are too low, then they will often win the bid but cause the winning bidder to lose money." P1 pointed to recent construction projects that finished far over budget. P2 stated, "The cause of the over budget problems is that owners, architects, and engineers are not using reliable means to obtain correct project numbers, which means bids can have unrealistic estimates that can cause budgets to fail." P1 stated, "Professional estimators are meticulous, and accurate estimates are necessary for successful bids."

P2, P3, and P5 stated, "There are tools available to aid the estimating process by using digital libraries and databases given estimators access to thousands of cost tables". P4 said, "Computers perform long calculations and minimize errors and automated estimating systems can count all necessary components of complex projects." P1 said, "Whether calculations are done by hand or by computer, all data need to be double-checked and record carefully kept." Three of the participants (P1, P3, and P4) confirmed similar strategies, and P3 stated, "They engaged the services of a subcontractor, home equity loans, and loans against receipts to fund their business during growth." In particular, P4 stated, "Advance payment and complexity of the project during their bidding process" (see Table 4).

The factors that can affect the construction bidding process can impact the success of a bid (Sardana, 2016). Construction estimators and bidders have intense pressure to submit extremely accurate bids on huge projects, and they must be well prepared. When a

company, institution, or government agency puts out a solicitation for bidding, contractors competitively bid for the project. To both win the bid and make a profit, the bidder must have a method of determining how to mark up the estimate and submit a bid that has the best chance of winning a profitable contract.

Table 4

Participant Responses on Estimating Accuracy

Emergent theme	Participants in agreement	% of responses
Budget	P1, P3, P4	60
Project complexity	P2, P4	40
Subcontractors	Р3	20
Advance payment	P4	20

Theme 4: Market Conditions and Competition

The fourth finding from the study was market condition and competition, which are criteria to win construction bids. Bidders can take market conditions and competition into consideration (Bowen, 2019). Small business owners are likely to appreciate deeper knowledge and understanding in the competitive commercial arena to make them innovative, flexible, responsive, and appropriately priced to boost their commercial successes (P. Khanna et al., 2014).

The participants stressed the need for owners and managers of small businesses to be mindful of market conditions and competition when preparing construction bids, which may help them win bids. However, the participants stated that some owners and managers might not have taking market conditions and competition into consideration; thus, have failed in winning construction bids in some instances.

The TOC aligned closely with challenges encountered by business owners when considering market conditions and competition during bidding. These challenges may be constraints, which could minimize the chances of business owners winning bids.

Identifying and thoroughly understanding these constraints and analysis of the problem is a way forward to finding the solution. Thus, implementing the TOC may require significant changes in the processes and policies within the organization, which could help business owners and managers overcome these constraints and eventually win construction bids.

Market conditions is a catch-all phrase that encompasses all external factors (Tunyi, 2019). Asked what the factors are, P2 stated, "The available projects, economy, legislation (current and future), competitor activity, and price of labor and supplies are the key factors." P2 further stated, "There is no way to assign values or numbers to these factors, but they will influence bidding success." Competition plays a key role in a bidding success. When bidding is competitive, competitors and their historical bidding trends should be considered, and consideration must be given to the number of contractors that are bidding a project (Sardana, 2016).

Participants expressed initial difficulty in terms of legislation for a loan access because of inadequate collateral. The other aspect participants expressed difficulty about centered on information access. The body of literature supported the finding concerning

government reluctance to promote SMEs based on financing. P2 stated, "There are global companies with a competitive advantage in winning construction bids because of their financial strength and government support."

The more bids that are submitted, the greater the possibility that one of those bids is unreasonably low; thus, denying the winning bidder the chance of a profitable venture (Sardana, 2016). Competitors will often ask other competitors for information. A competitor may not want a specific project but needs to bid to keep good relations with the customer.

Table 5

Participant Responses on Market Conditions and Competition

Emergent theme	Participants in agreement	% of responses
Legislation	Ps1, 2, 3, 4, 5	100
Information access	Ps1, 2, 3, 4, 5	100

Theme 5: Efficiency and Specialization

The fifth finding from the study was efficiency and specialization. Business owners and managers should have specialized skills and be efficient in preparing bids.

Lacking such attributes may reduce the chances of business owners and managers

winning bids. Some business owners and managers lacked the specialized skills and were not efficient enough to prepare and win bids. These were major constraints identified, which served as bottlenecks and the main obstacles that hindered small business owner's achievement and management's objectives. Identifying these as constraints may help business owners and managers to improve performance processes, which is consistent with the TOC. Also, the TOC aligned to the theme efficiency and specialization for business plans, initial challenges, and addressing subsequent changes as small business owners identified unpredictable events relating business and management practices and need to specialize to create a competitive advantage.

As a construction company completes projects, it tends to become very skilled in one type of construction. As seen in the body of literature, contingency theory supports the claim that companies need to recognize what they have been successful at in the past, and concentrating on this work increases possibilities of success, especially when bidding against contractors without the specialized experience (Opata, 2015). On the third and fourth interview questions, P4 and P5 stated, "Construction firms are often very secretive about their bidding strategies, and some estimators try to discover the current lowest bid on a project and undercut that bid by a small amount" (see Table 6).

On the third question, the participants revealed that others bid low and gamble that they can find ways to complete the project more efficiently by altering the original plans without altering the finished project. P2 and P5 stated, "The best estimator in the business can lose a job to a company with an aggressive bidding strategy."

P4 and P5 further stated, "Integrity, which they try to maintain, is essential for long-term success." A bidder must be careful, accurate, thorough, and honest, and the estimator who violates the trust and confidence of those he deals with will not survive. Obtaining information unethically or illegally will inevitably damage a business's reputation and could have serious legal consequences.

The body of literature is in alignment with the idea that a perfect bidding strategy does not exist. According to P3, bidding is a "scientific game." Good judgment, skill, and intuition all play a major role, and the outcome is uncertain until everything finishes.

Nevertheless, researchers have proposed several methods for maximizing profits by using specific strategies, and these methods assume that no unethical business practices are taking place (Shin, Kim, Choi, & Lee, 2016).

Strategy 1: Optimize the estimate. Generally, 90% of a bid is the estimate, and the remaining 10% is mark-up (Sardana, 2016). The estimate is, by far, the largest part of the bid, and therefore has the greatest impact on the success of the bid. According to P4, estimating inaccuracy is one of the main reasons for the destruction of bidding strategies. In other words, no matter how good one's bidding strategy is, if the estimator cannot estimate correctly, he is doomed to fail. If the estimator can estimate perfectly and optimize the project design to save money and time, then the mark-up makes less difference because the estimate will win the bid. P2 and P3 stated, "The backbone to any bidding strategy is an extensive knowledge of historical bids, knowledge of competitors, and practice. However, tools such as those listed have been shown to improve profits over time."

Strategy 2: Better construction bid opportunities through data. The bidding process requires a lot of resources, whether it is financial, labor, or time. Bidding smarter is using past bids to improve current and future ones. By breaking down past bids, seeing which ones are won and which ones are lost by managers, the managers might find a pattern. If managers remember the amount of time, the number of people, and deposits or purchases necessary for the ones they lost, they will see the true cost of a lost bid. This information can be used to help managers improve their bidding process. If the projects did not quite fit their businesses or were outside the scope of their resources, then managers know to watch out for projects like that in the future. If managers have lost bids because they did not have all the required information, then they can use that information to better prepare bids. Managers can ensure that they are targeting projects they should win.

Strategy 3: Crafting the best estimate and proofreading measurements and bids. Probably the easiest way to increase the likelihood of success of construction bids is to ensure accurate estimates. A firm can indeed receive an award with some projects that will have the lowest estimate. But if the project cost ends up being well over the estimated cost, that might risk their chances of working with the same people again. The reputation of the firm matters. Remembering to include contingency funds and planning for overtime is a good way to ensure a more accurate estimate. An easy way to ensure an accurate estimate is to ensure that the firm has the most up to date plans. Accurate plans ensure accurate measurements.

These accurate measurements are incredibly important in estimating. If their measurements are not correct, then they run the risk of having incorrect math, which may not enable the bidder to win the bid. The bidder might win the bid by underestimating the costs and bidding too low. Similarly, proofreading their bid proposal can increase their chances of winning. P2 and P5 said, "Bumping up the reputation of a company by way of bidders double-checking the math and creating a timeline may increase the company's chances of winning construction bids." Large sum costs can be a red flag for the project owner. Breaking these costs down into individual parts, while tedious, can assuage fears about the costs, and can give them a giant step up on any competition for construction bid opportunities.

Table 6

Participant Responses on Efficiency and Specialization

Emergent theme	Participants in agreement	% of responses
Measurements and bids	Ps3, 4, 5	60
Knowledge of competitors and practice.	Ps1, 2, 3, 4, 5	100

Theme 6: Highlight Past Projects

The sixth finding, which may aid business owners and manager win construction bid, was highlight past projects. According to C. Lee and Chiravuri (2019), the importance of highlighting past projects includes establishing a company's success story, demonstrating a proven track record of the company, allowing the institution seeking

bidders to ascertain the successes of the company, and putting the company in a better position to win bids. Participants stressed the need to highlight past projects, especially the ones that the firm had won and performed successfully.

However, some business owners and managers failed to highlight past projects when preparing and submitting construction bids, and thus, reduced their chances of winning bids. Not highlighting past projects served as a major constraint. Small business owners need to recognize that system constraints limit the performance of a system, and thus, a unique approach to managing these constraints should be adopted (Kaptein, 2015). Highlight past projects as a theme aligned with the TOC, which is the fundamental theory underlying my research. Goldratt developed the TOC in 1984 to suggest an explanation for business owners founded on the principle that managers can recognize the weakest point in an organization to improve performance processes and also use past projects as success factors to win any future projects.

Mentioning their company's past work is a good reference for current bids. If the business owners have completed a similar project, they can highlight the work they performed. Even if the business owners have not completed a similar project, highlighting their skills through past examples can be a major benefit. The participants revealed that past projects show their skill and reliability and provide references, and that great work comes with great references, which can lead to more work.

Asked what aspect of their past projects was a selling point, P3 said, "Excellent customer service." A client will rest easier knowing that if there is an issue, he/she will take care of it, even if it is months after the project completion. And any client who has

been treated unfairly by a construction firm going out of business midproject is going to place a big premium on a company that can show it is financially stable.

Table 7

Participant Responses on Highlight Past Projects

Emergent theme	Participants in agreement	% of responses
Customer service	Ps3, 5	40
References	Ps1, 2, 3, 4, 5	100

Theme 7: Technology

The seventh finding of the study was technology. Business owners and managers use technology to help them effectively prepare bids in a timely manner. The survival of SMEs depends partially on technology because technology plays a significant role in the success of every business, including SME contracting firms (Oluwaseun et al., 2016). Because of the stiff competition in the business environment, it may be difficult for SMEs to survive and compete without technology (Oluwaseun et al., 2016). Participants stressed the need for adequate technology, which will not only ease the bidding process but will enhance winning construction bids.

Participants highlighted inadequate modern technology as a major constraint.

Because of the lack of modern technology, business owners and managers failed to win bids in some instances. Bids were submitted late or had errors because of lack of adequate modern technology. This bottleneck, which was identified as a constraint, minimized the chances of business owners winning bids. Consistent with the TOC, identifying technology as a constraint can prevent business owners and managers from achieving their firm's goals to the greatest extent possible.

An easy way to save time and money on bid strategies is technology. Whether it is a digital record of past bidding proposals, estimator software, or a word processor, the use of technology can be of advantage in bidding. P1 says "Digital records make finding information easier for estimators" (see Table 8).

The Internet has significantly changed many aspects of the construction industry, including the bidding process. Traditionally, companies bidding on a project had to send large amounts of paperwork to a potential client for consideration. Construction bids can now be created and submitted online, finishing the bid process with the click of a mouse.

The participants revealed that their estimator software could streamline the estimating and budgeting process, and a word processor will help to write professional-looking documents. The participants further revealed that the simple step of typing up all parts of a firm's proposal could help the firm win more bids. P2 and P3 stated, "Our business is driven by technology using complicated software to analyze the bidding process from project initiation to contract award."

P1 and P2 stated, "They spend more on value all the time." That is true in every industry, and construction is no exception. But they have got to make a compelling argument for what their client is getting for the extra money, and it is incumbent on them to make that case crystal clear. In the end, this is the best way to win a bid. According to P3, if they get into a price-slashing war with their competitors, they are not going to make any profit anyway no matter how many bids they win. If they can find an effective way to make the "value" case to their prospective clients, they have got a big edge, and they are likely to make a lot more money per project.

The TOC is the fundamental theory underlying my research. Goldratt developed the TOC in 1984 to suggest an explanation for business owners founded on the principle that managers can recognize the weakest point in an organization to improve performance processes. Many of the responses from the participants supported the TOC. Implicit in the themes that emerged in the study is the assumption in the TOC that some constraints can prevent the business from accomplishing its goals. Owners and managers may gain practical understanding from the results of the study in identifying, evaluating, and managing the firm's constraints.

Table 8

Participant Responses on Technology

Emergent theme	Participants in agreement	% of responses
Internet/ software	Ps2, 5	40

Applications to Professional Practice

Winning construction bids remains a major challenge for small businesses. Identifying strategies to minimize this challenge continue to remain a concern for small business owners and researchers. There is, therefore, a need to identify bidding strategies for small businesses to minimize the failure rate of small businesses in South Africa. Small business failure rate in Africa is between 70% and 80%, and thus can be difficult to understand the reasons for the poor performance of African small business entrepreneurs (Mendy & Hack-Polay, 2018). Glas and Eßig (2018) highlighted factors that can influence small business success, which include the type of bids, the number of participating firms, and the overall volume of tender.

The purpose of the qualitative multiple case study was to explore bidding strategies SME business owners use to win construction bids. The study centered on interviews with five small businesses in Johannesburg, South Africa. Consistent with the literature, participants identified the need for better strategies for small business growth.

Researchers and practitioners have documented the significance for small business owners to understand business strategies when participating in construction bids (Glas & Eßig, 2018). Findings revealed seven major themes and several subthemes that provide a foundation for recommendations for professional practice. First, through this study, current and future business owners may understand how to develop successful bidding strategies to create a sustainable company. Business owners may learn proven

bidding strategies, which may help them win bids, develop their businesses, and ensure long-term growth and lucrativeness of their company. The findings may show small business owners the strategies to engage in winning construction bids. Finally, small business owners may recognize the potential challenges to expect during the process of creating and writing construction bid proposals. The findings of this study justifies why understanding construction bid strategies are imperative for small firms.

The themes identified in this study apply directly to the professional practice of small businesses, and government leaders are involved in promoting small businesses. The findings of this study could be relevant to assisting and changing a small business owner's approach to bidding and winning construction contracts because of (a) basic bidding principles, (b) factor of success, (c) estimating accuracy, (d) market conditions and competition, (e) efficiency and specialization, (f) highlight past projects, and (g) technology. Small businesses are consistently failing to estimate and bid construction projects accurately, and, therefore, they are losing significant profit as a result.

The information in the study could improve the bidding process and success rate of a construction company as a result of the skills and knowledge acquired by business owners and managers. The most common form of awarding construction projects to contractors is through competitive bidding. Construction companies that participate in the bidding process need to submit bids that give the best chance of winning and making a profit. The information presented comes from peer-reviewed articles published on this topic, websites, dissertations, and other educational books. The study encompasses the preparation that needs to be completed prior to bidding. The factors that contribute to the

success of a bid are analyzed in the study. Finally, documented strategies that improve the possibility and profitability of a successful bid are examined in the study.

Implications for Social Change

The survival of small businesses and the growth of the economy in South Africa is a potential implication for positive social change. Business owners may use the results of this study to identify and implement new strategies for successful bids. Additionally, the results of this study may positively affect communities by way of enhancing social services through taxes and by way of enhancing growth for the South African economy. Implications for potential positive social change may include helping SMEs win contracts, which in turn could help to improve the livelihoods of the owners, their employees, local people, communities, and possibly grow the economy of South Africa. With the increased survival rate of SMEs as a result of the findings, owners will be able to provide more jobs for local people and provide social services for communities.

Recommendations for Action

The purpose of the qualitative multiple case study was to explore bidding strategies SME business owners use to win construction bids. Winning construction bids remains a critical issue for SMEs. The findings of this study indicated seven emerging themes: (a) basic bidding principles, (b) factors of success, (c) estimating accuracy, (d) market conditions and competition, (e) efficiency and specialization, (f) highlight past projects, and (g) technology. The findings should be of specific interest to present and future SME business owners as a means of starting and growing their businesses, maximize profit, sustain their operational activities, and eventually increase their survival

rate. Business owners and managers should pay attention to the result of the findings to enable them acquire the necessary skills and to know what it will take to accomplish a successful bid.

There has been inadequate empirical research to validate the contingency theory on bid winning strategies. The summary of the findings in this study could further contribute to discussions on small business owners feeling the pressure to submit a bid that is lower than everyone else's. Representatives of institutions, companies, and government agencies that put out a solicitation for bidding sometimes assume that business owners and general contractors are only interested in getting the best deal, but that is not always the case.

I will use different channels to disseminate the findings of the study to increase the chances of small business owners to have access to the information from the study. I will publish the approved study in the ProQuest/UMI dissertation database. Students, researchers, small business owners, engineers, and architects who are interested in the study can have access. Additionally, I will send a summary of the study findings and recommendations to all participants. The goal is to publish an article in the peer review journal in procurement and look forward to attending and present at conferences.

Recommendations for Further Research

The first recommendation for further study is for future researchers to engage in the research for construction bids in South Africa. Other researchers should conduct a case study that is empirical to analyze the external factors that small businesses bids in the construction sector by such researchers paying more attention to procurement laws and regulations. In this study, there was no documented research on strategies to win construction bids in South Africa. The interest needs to be harnessed in this area of study to explore the opportunities and inspire positive change. Further studies should be conducted in other parts of South Africa to explore, document, and analyze the challenges and opportunities in the construction industry in terms of the bidding processes and strategies.

The limitations of this study included the views of the participants might not represent the views of many small business owners in South Africa. As a result, the sample of participants may not essentially characterize all areas in South Africa. Each participant's unique situation might lead to their successes, and the participants may not provide sufficient information. To address these limitations in future research, researchers should increase the number of participants, which may increase the likelihood to get greater views of many small business owners in South Africa. Researchers should require and ensure high disclosure standards are in the consent form, which may ensure participants to provide sufficient information.

Reflections

The Doctor of Business Administration Program has been a rewarding journey. I had the opportunity to interact and learn from participants who are owners of small business located in Johannesburg, South Africa. Recruiting participants was a difficulty I initially encountered. Some refused to participate because they were too busy, and some were not comfortable with some of the interview questions. Another challenge I encountered was the divorce process I went through with my wife. This situation caused

a delay for me to start collecting data. Despite these challenges, I surmounted them by persuading the participants who eventually took part in the study and successfully negotiated with my wife to enable me to begin my data collection.

During the study, my experience as a business owner, ideas, personal philosophies, and prejudices, which, if regarded before the study, would have enhanced possible bias. However, I maintained neutrality and minimized any biases or preconception I have throughout the research process by strictly following the interview protocol of the study. I was amazed at the wealth of knowledge I received from the participants and their willingness to share with me the important aspects of their business activities. The professional knowledge I gained and the experiences will sharpen my leadership skills.

Conclusion

Small business owners face some challenges in winning construction bids. These challenges have the potential to hamper business growth and sustainability. The objective of this qualitative multiple case study was to explore the strategies of winning construction bids by small businesses. To collect data, I used semistructured interviews, observation, and documents of five small businesses in Johannesburg, South Africa. The findings of the study indicated seven emerging themes: (a) basic bidding principles, (b) factors of success, (c) estimating accuracy, (d) market conditions and competition, (e) efficiency and specialization, (f) highlight past projects, and (g) technology. There was data saturation during the interview with the fifth participant since no new information

emerged. I utilized NVivo 12 software to develop and analyzed the emerged and related themes to the research. The conceptual framework for the study was the TOC.

In this study, I identified core competence and strength that significantly influence small business owners' possibilities of winning construction contracts. Application to professional practice and recommendations for action detailed the aspects of project knowledge, access to resources, and sustainable practices. The summary of the findings in this study could further contribute to discussions on small business owners feeling the pressure to submit a bid that is lower than their competitors. These strategies identified in the study may help small business in winning construction bids.

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Appendix A: Interview Questions

- 1. What strategies do you use to win construction bids?
- 2. How do you assess the effectiveness of the strategies for winning construction contract bids?
- 3. What is the maximum contract threshold you bid for annually?
- 4. What are the formal or informal networks that you rely on to win bids?
- 5. What barriers did you encounter+ in implementing the strategies from winning construction bids?
- 6. How did you address the barriers to winning construction bids?
- 7. How do you identify projects to bid on?
- 8. How do you develop construction bids?
- 9. How do you submit construction bids?
- 10. What other information can you provide on how to bid contracts successfully?

Appendix B: Interview Protocol

Institutions:	
Participant (Title):	
Interviewer:	
Date of the interview	_
Time of the interview	_
B: Department/Unit	
Introductory Protocol	

Bidding Strategies for Winning Construction Bids in South Africa

I will conduct a semistructured, open-ended, and face-to-face interviews on the participating company premises either in the office of the participant or a business room office. The length of the interviews will be 45 minutes approximately. I will introduce myself, the research topic, and state the purpose of the research. During this time, I will ask several questions that I would like to cover based on my sample interview questions. If time begins to run short, it may be necessary to ask participants for more time to push ahead and complete this line of questioning.

Introduction: I kindly ask you to accept my invitation to be interviewed because you are a small business owner and familiar with the bidding strategies for winning construction bids in South Africa. I would like you to share with me the bidding strategies for winning construction bids in the organization. My research project focuses on bidding strategies for winning construction bids.