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Strategies Project Managers Use That Reduce Information Technology Project Failures in the Insurance Industry

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Walden University

College of Management and Technology

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Jamarcus Snipes

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Walden University
2021

Abstract

Strategies Project Managers Use That Reduce Information Technology Project Failures in
the Insurance Industry

by

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MS, Troy University, 2008

B.S., University of North Alabama, 2005

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

Walden University

May 2021

Abstract

The worldwide failure rate of information technology (IT) projects is approximately 65%. Insurance project managers who fail to successfully implement IT projects negatively impact organizational performance and profitability. Grounded in the management by objectives theory, the purpose of this qualitative multiple case study was to explore strategies project managers use to reduce IT project failures in the insurance industry. The participants comprised four IT project managers in Alabama who successfully used strategies to reduce IT project failures in the insurance industry. Data were collected from virtual semistructured interviews, company documents, existing literature, and journal notes. Thematic analysis was used to analyze the data. Three themes emerged: scope management, effective communication, and managing priorities. A key recommendation for IT project managers is to develop a change control process for scope management. The implications for positive social change include the potential for IT project managers to create jobs and stimulate the local economy.

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Section 1: Foundation of the Study

Projects are used by business leaders to execute business objectives and strategies, and the failure of projects can have a direct impact on the organization's success. Project managers are under pressure to identify strategies that will help organizations successfully implement their Information Technology (IT) projects (Anantatmula, 2015). Less than one-third of business leaders are not getting the desired business results when IT projects conclude (Sudhakar, 2016). An IT project can be expensive, and organizational leaders cannot afford the potential losses of a failed project or a compromise that negatively influences competitive advantage (Chi & Sun, 2015). According to Emam and Koru (2008), if a leader correctly places their time, money, and energy on IT projects, they can be more productive and efficient than their competitors. There are many factors, such as changes in technologies, increased complexity, and poor planning that can influence success or failure in IT projects (Jørgensen & Yamashita, 2016).

The failure of IT projects can have a negative influence on organizational leaders' ability to meet their business goals (Ko & Kirsch, 2017). Organizational leaders are experiencing increased project failures due to the inability to meet either budget, schedule, or project scope (Serrador & Turner, 2015). IT project failures present organizational leaders with the potential loss of market share and competitive advantage that could lead to organizational failure and economic challenges (Engelbrecht et al., 2017).

Background of the Problem

According to Maruping et al. (2019), the complexity of information technology may contribute to the lack of success in IT projects. IT project management includes implementing projects for software development, hardware installations, network upgrades, cloud computing, and implementing IT services (Paul et al., 2018). The successful implementation of IT projects influences organizational success, growth, and competitiveness (Ko & Kirsch, 2017). Although the definition of project success has expanded outside of the triple constraint (time, cost, and scope), a project is considered a failure when it has not delivered what was required and in line with expectations.

Organizational leaders invest in their IT products to support their organizational strategies. As a result, there is an increased focus on implementing project management strategies that reduce IT project failure. However, with the increased complexity and pressure involved with information technology, project managers are experiencing project cancellations, budget overruns, schedule delays, or failures to implement functionality specified in the contract scope (Scheuchner, 2017). According to Korzaan and Erskine (2018), 25% of technology projects fail outright.

Problem Statement

Failed implementation of IT projects negatively impacts organizational performance and profitability (Jeppson & Salerno, 2017). In 2016, the failure rate of IT projects was approximately 65% worldwide (Terlizzi et al., 2016). The general business problem was that failure to implement IT projects successfully puts organizations at

financial risk. The specific business problem was that some project managers lack strategies to reduce IT project failures in the insurance industry.

Purpose Statement

The purpose of this qualitative multiple case study was to explore strategies that project managers use to reduce IT project failures in the insurance industry. The target population consisted of four IT project managers who have successfully used strategies to reduce IT project failures in the insurance industry located in Alabama. The contributions to social change may include the improvement of project performance and reduction of financial risks. A reduction in the number of failed IT projects can improve organizational performance and the economy, ultimately providing a positive impact on society through the creation of jobs and economic development.

Nature of the Study

There three types of researcher methods, and they are qualitative, quantitative, and mixed methods (McCusker & Gunaydin, 2015). The qualitative method explores a phenomenon to gain an understanding of underlying reasons, opinions, and motivations (Avgousti, 2013). The justification for using the qualitative method stems from the need to conduct humanistic data gathering and analysis (Chowdhury, 2015). The quantitative method involves testing the hypotheses and analyzing independent and dependent variable relationships (Nardi, 2018). The quantitative method was not appropriate for the study because it focuses on numerical data, and the study explored the experiences of the participants. Researchers use a mixed methods approach when combining quantitative and qualitative methods (Nardi, 2018). The mixed methods was not appropriate for this

study because it involves the incorporation of the qualitative and quantitative approaches, and the quantitative approach examines the relationships between independent and dependent variables. The purpose of the study was to explore experiences of the participants rather than explore the relationship between variables.

This study used a multiple case study design. Researchers use the case study design to broaden understanding and explore a case that is bounded in time and place (Tetnowski, 2015). The multiple case study design was appropriate for this study to explore the experiences of different project managers in various IT projects. Researchers use the phenomenological design to explore a phenomenon in human nature through the lived experiences of participants (Moustakas, 1994). The phenomenological design was not appropriate for this study because there was not a focus on life experiences. Researchers use the grounded theory design to develop theories to explain research data (Glaser, 1999). The grounded theory design was not appropriate for this study because the research did not discover or generate new theories. Researchers use the ethnographic design to study people and their behavior in a cultural setting (Lewis, 2015). The ethnographic design was not appropriate as this study did not involve group exploration in a cultural-sharing.

Research Question

The central question guiding the research was:

RQ: What strategies do project managers use to reduce IT project failures in the insurance industry?

Interview Questions

1. What strategies have you used to reduce IT project failures?
2. What strategies did you find worked best to minimize the risk of IT project failure?
3. How did the different strategies to reduce IT project failure impact project outcomes?
4. What modifications did you apply to any of the strategies to improve the effect of IT project success?
5. What strategies did you find were the least effective in reducing IT project failures, and why?
6. Is there anything else you would like to add that you did not address about reducing IT project failures?

Conceptual Framework

The management by objectives (MBO) theory was the conceptual framework for this study. Drucker (1954) developed MBO theory in 1954 to explain the discipline of modern management practices to improve the performance of an organization by defining clear objectives for all levels of an organization. Drucker (1954) identified the following principles: (a) review and revise cascading organizational goal and objectives, (b) translate specific objectives for each employee, (c) stimulate the participation of employees in the determining of the objectives, (d) monitor progress, and (e) evaluate performance and reward achievements. The MBO theory was selected for this study because, like project management, the MBO theory is about goal setting and frequent

communication and understanding the why, when, and how objectives to achieve the goals needed for project success. As a result, the MBO theory served as a useful foundation for understanding strategies project managers use to reduce IT project failures.

Operational Definitions

Iron triangle: The iron triangle is a model of constraint that defines success using the time, cost, and scope of project objectives with quality as the central theme (Darling & Whitty, 2016).

System development life cycle (SDLC): The SDLC is a methodology for building, designing, and maintaining computer software, information, and industrial systems (Oluwaseun et al., 2016).

SMART goals: SMART goals are activities that are Specific, Measurable, Aceptable, Realistic, and Time-bound (Sull & Sull, 2018).

Assumptions, Limitations, and Delimitations

Assumptions

Assumptions are details that relate to a study that the researcher considers to be true without verification (Lips-Wiersma & Mills, 2014). There were three assumptions for this study. The first assumption was that the participants would honestly represent their project management knowledge and experience related to the strategies for project success required for this study. The second assumption was that the participants would have a comprehensive knowledge of the Project Management Body of Knowledge

(PMBOK). The third assumption was that the participants' views represent most project managers in the effective management of IT projects.

Limitations

Limitations are uncontrollable threats associated with the study that may influence the interpretation of the results (Singh, 2015). According to Weisburd and Gill (2014), limitations are possible weaknesses related to the study. There were two limitations to the study. First, the small sample size of participants may not fully represent the views of other project managers. The results of a study can be limited when researchers use small sample sizes (Kharuddin, et al., 2015). Secondly, researcher bias was a limitation given my professional experience with IT projects. Research bias can influence the results to portray a specific outcome (Noble & Smith, 2015).

Delimitations

Delimitations are factors that restrict the scope of the study and identify what the research is not going to address (Yin, 2017). Delimitations are choices researchers make to design and define the project's scope (Yin, 2017). There were two delimitations of the study. Firstly, the participant location was limited to Birmingham, Alabama, and may not transfer to project managers in other regions of the United States for future studies. Secondly, although the participants had experience that applied to the study, they may have had fewer than 10 years of experience.

Significance of the Study

This study is significant to business practice in that it may provide a model for leaders who look to improve the success rate of IT projects and the the leaders' ability to

achieve yearly goals and performance objectives. The outcomes of the study could demonstrate that project management practices are needed to implement tactical plan initiatives, reduce project failure rates, limit unaccounted costs, and avoid lost opportunities. The results could benefit the project management community and provide project managers with strategies that result in project success.

Projects that have failed in the past have had consequences for the economy, organizations, customers, societies, and communities (Gelbard & Carmeli, 2009). From a social change perspective, the study may provide project management strategies that IT project managers can use to reduce the risk of project failure and improve decision making, therefore improving organizational performance. Improved project and organizational performance can have a positive impact on the economy and, ultimately, positively impact society.

A Review of the Professional and Academic Literature

The literature review section provides a comprehensive review of the literature regarding strategies that project managers use to reduce IT project failures. The central research question was:

RQ: What strategies do project managers use to reduce IT project failures in the insurance industry?

The literature review represents the critical analysis and synthesis of researched literature related to the study and addresses conflicting theories.

The literature review contains a detailed review of current and influential peer-reviewed literature and comprises of the following topic areas (a) project management,

(b) information technology, and (c) SDLC, and (d) MBO. The literature topics related to the overall research included strengths, weaknesses, limitations, and potential for future research. The literature review involved searches of numerous databases, including (a) Google Scholar, (b) ProQuest Central, (c) Business Source Complete database, (d) EBSCO, (e) Emerald Management Journals, (f) ABI/INFORM Complete, and (g) Academic Search Complete. The keywords used to search for relevant literature included *project management*, *Information technology*, *project management failure*, *project management success*, *project management leadership*, and *management by objectives*. The review of the literature includes the conceptual framework of the MBO theory and the contributions of multiple seminal researchers whose work has grounded present-day IT project management strategies.

The study included 226 literature sources. Of the 226 sources, 67% were peer-reviewed journals, and 68% of the literature reflected publication dates between 2015 and 2020, less than 5 years from the completion of this study (see Table 1).

Table 1

Literature Review Source Content

Reference type	Total	< 5years	> 5 Years	% Total < 5 years old
Peer-reviewed journal	170	90	80	53%
Dissertation	8	8	0	100%
Books	52	35	17	67%
Conference paper	6	3	3	50%
Total	236	136	100	59%

The research provided a review of the literature on project management and the link between project management principles and project success. Project management

principles set the foundation for project managers and are necessary when charting a path to project success. The research included a review of the link between project management and IT and the uniqueness of IT projects.

The study also included a review of the literature to link the findings of MBO theory to current practices. The MBO theory focuses on achieving goals by setting individual objectives and managing the process by assessing and communicating the performance of an individual regularly until the organizational goals are obtained (Drucker, 1954). I used the literature review to link the findings of these theorists to current practices in project management. Project management has taken concepts from the MBO theory related to the management of activities and has continued to develop its practices over the years (Yang et al., 2016).

Information Technology

IT is a set of tools, processes, and methodologies used to collect and process information to enhance business operations (Kasemsap, 2016). Throughout history, IT has helped to make life easier. The four IT ages of technology history are premechanical, mechanical, electromechanical, and electronic (Mukherjee & Ghosh, 2018) listed in Table 2. The premechanical, mechanical, and electromechanical ages were influential but were not directly relevant to the study of modern IT project management. The electronic age is a vital and integral tool for business leaders as they implement business strategies.

IT has a direct impact on business and provides organizations with the flexibility to add more powerful and less expensive options. Business leaders use IT to drive efficiency and innovation for business success (Chae et al., 2018). IT improves efficiency

through decision making and the development of innovative tools to solve complex business problems (Setyowati, 2018). Literature regarding leaders' success with IT has been ongoing since the year 2000 bug (Y2K) or millennium bug. Still, research has not focused on the project manager's ability to plan and execute IT projects under budget and on time. Business leaders use innovation to drive efficiency to increase their competitive advantage. Therefore, the reasons why IT projects fail, and the SDLC phases were essential discussions that align with this study.

Table 2

Information Technology History

Ages	Dates	Description
Premechanical	3000 BC to 1450 AD.	Utilization of written communication since most communication conducted through speaking and pictures.
Mechanical	1450- 1840	Utilization of machinery and objects to compute numbers, differences, and measurements.
Electromechanical	1840 to 1940	The early stages of telecommunication and the harnessing of electricity.
Electronic	1940s-Present	Utilization of vacuum tubes and electronic equipment along with the introduction of computers.

Information Technology Projects

IT projects are temporary endeavors that have an impact or dependency on an organization's information systems (Turner & Muller, 2003). Through the implementation of IT projects, business leaders may increase their organization's capabilities, processes, and security (Taylor et al., 2016). IT projects often are used to

achieve an organization's business strategic goals and objectives through technical innovation (Standing et al., 2016). IT projects are typically more complex and unique due to the speed at which technology is changing. IT projects are typically unique efforts for an organization and are not performed routinely, which adds to the complexity of an IT project (Urbanek, 2016).

In 2014, hackers accessed Sony's systems erased data, stole consumer data, and gained access to corporate information (Sullivan, 2016). Security threats similar to those suffered by Sony presented the need for IT projects to support business operations in the areas of data integrity, cloud computing, mobile operational process services, and products (Gupta & Mata-Toledo, 2016). Launching an IT project involves multiple technology groups working together to deliver a product (Durney & Donnelly, 2015).

There are multiple ways to manage an information technology project that impacts the project life cycle. Project managers have the option to choose from one of the life cycle approaches identified in Table 3 to help reduce the risk of failure, account for changing technology, and prevent a prolonged burdensome planning process too early in the project. Similar to project management, the life cycle phases of an IT project are planning, executing, and controlling through to production (Artto et al., 2016).

Table 3*Information Technology Project Management Life Cycles*

IT project management life cycles	Description
Predictive life cycle	The predictive life cycle is similar to the project management waterfall approach due to its linear approach. The scope, schedule, and costs are identified before the project execution phase (Wahyudi et al., 2018).
Iterative life cycle	In the iterative life cycle, the items with the highest priority items are planned first, and benefits are released to the organization incrementally (Wahyudi et al., 2018).
Adaptive life cycle	An adaptive life cycle is a flexible approach that is similar to the Agile project management method that manages flexibility and constant change (Wahyudi et al., 2018).

As organizational leaders move to a more application-centric focus to accomplish business goals, the number of IT projects increases, and the project manager must manage them differently. Therefore, IT project managers must have a unique set of project management tools and techniques to accomplish them. Large IT projects can be more challenging and complex as a result of the rapidly changing technology that could impact the project. As a result of the complexity of IT projects, the dependence on organizational goals, and the constantly changing IT environment, project managers must focus on identifying the strategies that best prevent IT project failure.

Information Technology Project Failures

Ensuring that IT project implementations are successful is a high priority for project stakeholders. Many researchers have focused on the strategies for project success,

but there is limited research that explores the factors that lead to IT project failures (Hosch, 2016). According to Rajkumar and Alagarsamy (2013), a project is considered a failure when the project outcomes do not provide the desired results.

Winter et al. (2019) found that 71% of IT projects fail. However, based on the research conducted by Sudhakar (2016), most IT project failures are avoidable and can be predicted. According to Rajkumar and Alagarsamy (2013), there is not a single factor that leads to IT project failure. However, some common factors are changes in requirements and scope, lack of senior management commitment, and lack of project management skills. Zarndt (2011) identified seven of the most common critical failure factors for IT projects (see Table 4).

Table 4*Failure Factors for Information Technology Projects*

IT failure factors	Description
Poor planning	Lack of preparation and understanding of the scope and risk of the project.
Unclear goals and objectives	The purpose of the initiative is not adequately defined, causing unclear project success criteria.
Continuous scope changes	Commonly known as scope creep. When the user requirements of an initiative are uncontrolled and change the original scope unexpectedly.
An unrealistic time or resource estimates	Setting unrealistic deadlines that do factor in project constraints, risks, and complex factors that could negatively impact the project schedule.
Lack of senior management support	The lack of stakeholder support can be a decelerator to a project as opposed to the benefit of helping to remove roadblocks
Failure to communicate and work together as a team	Lack of communication causes confusion and unnecessary tension that takes the focus away from the overall goal.

Organizations leverage IT to gain a competitive advantage, but most do not plan for failure, they only plan for success. Even though in 2015 only 29% of IT project implementations were successful and 19% were considered utter failures (Hastie & Wojewoda, 2015). Project managers are in a position to reduce the risk of IT project failures by implementing project management strategies that identify project risks before they become issues and negatively impact the project. IT is improving rapidly, and as a result, there are multiple IT initiatives business leaders strive to implement; the practice

of project management can help organizational leaders implement IT initiatives successfully.

Project Management

According to Darling and Whitty (2016), project planning and project management have significantly evolved. Project management has had an influence on history as evidenced in projects such as the Great Pyramid of Giza, the transcontinental railroad, and the One World Trade Center (Lew, 2015). Project management support is a foundation for the development, launch, and maintenance of technology programs (Seymour & Hussein, 2014). A review of the literature on the history of project management, the concepts of project management, project management effectiveness, and project failure and success aides in an understanding of the strategies associated with project management.

Gantt is the father of modern project management. Gantt introduced modern project management in 1958 and developed planning and control techniques to help business leaders succeed (as cited in Seymour & Hussein, 2014). After WWII, project managers began to research new ways to conduct and manage projects. As a result, the U.S. Navy developed the program evaluation review technique (PERT) in the 1950s, and DuPont developed the critical path methods (Samman & Brahem, 2014). Project managers use the program evaluation review technique to analyze individual tasks by asserting a minimum amount of time for completion (Samman & Brahem, 2014). Project managers use critical path methods to assess the time frame for long-range activities and the relationship between the activities and the endpoints (Seymour & Hussein, 2014). In

1996, Project Management Institute (PMI) published the PMBOK, and in 1998 the American National Standards Institute recognized the PMBOK as the standard for project management (Seymour & Hussein, 2014). One of the objectives of the PMBOK is to identify the different functional project management knowledge areas that define a set of concepts, terms, and actions that make up an area of project specialization (Besner & Hobbs, 2012). The 10 knowledge areas identified in Table 5 are integration management, project scope management, project time management, project cost management, project quality management, project human resource management, project communications management, project risk management, project procurement management, and project stakeholder management (Oun et al., 2016).

Table 5*Project Management Knowledge Areas*

Knowledge areas	Description
Project integration management	Relates to tasks that ensure project components are coordinated and managed (Strucker, 2018).
Project scope management	Refers to the deliverables and features required in a project.
Project time management	Refers to taking into account the project tasks necessary to achieve the completion of the project on time (Leal et al., 2018).
Project cost management	Focuses on activities for estimating, budgeting, and managing the project cost (Poorhassan, 2020).
Project quality management	Focuses on the process of ensuring that project outcomes align with the expected objectives (Badiru et al., 2018).
Project human resource management	Relates to acquiring the right team, ensuring their satisfaction, and tracking their performance.
Project communication management	Identifies the information communicated to the team, the primary contacts to, and who will use the information effectively.
Project risk management	Analyzing, assessing, and developing a plan to reduce factors that might cause negative impacts throughout the project lifecycle (Titarenko et al., 2018).
Project procurement management	Relates to the procurement of resources required from an outside source.
Project stakeholder management	Identifies stakeholder role and their impact on the project (Dansoh et al., 2020).

Projects and Project Management

A project is a temporary endeavor that has a beginning, a middle, and end to create a unique product or service (El-Sayegh & Al-Haj, 2017). The primary characteristic of a project is its uniqueness and temporary nature. An endeavor can be unique, but if it does not have an end date to produce an output, then the effort is not a project, and if the effort is not unique, then it can be considered a routine process. Project management is the practice of PMI's skills and techniques and implementation of their knowledge areas to achieve a defined objective. According to Kerzner (2017), project management is a management concept that focuses on planning, organizing, directing, and controlling all aspects of a project to achieve a goal or objective.

Organizational leaders who do not take advantage of project management are not taking full advantage of their success opportunities (Blaskovics, 2016). Project management helps organizations gain a competitive advantage by implementing innovative initiatives (Isharyanto et al., 2015). According to Darling and Whitty (2016), project management principles provide project managers with the ability to enhance the speed of project delivery that may result in profitability.

Project Success Criteria

The project manager is instrumental in the success or failure of multiple and varied projects (Zahra et al., 2014). Project managers are responsible for project success, and the strategies they implement influence project results (Anantatmula, 2015). A project manager must possess the ability to identify critical and noncritical paths, excel at managing all facets of the project work tasks, and adjust strategies based on project type

to prevent the multiple factors that can lead to project failure (Krahn & Hartment, 2006). Njogu et al. (2018) studied the critical success factors of projects. They concluded that project success has a direct correlation to the project outcomes or deliverables aligning with project sponsor expectations and the project manager's ability to leverage lessons learned from previous projects. Project managers continue to search for project management strategies through conferences, training, seminars, and workshops.

If project managers better understand the concept of project management outlined in the PMBOK, they may be better aligned to develop strategies to reduce their project failures rates. By understanding the concepts of project management, the project manager may be in a better position to identify best practices proven to be successful (Kerzner, 2017). Although the definition of success has expanded, business owners still measure success against how well they meet their business owner's expectations, this has become difficult as IT project managers are responsible for complex and unique projects.

Many researchers have theorized the meaning of project success, and the multiple definitions have made it difficult for organizations to truly determine a failed or successful project (Alias et al., 2014). In the early years of project management, one of the first measures to determine project success was the iron triangle. According to Berssaneti and Carvalho (2015), when a project falls within the triple constraints (or commonly called *Iron Triangle*) organizations. Each segment of the iron triangle can have a direct impact on the other and contribute to project success (Serrador & Turner, 2015). As Berssaneti and Carvalho (2015) stated, the iron triangle defines the boundaries for which project managers determine success.

Once literary research grew around the definition of project success, new theories began to emerge that expanded the notion of the iron triangle's limits on the meaning of project success. Researchers began to identify that organizations were acknowledging projects success outside of the iron triangle constraints (Serrador & Turner, 2015). Cullen and Parker (2015) contended that the triple constraints of the iron triangle alone are not a fair assessment of project success. Van der Hoorn and Whitty (2015) suggested that the determination of project success is limited because it does not align with the lived experience of projects and is too simplistic. As a result, project managers began to include additional success criteria.

Research contributions have identified the emergence of two major themes in the criteria to define project success; stakeholder acceptance and the critical success factors. Stakeholder acceptance is the determination of whether a project has been successful as determined by the stakeholders. According to Albert et al. (2017), stakeholders place different importance on the outcomes, and therefore their definition of project success can vary. Albert et al. (2017) noted that some stakeholders might consider the project a success based on functionality, and others may use part of the criteria from the iron triangle. Given the subjectivity of stakeholder acceptance, project managers must ensure they clearly define measures of success for each key stakeholder. According to Deeba and Kureshi (2017), a project increases the level of success when stakeholder expected outcomes are defined.

There is increased research regarding the factors that influence a project's success. Critical success factors are the variables that impact projects and lead to project success

(Yamin & Sim, 2016). Pinto and Slevin (1987), identified the following factors as critical to project success:

- Project mission,
- top management support,
- the project schedule or plan,
- client consultation,
- personnel,
- technical tasks,
- client acceptance,
- monitoring and feedback
- communication, and
- troubleshooting

Expanding on the critical success factors identified by Pinto and Slevin (1987), Gollner and Baumann-Vitolina (2016) identified additional success factors that impact IT Projects such as project management, time, and budget, ERP system quality, user satisfaction, and economic value. Recently Yamin and Sim (2016) identified that there was a positive correlation between the critical success variables and project success. There are many ways to evaluate a project's success, such as the iron triangle and stakeholder acceptance. However, limited research is available regarding the impact of variables to project success.

Why Projects Fail

According to Dai and Wells (2004), despite the maturity of project management and the well-known benefits, project failure rates remain high. A project must identify and manage the risks that can attribute to project failure to be effective. Although project management has made many advances in project management, where Champion organizations have an 80% success rate, multiple underperformers have a 24% success rate of projects completed within the original cost and timelines established (Florentine, 2017). Wagner's (2016) research defined project failure as the instance when deliverables do not align with expected outcomes to stay on budget and to deliver the expected requirements on time. According to Sudhakar (2016), poor planning, poor communication, and a project manager's inability to manage scope are common causes of project failure (see table 6).

Table 6

Project Failure Reasons

Project failure reasons	Description
Poor planning	Failure to identify scope and project success or failure at the initial stage of the process.
Lack of communication	Failure to effectively translate information that is easy to understand.
Scope creep	Uncontrolled changes to a project's requirements or deliverable

Poor Planning

According Alami (2016), poor planning is a failure to identify scope and project success or failure at the initial stage of the process. Project managers develop a plan early

in the project to provide an outline of the project steps needed for increased success. The project provides the project manager a foundation to follow. Robbins (2019) revealed that many projects fail due to poor planning. According to Shivakumar (2018), poor planning will cause poor schedule management, misaligned budgets, and failure to meet stakeholder expectations, each of these items can cause project failure. Despite the high failure rate due to a lack of planning, this step is often skipped or poorly executed due to a need to achieve the desired deadline. Failure to plan is a misguided practice, and the project manager must be intentional about planning out the major steps in the project. Project managers can avoid the pressure of skipping planning by including the task in the project schedule and requiring formal signoff before moving to project execution.

Lack of Communication

Lack of communication on a project occurs when there is a failure to effectively translate information timely in an understandable manner to project stakeholders (Zoder, 2019). Proper communication is critical for project managers; poor communication on a project can have a negative impact on project success (Gamil et al., 2019). When there is a lack of communication in a project, and there is a failure to report project status, project changes, or project stakeholders may start making assumptions that lead to a misalignment of expectation and the determination of project success. Project managers typically develop a communication plan that outlines who should receive information, when and how information should be received, and the type of information provided about a project (Butt et al., 2016). This type of communication allows the project

manager to ensure there are no gaps in knowledge around the project and adapt the information for each stakeholder group.

Scope Creep

A project's scope defines the output or features delivered at the end of a project (Shahibi et al., 2019). Providing the items identified in the scope plays a significant part in determining project success. The scope is typically confirmed in the planning process and drives the work activities and estimates for the project. However, scope creep occurs when uncontrolled changes occur in the project scope (Ajmal et al., 2019). The fail point is when the changes are requested or made to the scope and estimates, and expectations with project stakeholders are not adjusted. The definition of success now differs from the project team and the key stakeholders. They primarily determine project success or failure. In order to avoid this risk, project managers develop a scope management plan that defines the scope and how it managed. The plan helps project managers ensure that stakeholders understand the impact scope changes have on the original project outcomes. Scope changes usually require a stakeholder approval process.

Project Management Effectiveness

Project effectiveness centers on doing the right thing (Drucker, 1954). Effectiveness in projects implies supporting the organizational and stakeholder goals by implementing successful products that will increase bottom lines and the ability to compete (O' Regan, 2017). Browning and Yassine (2016) proposed that project effectiveness and success indicators help to visualize the portfolio through the use of multiple criteria. Goal clarity is also a fundamental variable that can promote project

success (Stelson et al., 2017). Project managers use the past experiences of other project managers to develop best practices to enhance the chances of project success (Davies & Brady, 2016).

Organization leaders are implementing project management approaches that align with the long-term strategic plan. Effective project managers achieve objectives successfully by planning and organizing resources. According to Muller et al., (2012), successful project managers use their technical skills and interpersonal skills to meet project objectives. According to Alkhuraiji et al. (2016), project managers are more effective when they use previously successful strategies. The successful implementation of an IT project requires project managers to understand business objectives and use project management strategies to increase the effectiveness of the business (Chipulu et al., 2014). IT project success heavily relies on the effectiveness of a project manager's ability to implement project management strategies.

Effective Project Leadership

The effectiveness and competence of a project manager is an essential factor in the successful outcome of a project. Organizations want influential project leaders they can trust who will see the project through to successful completion (Blaskovics, 2016). The ability of project managers to use multiple leadership skills contributes to the success of the projects. According to Henkel et al. (2019), project managers that are effective leaders increase their chances of successful project implementation. Projects can vary depending on complexity, risk, and support resources, and success can depend on the ability of a project manager to adapt their leadership skills and use multiple strategies

(Müller & Turner, 2010). The ability to use multiple project management leadership skills, as identified in Table 7 and their use of project management strategies, measures a project manager's effectiveness as a project leader (Marsh, 2018). The ability to adjust their skills based on the project needs and the organizational environment measures a project manager's competence.

Table 7

Project Management Skills

Project management skills	Description
Communication and interpersonal skills	The ability to effectively translate information and relate to people at different levels of an organization.
The ability to inspire others for a common goal	The ability to understand the vision and effectively provide that vision to others.
Excellent decision maker	The ability to adapt and quickly make business decisions.
Delegation	Understanding of team member's skills and abilities and allowing them to carry out specific tasks.
Problem solver	The ability to be creative and find ways to resolve difficult questions.
Positive attitude/motivator	An optimistic attitude toward team members can impact their mental thinking to motivate and drive promising results.
Honesty	The ability to be honest to gain the trust of a team (Marsh, 2018).
Competence	The ability to gain the respect of a team by demonstrating a knowledge of one's skills and abilities.
Stress management	The ability to remain calm and reason in high-pressure situations.
Team Building	The ability to build a productive and creative environment through communications and a focus on goals.

The project managers who are most effectively utilizing the skills identified in table 7 at various stages in the project have learned the art of adjusting their skill sets based on the project needs. A project can vary based on size, complexity, and risks, among other factors, and a project manager must understand that the skills and competencies for project managers are very different (Krahn & Hartment, 2006). When a project manager can demonstrate an ability to adapt to larger and more complex projects in the face of uncertainty, their initiatives can have a higher chance of project success. The need to implement projects successfully in fast-paced environments and through uncertainty is especially important in the insurance industry.

Project Management in the Insurance Industry

Companies in the insurance industry offer risk management solutions to cover uncertain events (Sachs, 2018). Some common categories of insurance companies are accident and health and property and casualty. Insurance companies are required to meet regulatory standards that require a continual change in their processes and systems to stay compliant (Klein, 2005). Insurance companies are highly competitive, and companies must stay current with the processes and technologies to maintain a competitive advantage (Cappiello, 2018). The need to thrive with the constant changing and competitive nature of the industry has caused the companies to implement project management programs (Edwards, 2018). However, according to Edwards (2018), project success rates are lower in the insurance industry due to a lack of planning projects, project resources, scope/requirements, regulatory understanding, and communication. The research revealed that insurance companies that have standard project management

practices achieve a strategic advantage over their competitors who have no formal project management practice in place (Jugdev, 2005). According to Sarkar and Locatelli (2018), implementing project management best practices helps organizations such as insurance companies improve their performance and achieve their desired goals to obtain a competitive advantage. Unfortunately, there is a lack of literature on project management in the insurance industry; the research helped build upon the literature that connects project management and the insurance industry.

System Development Life Cycle

Research on IT projects, in general, has shown that project management following the SDLC and the MBO can increase project success. The SDLC is a process used in conjunction with IT projects and defines the sequential stages of IT projects (Mustaquim & Nyström, 2015). Each of the phase's goal is to provide useful planning for the project team. Proper planning and project management will allow teams to deliver the product on time and minimize the costs. The phases include (a) requirements analysis, (b) design, (c) development, (d) integration and testing, and (e) deployment and maintenance (Church et al., 2016). Each phase is dependent upon another and can be impacted by multiple external factors. Each phase of the SDLC is critical to the overall success of IT projects. Project managers are responsible for breaking down each of the phases into smaller, more manageable tasks when building the project plan (Locatelli et al., 2017). There is a dependency between each phase of the SDLC. A clear understanding of the results of each phase is required to ensure the successful outcome of each phase and the overall

project (Aljohani & Qureshi, 2016). However, many IT projects fail to successfully execute the project plan, despite having the SDLC as a guide to support implementation.

Requirements Analysis

The requirements analysis is the first phase of the SDLC and is the collection of user business requirements; the emphasis is on identifying the needs of the system (Sharma, 2017). Project managers ensure that the software developed in projects meet business objectives. Project managers and business analysts hold discussions with stakeholders to understand the problem, and the information received is translated into formal requirements documents (Sharma, 2017). The formal requirements document is reviewed for validity and as input for the design phase of the SDLC. The output of requirement analysis is a complete and comprehensive description of the behavior of the software to be developed (Roy et al., 2016).

Design

In the design, phase developers and technical architects begin the high-level design of the software and system requirements and transform the requirements into detailed system design specifications (Karim et al., 2017). The goal of this phase is to transform the requirement specification into a structure or plan. The design specifications provide a detailed overview of the system (Sharma, 2017). The output of this phase is the software design document (Karim et al., 2017). Once the design of the specifications, features, and operational setup are approved, the development team begins the next phase of the SDLC.

Development

The development phase is the start of production. Developers begin coding the design specifications according to the user requirements and the design specifications (Sharma, 2017). The developers use the design(s) to ensure the system is appropriately organized by creating and reviewing code and deploying software to an environment for testing (Church et al., 2016). The output of the development phase is program code (Church et al., 2016). After the development phase, unit integration and testing are the next phases of the SDLC.

Integration and Testing

Integration and testing is the longest phase of the SDLC and designed to understand and review the actual versus expected results from the output of the application. Quality assurance (QA) professionals bring different components and subsystems together to create the whole integrated system, introduce the system to different inputs to obtain and analyze its outputs, and assess the behavior and the way it functions (Kazim, 2017). System tests check for defects and interoperability (Kazim, 2017). Project teams have also taken advantage of automated testing tools to ensure that testing outcomes are predicted and meet the desired project objectives (Mittal, 2016). Testing repeats until all errors have been identified and fixed, and once the system is confirmed, it is ready to move to the implementation and maintenance phase of the SDLC.

Deployment and Maintenance

Deployment and maintenance is the final phase and begins once all defects have been resolved and tested (Sharma, 2017). After the software release to production, a maintenance team evaluates the release for any post-production issues. The goal of software maintenance is to remove errors or bugs, change platform requirements, and add new features to existing software to ensure that the existing software application continues to meet business owner needs (Kazim, 2017). Project managers that manage IT projects develop strategies that help align the project milestones with the outputs of each phase of the SDLC to avoid project failure (Kiswani et al., 2017).

SDLC and Project Management

The project management methodology and the SDLC share similar benefits of dividing efforts into manageable parts and creating specific milestones and deliverables as measures of success (Lee & Wong, 2018). Despite the commonalities, there are a few differences between the project management life cycle and the SDLC. The project management lifecycle starts with initiation, which is a direct correlation to the requirements phase of the SDLC. To complete the planning phase, it is necessary to fully define and gather requirements to ensure the results align with expectations (Church et al., 2016). The activities conducted in the planning phase are similar to the activities in the design phase of the SDLC (Mustaquim & Nyström, 2015). The execution phase of the project management process is comparable to the construction phase of the system development lifecycle phase (Blake, 2004). The project management closeout phase in the project management process does not map directly to the SDLC. Project managers can add value to IT projects and the SDLC phases through their support of similar

activities such as writing a performance work statement, requirements analysis, system testing, and scope management (Church et al., 2016). It is a project manager's job to make sure the teams uphold project management and systems development standards.

Management by Objectives

Business leaders aim to improve project performance by identifying tools, techniques, and processes that allow them to set defined objectives. The search for another business approach motivated management theorist Peter Drucker to develop MBO theory and preempt the mainstream emergence of modern project management (Drucker, 1954). Peter Drucker (1954) defined management as an organized body of knowledge, and his MBO theory refers to a system in which overall objectives are stated and agreed upon. Drucker emphasized agreement between management and the employees on the objectives and what they need to do to achieve the desired objectives (Yang et al., 2016).

The process of MBO involves managers and employees determining objectives, periodic review of the progress toward the objectives, evaluation of results, and allocating rewards based on the progress made (Drucker, 1954). The manager assures that the employee's objectives align with the objectives of the department and the organization and encourages employee involvement early in the planning process to motivate the team and gain commitment to achieve desired results. (Drucker, 1954). Drucker (1954) identified five management steps that enhance project effectiveness and overall success

Managers develop objectives from business goals. According to Drucker (1954), managers can consider how their unit's objectives assist other units in meeting their

objectives and how anticipated contributions from other units will help to meet their unit's objectives. Business leaders who lose sight of organizational objectives become too get involved in their current activities and lose sight of their goals, Drucker defined the process as the activity trap (Drucker, 1954; Onyeike & Eseyin, 2018). Peter Drucker used the SMART (Specific, Measurable, Acceptable, Realistic, and Time-bound) goals to define objectives. According to Drucker (1954), objectives should be clear and recognizable, and employees should understand their part in achieving the organizational objectives.

Table 8

Management by Objectives Process

MBO steps	Description
Define organizational objectives	The identification of activities and goals in which outcomes align with the mission and vision.
Translate organizational objectives	Providing the organizational objectives to employees and ensuring the objectives are specific, measurable, acceptable, realistic, and time-bound.
Stimulate the participation of employees	Motivate employees to participate by encouraging them to set and commit to personal objectives that help achieve the objectives of the organization.
Monitor progress of objectives	An assessment of the progress and performance of the objectives established to ensure alignment with the goals and expectations.
Evaluate and reward achievements	Feedback to employees regarding their performance and the recognition of their achievements.

In addition to Drucker's (1954) MBO theory, Edwin Locke (Locke & Latham, 1990) pioneered a similar objectives-based theory called the goal setting and motivation

theory. Locke and Latham (2013) asserted that specific and ambitious goals lead to performance improvement. Locke and Latham (1990) argued that working toward a goal is also a significant source of motivation. Locke and Latham (2013) affirmed that goal setting increases motivation, which leads to better performance, as well as improving the quality of feedback. Goal-setting theory is a technique used to raise incentives for employees to complete work quickly and effectively (Locke & Latham, 2013). In line with these theory project managers set goals early (deliverable or scope) in a project to determine success, the known success criteria may motivate resources to complete their specific work on time or early.

Although some researchers view the MBO theory as dated, Drucker evolved his theory. Project managers put into practice the core principles of Drucker's goal-setting theory as they align project-specific goals with some self-development or team-based goals, and use those to motivate their teams (Zwikael et al., 2018). In 1981 George Doran introduced the concept of the SMART goals, a method that included the principles from Drucker and Locke, and provides a clear and straightforward framework to define and manage goals and objectives (Ogbeiwi, 2017).

Walthour (2018) evaluated strategies NHAs use to improve regulation compliance, mitigating potential deficiencies, and derivative fines to promote financial sustainability. Data was collected using semistructured interviews with four NHAs and from Medicare's Nursing Home Compare website. The researcher chose Drucker's MBO theory for their conceptual framework because it provided a lens through which to evaluate successful strategies that NHAs use to improve state and federal regulation

compliance to mitigate potential deficiencies and derivative fines to promote financial sustainability. MBO involves a manager and employee collaboration in the planning process to improve efficiency and communication to achieve desired results. Walthour's (2018) findings support Drucker's theory around collaboration and communication between employee and manager and revealed three major themes: develop knowledgeable staff, enhance communication with staff and residents, and promote innovation for continuous quality improvement. Drucker's MBO theory uses goal setting and frequent communication to help successfully achieve the goals needed for project success (Kuster et al., 2015). This study applies to my researcher because I want to determine strategies that project managers use to reduce IT project failures in the insurance industry and provide improved results.

Alternative Viewpoints & Critique of MBO

Using the MBO theory, Drucker (1954) focused on managing the process that improves organizational performance through the use of clearly defined objectives. Transformational leadership theorist James McGregor Burns (1998) suggested that leaders contribute to critical organizational outcomes rather than focus on objectives. Although MBO focuses more on management, the transformational leadership theory focuses on extracting the best out of employees as they work as a single unit towards a common goal.

Although Drucker's theory has been adopted and accepted by many, there have been critics of the theory. Edward Deming, the founder of the management theory, found that setting production targets influenced workers to meet established goals through

whatever means necessary, which usually results in poor quality (Corbacioglu, 2016). According to Castellano and Roehm (2001, 03) Deming argued that when organizations follow the MBO theory setting goals like may lead workers to focus on only meeting those goals and which could negatively impact quality. Many researchers have contended that the MBO does not support optimization because it breeds in competition between employees, selfishness, and a lack motivation (Castellano & Roehm, 2001). Deming identified that goals setting through the use of numerical goals and targets to control people and processes do not properly motivate employees and creates adversarial relationships and low quality (Deming, 2018).

In addition, Levinson (2003) also was a critic of the MBO theory and focused on Herzberg's (1959) findings that individuals are most deeply motivated by work that stretches and excites them while also advancing organizational goals. Levinson (2003) also argued that MBO fails to take adequately into account the deeper emotional components of motivation. Similar to Deming, Levinson (2003) considered the MBO to be a self-defeating theory due to a limited choice of objectives and the increased pressure on the individual. Although the MBO process is inclusive and designed to be self-motivating for employees, Levinson (2003) contends that the individual's needs and desires are absent from the MBO theory and assumes that these are in perfect alignment with corporate goals. Levinson and Deming both agree that the MBO theory does not take into account employee motivations and negatively impact quality.

Drucker (1954) identified the MBO theory as a concept that focuses on goal setting to ensure project success, and according to Deming et al. (2018), the management

theory targets the concept that focuses on how people understand where their effort or output fits into the achieving the overall goal. Drucker (1954) defined project management success as achieving the goals of the effort. Drucker (1954) outlined how project managers could improve their performance and reduce IT project failure by employing effective manage time, identifying the strategic decisions that contribute to the growth, and connecting management variables to effective decision making.

Project Management and MBO

Project management and the MBO theory are similar; the primary principles focus on defining objectives to achieve a goal. As with project management, the MBO theory helps one identify why, when, and how to accomplish objectives. Drucker (1954) described MBO as a method of allowing management and employees to concentrate on achievable objectives to maximize resources to yield the highest possible results. Drucker's MBO theory has had a direct influence on project management as it developed its phased approach of initiation, planning, execution, control and monitoring, and closing.

In the planning phase, project managers use the scope management process to define the objectives of an effort and assign resources to specific tasks or objectives in the overall planning process (Oun et al., 2016). Scope management is the part of project planning that involves determining and documenting a list of specific project goals, deliverables, features, functions, tasks, deadlines, and ultimately costs (Besner & Hobbs, 2012). Organizational leaders can avoid the activity trap by identifying goals at both the individual and team levels and actively managing those goals (Drucker, 1954). After

organizational leaders establish the scope and goals, they must communicate the expectations and goals to employees so they can buy-in to the effort to ensure the overall successful delivery of the organizational goals and projects (Zwikael et al., 2018). An advantage of the MBO theory is the motivation of employees when the organizational objectives are discussed and shared with the employees of the organization so that everyone will know what the expectations set for them (Islami et al., 2018). When an organization expands the decision-making responsibility, the result is motivated employees who want to solve the problems they are faced within an intelligent manner; while remaining flexible in the changing circumstances (Irawanto, 2015). The participatory process ensures that stakeholders are actively engaged in the decision-making process and clear on all the organizational objectives (Hassenforder et al., 2015).

The evaluation and monitoring phase in the MBO theory set the stage for the monitoring and control phase of project management (Drucker, 1954). Project managers evaluate and monitor the progress of their effort. Project monitoring is a fundamental but mandatory phase for any project manager (Blaskovics, 2016). To ensure project success, project managers must update stakeholders on the project progress through reports and regularly assessing progress related to scope, benchmark goals, timeline, and budget helps ensure project success (Davies & Brady, 2016). Monitoring allows management to assess whether the progress aligns with the intended objectives; evaluation focuses on the data and information by the monitoring system to analyze trends and impact on the project (Kerzner, 2017). Drucker's MBO theory is a natural fit for project managers because it uses goal setting and frequent communication to help successfully achieve the

goals needed for project success (Kuster et al., 2015). Drucker's MBO theory provides a lens through which I can explore successful strategies that project managers use to reduce IT project failures in the insurance industry.

Transition

In Section 1, I outlined why the topic of project management strategies and their use or lack thereof impact project failure is a relevant business topic with brief explanations of the background, problem, and purpose statements, as well as the nature of the study. Additionally, I outlined the research question, interview questions, conceptual framework, operational definitions, assumptions, limitations, and delimitations, as well as the significance of the study. I also included a literature review, organized into four main themes: (a) project management, (b) information technology, (c) systems development life cycle, and (d) MBO.

In section 2, I outlined the role of the researcher and provide a more detailed explanation of the project components, as well as the rationale for the decisions. In Section 2, I also included the criteria for participants, the chosen research method, design, and population to achieve a study sample. Section 2 included the explanation of how data collection instruments and techniques, data organization and analysis, and methods are used to achieve trustworthiness.

As part of Section 3, I described the outcomes of the project, including a presentation of the findings, application to professional practice, implications for social change, recommendations for action, and recommendations for further research. Finally,

section 3 included reflections and conclusions regarding successful IT project management strategies.

Section 2: The Project

In Section 2, I include an overview of the study methodology and a description of the qualitative method. Section 2 also includes the purpose statement of the study. I then discuss the role of the researcher and describe the participants in the study, along with a discussion of the research method and design, population and sampling, and ethical research. I concluded Section 2 by discussing data collection instruments, data organization technique, data analysis, and reliability and validity.

Purpose Statement

The purpose of this qualitative multiple case study was to explore strategies that project managers use to reduce IT project failures in the insurance industry. The target population consisted of four IT project managers who have successfully used strategies to reduce IT project failures in the insurance industry located in Alabama. The contributions to social change may include the improvement of project performance and reduce financial risks. A reduction in the number of failed IT projects can improve organizational performance and the economy, ultimately providing a positive impact on society.

Role of the Researcher

An essential part of this study was the role of the researcher. I was the primary data collection and analysis instrument. In this study I explored the experiences of the participants related to the research question. The main research instrument for qualitative studies are researchers, and they are the primary individuals interacting with the participants (Cairney & St. Denny, 2015). The

semistructured interviews included probing (open-ended) questions, the use of audio to record the interviews, and follow-up interviews for clarification purposes. In qualitative studies, to encourage participants, the researcher uses semistructured interview protocols to discuss their experiences related to a phenomenon (Dumay & Qu, 2011).

Although I do have experience in the project management industry, I did not have a relationship with participants involved in the data collection. According to Kooskora (2013), prior knowledge of the project management industry is essential to the research process. The goal of this research study was to explore project management strategies used; therefore, knowledge of the existing project management practices was more important than having an in-depth relationship with the participants or organization in the study.

I followed the ethical principles and guidelines in the *Belmont Report* (National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research, 1979). In the interactions with participants, I considered respect for persons, beneficence, justice, and equality. The informed consent and interview protocols allow for confidentiality, and the lack of incentives offered mitigated potential ethical risks (Check et al., 2014). As the researcher, I ensured participant confidentiality was maintained to align with the guidelines of the *Belmont Report* and the research ethical guidelines identified by Walden's Institutional Review Board.

To avoid researcher bias, I used an interview protocol to ensure the same interview process and questions for each interview. The interview protocol is a seven-step collection process that ensures that the same procedure for each interview is

followed (Yin, 2017). The interview protocol steps included: (a) opening statements, (b) semistructured interview questions, (c) probing questions, (d) participant verify themes, (e) follow-up questions, and (f) record reflexive notes (Yin, 2017). I followed the same protocol steps identified by Yin. The interview questions were open-ended, allowing for more detailed responses. Researcher bias was managed by using the member checking technique. Member checking is a technique that researchers use to provide the participants with the ability to validate findings from the research by providing feedback and correction (Harvey, 2015). Therefore, member checking and the use of interview protocols ensured the accuracy of the data captured and avoided researcher bias influencing results to portray a specific outcome.

Participants

To be eligible to participate in the study, participants were Project Management Professional (PMP) certified, had a minimum of 3 years of experience managing IT projects in the United States, and were employed by the organization identified in the case study. A participant with a PMP certification has a full body of knowledge of project management practices and techniques (Blaskovics, 2016). To ensure I captured a variety of experiences, there was no limitation related to the number of years a participant has managed projects. Participants with a PMP and with at least 3 years' experience in the project management field were relevant to the study because they know their organization and the project management skills and techniques to provide answers to the interview questions.

To gain access to participants, I visited a local Project Management Institute chapter meeting to network with members of the project management community. Once the interested parties agreed to participate, I made contact through a recruitment email. The email described the intent of the study, the participants needed, and the confidentiality measures. After I received consent, I sent the informed consent form to describe the intent of the study along with the interview questions. I requested an interview date and time.

In qualitative research, the researcher needs to establish trust with the participants to help ensure open and honest responses (Cope, 2014). Yin (2017) suggested that to maintain a conversational and casual tone during the interview, researchers must build rapport with participants. According to Ndimande (2012), building a relationship and trust with the participants will provide more in-depth responses and perspectives. To establish trust, I provided detailed explanations of all procedures, conducted in-person interviews, promoted knowledge sharing, and provided my contact information for follow up questions.

Research Method

Research methods and design are critical components of a doctoral study. The selection of the qualitative method for this study was appropriate because of the intent to explore strategies that project managers use to reduce IT project failures in the insurance industry. The qualitative method was used by researchers to explore a phenomenon to gain an understanding of underlying reasons, opinions, and motivations (Avgousti, 2013). The qualitative method allows researchers the ability to ask probing questions to better

understand the participant's motivation and feelings (Marshall & Rossman, 2014). When using the qualitative method, I was able to understand the current practices of project managers and gain an in-depth understanding of the phenomenon from various perspectives.

With the quantitative research method, researchers can examine the relationship between variables and analyze the relationship mathematically through statistical analysis (Thamhain, 2014). Researchers use statistical analysis tools to quantify data and generalize results from a sample (Yilmaz, 2013). The use of the quantitative method might have provided insight into the correlation of project failures to organizational cost overruns. Still, it would not have captured the strategies managers use to reduce IT project failure. The quantitative method was not appropriate because I did not use hypothesis testing to address the research question.

A mixed methods approach combines quantitative and qualitative methods (Nardi, 2018). Researchers use mixed methods to overcome the limitations of a single design (Caruth, 2013). Therefore, data is more comprehensive and can be used to overcome the weakness of both methods and use the strengths of each (Fielding, 2010). The mixed methods approach was not appropriate for this study because I did not focus on the relationship between independent and dependent variables associated with the quantitative approach found in mixed methods studies that use both the qualitative and quantitative approaches.

Research Design

Researchers use the case study design to understand and explore a case that is bounded in time and place (Amerson, 2011). According to Dasgupta (2015), the case study design provides a narrow scope of a topic and determines if theories work in the real world. I used the multiple case study design for this research. I chose a multiple case study design because I gathered data presented from multiple experts and their many life and practical experiences implementing IT projects. Case studies can be exploratory, explanatory, or descriptive based on the reporting structures for the inquiry results (Yin, 2017). Explanatory case studies are presentations of reasons how or why a phenomenon came to be and can be presented with mixed methods to support a causal argument (Johansen et al., 2015). Descriptive case studies are introductory or illustrative presentations of a phenomenon and provide an in-depth description to develop a common language for use to describe a phenomenon (Vu et al., 2018). As a result, the descriptive multiple case study design was not appropriate for this study. Exploratory case studies are small in scope and provide insight into the appropriateness of interview questions and types of analysis (Blackburn, 2017). I used the exploratory multiple case study design to explore a phenomenon rather than a statistical survey.

Researchers use the phenomenological design to explore a phenomenon in human nature through the lived experiences of participants (Moustakas, 1994). Researchers also use the phenomenological design to avoid biases and assumptions about human experience to a particular phenomenon (Davidsen, 2013). The phenomenological design uses in-depth interviews with small samples of participants (Khan, 2014). A researcher

can make generalizations regarding what it is like to experience a particular phenomenon from lived experiences (Robertson & Thomson, 2014). The phenomenological design was not appropriate for this study because I did not focus on the life experiences of the participants, but multiple cases related to the phenomenon.

Researchers use the grounded theory design to develop theories to explain research data (Glaser, 1999). Researchers who use the grounded theory design do not start with a theory or model when beginning their research, the data collected helps construct the theory (Charmaz & Belgrave, 2019). Data collection and analysis for grounded theory occur at the same time (Reiter et al., 2011). The grounded theory design was not appropriate for this study because I did not plan to discover or generate new theories.

Researchers use the ethnography design to evaluate people and how they interact in a cultural setting (Lewis, 2015). Researchers use the ethnography research design to observe and interact with research participants and provide a deep understanding of the problem (Mannay & Morgan, 2015). Participant observation, interviews, and surveys are also a part of ethnography (Thierbach & Lorenz, 2014). The ethnography design was not appropriate as this study did not involve observation of a group in their cultural settings.

I ensured quality data collection through data saturation. The interview process continued until there was no additional information to be gained from the participants. I completed data gathering when I reached data saturation. According to Faulkner and Trotter (2017) data saturation occurs when no new themes or patterns emerge from the data.

Population and Sampling

The target population for the study aligned with the overarching research question because it included certified IT project managers in the insurance industry located in Alabama that have experience managing IT Projects. According to Yin (2017), interview participants must be knowledgeable of the research questions, able to answer the research questions, and understand the research phenomenon in qualitative research. Based on the requirements identified by Yin, the target population for this study was appropriate for the study. I selected the participants for the study from the target population. I attended a public event hosted by a local project management group that consists of the target population project managers. The event was attended by certified project managers in the insurance industry, which meets the criteria to be eligible to participate in the study. I created a one-page overview (flyer) of the study to provide potential candidates while at the partner organization. When a volunteer showed interest, I emailed them the flyer that described the intent of the study, the participants needed, and the confidentiality measures.

A reasonable sample size is between three to six participants (Hackmann et al., 2017). According to Rowley (2012), the size of the population should be large enough to bring credibility, but not too large that it prevents the ability to provide detail and depth to the study. In qualitative studies, the appropriate sampling size depends on the nature and scope of the study, the quality of the interviews, sampling procedures, and the qualitative method used (Marshall et al., 2013). I used purposeful sampling to identify the multiple perspectives of four participants from an insurance company's Project

Management Office (PMO) in Alabama who met the established criteria. Purposeful sampling is a technique useful to narrow down the population by selecting participants based on their ability to answer the overarching research question (Palinkas et al., 2015). Purposeful sampling was appropriate for this study because I established a defined criteria for participation to ensure substantial data related to the research question was acquired. According to Yin (2017), purposeful sampling is used by qualitative researchers to select participants who are knowledgeable about the phenomenon.

According to Yin (2017), at least six in-depth interviews should provide enough data for data saturation. Data saturation is met when no new information can be gathered by analyzing more data (Fusch & Ness, 2015). I continued to interview participants until there was no additional information gathered from interviews. According to Robinson (2014), data saturation can occur with a size of ten or fewer participants. To ensure consistency, I used an interview protocol.

I provided each participant with the opportunity to choose the date, time, and location for their interview. A preferred location selected by the participants improves their involvement in the interview, allows for more comprehensive data, and reduces possible bias (Oltmann, 2016). When participants can choose their interview location, it can build a level of trust (Hoogesteyn et al., 2020). I conducted face-to-face interviews and provided telephone or video teleconference interview capabilities when needed. The interview settings were free from distraction, and I used a recorder to ensure accuracy. Rosenthal (2016) suggested researchers use record interviews and use the recordings to ensure accuracy of the interview transcriptions.

Ethical Research

To ensure the ethical protection of the participants involved in the research, I followed three ethical objectives: respect for persons, beneficence, and justice. I used the informed consent process to gain consent from participants. Researchers use the informed consent process to ensure participants have an understanding of the research intent and allow participants to make a rational and informed decision about participation (Kadam, 2017). In addition to providing informed consent, I included the rights and responsibilities of both the researcher and participants, contact information for myself, and academic institution for questions, concerns, and withdrawal instructions from the study.

Participation in the research was voluntary, with minimal risk to the participants. The prospective participants responded via email with the words “I consent” to indicate their willingness to participate voluntarily in the study. Through a lack of response, prospective participants indicate their refusal to participate in the study. I provided the participants with the details of the study and the confidentiality procedures. Researchers must provide participants the procedures conducted in the study and the plans to protect their identity (Hiriscau et al., 2014). The informed consent details included (a) details of the study, (b) the research process, (c) study withdrawal steps (d) potential benefits of the findings, and (e) my contact information. According to Thorpe (2014), researchers should provide participants the opportunity to withdraw for any reason. At any time, the participants had the option to withdraw from the study for any reason. The participants did not incur a penalty for withdrawing. To withdraw from the study, the participants had

the opportunity to inform me via email or phone about their wish to withdraw from the study. I did not include any data collected from a participant withdrawing from the study. The participants did not receive any compensation or incentive for their participation in the study.

To ensure the ethical protection and confidentiality of participants, I assigned a code for each participant (P1, P2, etc...). The assignment of a pseudonym or code allows the research the ability to provide confidentiality and privacy for the participants (Anthony & Stablein, 2016). I will store the data collected securely for five years by keeping all electronic research data password-protected and paper research in a locked filing cabinet. After 5 years, I will delete all electronic files and shred paper documents. The actions to obtain permission to conduct the study followed the process set by the Institutional Review Board and the approval number for this study was 12-14-20-0660652.

Data Collection Instruments

As the researcher in the qualitative study, I was be the primary data collection instrument. The four sources qualitative researchers use to support data collection efforts are structured interview, semistructured interview, questionnaire, and organizational documents (Fusch & Ness, 2015). I collected data by using virtual face to face semistructured interviews using an interview protocol (see Appendix) after consent and the confirmation of an interview location. According to Cline (2011), in qualitative research, semi-structured interviews are a typical data collection method and can be held face to face. I used one hour for each interview, at a location convenient to each

participant, and used prearranged questions for the semistructured interviews. A preferred and convenient interview location improves participant involvement during the interview (Mealer & Jones, 2014). With participant consent, I recorded each interview session using a digital audio recorder.

Along with introducing the study, the interview protocol outlined the interview process and the interview questions. The interview questions addressed the problem statement. As the researcher, my responsibility was to follow the interview protocol to avoid bias and increase credibility. According to Yin (2017), an interview protocol is an essential tool to improve the credibility of the study. Semistructured interviews allow a researcher the flexibility to ask open-ended questions for more in-depth data (Kallio et al., 2016).

During the interview, I supported the audio recordings by writing notes in a field journal. I recorded personal thoughts in the note pad to prevent any researcher bias, after the completion of each interview. I organized data by recording the participant's name, organization, time, date, and location, and by assigning a code. I used digital audio recordings to verify the participants' responses and store the audio recordings in a locked cabinet to protect their confidentiality. Qualitative researchers minimize errors in data transcription and interpretation by transcribing them immediately (Yin, 2017).

To further enhance the reliability and provide an opportunity for validation, I used member checking. Member checking increases (a) accuracy, (b) minimize erroneous data, and (c) strengthen the reliability and validity of the study by sharing interpretations of the findings with the participants to check for accuracy and alignment with their

experiences (Birt et al., 2016; Harvey, 2015). Member checking allows researchers to validate the themes and understanding captured during the interview (Morse, 2015). After the semi-structured interviews and follow-ups, I supplied each participant with a summary of their interview for review to ensure the accuracy of the data captured.

Data Collection Technique

The primary data collection technique was virtual face to face semistructured interviews in this multiple case study. I also collected secondary data through review of company documents and literature review. The use of semistructured interviews allows qualitative researchers with the ability to gain in-depth knowledge related to the research question (Szolnoki & Hoffmann, 2013). There are several benefits to using semistructured interviews, such as collecting in-depth data by allowing participants to express their views with face to face interviews with constant interaction with the interviewer (Udawatta et al., 2018). A common disadvantage of semistructured interviews includes the misrepresentation of information by participants (Udawatta et al., 2018).

When conducting face-to-face interviews, I had the opportunity to ask participants to provide additional clarity on their responses. The disadvantage of face to face semistructured interviews is the risk of the researcher influencing the responses of the participants (Hawkins, 2017). Before the interview, I sent the interview questions and informed consent form via email in addition to scheduling a date and time for their interview. According to Nusbaum et al. (2017), providing interview questions and informed consent provides individuals with more time to review and ask questions. The

participants chose a location that was convenient for them. Researchers should allow participants to choose the location of an interview to provide an increased level of comfort for the interview participants (Jenner & Myers, 2019). I scheduled the interview location and recorded the interview using the voice recording feature on my phone. I used the interview protocol (Appendix) as a guide to conduct semistructured interviews.

Before conducting the interview, I reviewed the research topic and purpose for the interview, reviewed the informed consent form, and addressed how I planned to maintain confidentiality. Also, I informed the participant about the option to withdraw from the interview and encouraged the participant to answer questions to the best of their ability. Interview details included the participant's associated code, date of interview, location, the start time of the interview, the end time of the interview, and general observations. I worked to avoid researcher bias by writing notes during interviews and maintaining a field journal. Using a field journal increased the trustworthiness and confirmability of the study. According to Balchin et al. (2020), field journal notes increases transparency and audit trail, which help to avoid researcher bias. After the interview, participants validated the interview response analysis through member checking. The participants were provided with the summary analysis and interpretations of their interviews to allow for comments and validation. Member checking ensures the accuracy of the interview response interpretation (Harvey, 2015). Member checking also increased the credibility and rigor of the study.

Data Organization Technique

To track the data, I used interview journal notes, alphanumeric coding, and audio recordings for a secure electronic and hard copy filing system. I organized the data gathered in the research by labeling, categorizing, and storing it in a secure location. Data organizational techniques allow the researcher to classify and organize data sets to make them more useful (Woods et al., 2015). A password-protected flash drive stored the digital recordings and a Word document for transcribing audio interviews. After transcribing journal notes I destroyed the notes in a shredder, after downloading the audio recordings. I deleted the files from the phone's voice recorder. According to Muasya and Gatumu (2013), a researcher is responsible for safeguarding the confidentiality of the participants. I created folders using unique filenames on the password-protected flash drive and used the Zotero web-based virtual library to keep track of references. The privacy of each participant was necessary for this study; therefore, I labeled each participant with a unique identifier to ensure confidentiality. I used P1 through P4 as the coding system when referring to participants in the study. I will keep interview transcripts, other documentation on a password-protected flash drive, password protected Zotero library, and the external hard drive for five years.

Data Analysis

During data analysis I used methodological triangulation to analyze the research question and interpret meaning from the collected information to develop themes. According to Turner et al. (2013) qualitative researchers should develop codes and identify themes during data analysis. The four types of triangulation methods include (a)

data triangulation, (b) investigator triangulation, (c) theoretical triangulation, and (d) methodological triangulation (Joslin & Müller, 2016). Researchers use Methodological triangulation to obtain more insightful data, which enhances validity (Marwa et al., 2019). The data triangulation method was not fit for this study because time or space was not a factor in the collection of the data. I was the only researcher for the study, and therefore the investigator triangulation did not align. I did not be analyze more than one theory to interpret the data; therefore, theory triangulation was not a theory used for the study. The data sources used for analysis was existing literature, audio recordings, and field journal notes. The methodological triangulation method involves gathering comprehensive data of a phenomenon by using multiple sources of evidence to increase validity (Wilson, 2014). Methodological triangulation aligned with my study because I gathered comprehensive data of a phenomenon by using multiple sources of evidence to increase validity.

I used NVivo to load transcriptions, code data, identify themes, and organize essential functions of the raw data. I did not choose ATLASTI because the query tool cannot integrate search inquiries for coding data. The cost of using MAXQDA was high, and the tool did not provide the needed functionality, such as multiple user access. To analyze the information related to the strategies used by project managers, I used the five-step process identified by Yin (2017), which includes (a) compiling, (b) disassembling, (c) reassembling, (d) interpreting, and (e) concluding.

Compiling

According to Pietkiewicz and Smith (2014), compiling involves organizing the data into themes to create a database. I searched for themes, patterns, and concepts from the interviews and notes taken. According to Yin (2017), an interview protocol helps develop a pattern in observed data gathered from the face to face interviews used in the study. NVivo was used to compile and organize the collected data in Microsoft Word and Excel software applications. The NVivo application created themes along with the capability for file naming, reflective journaling, indexing, and research logs are also data organization techniques (Peterson & Bonell, 2018). After compiling the data, I began to disassemble the data.

Disassembling

According to Spector-Mersel (2010), disassembling included breaking down materials into pieces, parts, elements, or units. I disassembled the data to identify concepts, themes, phrases, and terms, and then separate the data into the categories identified in the literature review. The coding process identifies themes and then groups the data (St. Pierre & Jackson, 2014). I analyzed the data collected through audio recordings, existing literature, and journal notes to identify any themes. Once I identified the codes, I reassembled the data into emerging themes.

Reassembling

After disassembling the data, I used NVivo to reassemble the data into emerging themes. The NVivo software application is an appropriate software program for data organization, management, and analysis (Phillips & Lu, 2018). The auto-coding and

nodes functions in the NVivo software provided me the ability to organize and identify emerging themes for this study. I used the NVivo software to identify groupings and themes. I identified the emerging patterns and themes during this phase.

Interpreting

After Reassembling, I interpreted the meaning of the data as they relate to the research question. According to Braun et al. (2019), qualitative researchers interpret data to enhance their knowledge of the research question. The more detailed the researcher can be about the steps to gather and interpret the data, the more the reader will be able to appreciate and evaluate our research (Willig & Rogers, 2017). After completing data interpretation, I concludef the data analysis portion of the study.

Concluding

After interpretation, the final step of data analysis was to develop the conclusions. I used member checking to gain the participant's perspectives on the interpretation of the data, to enhance the reliability and validity of the findings. According to Nowell et al. (2017), allowing the participants to add their perspectives to the data interpretation increases the accuracy and credibility of the findings. I avoided researcher bias by ensuring that I did not include personal thoughts or assumptions that could potentially influence results. The NVivo tool helped identify themes in the data to develop groupings for data analysis. I focused the analysis and finding based on the grouping and themes and connect the themes identified from the interviews with the literature review, new studies published, and the conceptual framework.

I connected the themes identified with the literature to provide credibility for the findings in answering the research question and include the participant's comments to increase the integrity and trustworthiness of the study. Harvey (2015) contended that qualitative research, including participant quotes in the analysis, improves the trustworthiness and integrity of the study. Connecting the themes with the literature provided the perspective needed to better understand the strategies project managers use to reduce IT project failure.

Once I identified the themes from the data gathered from the interviews, I compared it the themes identified in the literature review and the conceptual framework. For this study, I used the MBO theory as the conceptual framework. By correlating the emergent themes with prior literature and the conceptual framework, I was able to answer the overarching research question. According to Yin (2017) associating themes identified during data analysis with theories and prior literature findings, will help qualitative researchers answer their research questions. Through this process, I gained a better understanding of the study, which was to identify strategies project managers use to reduce IT project failures in the insurance industry.

Reliability and Validity

In qualitative research, reliability and validity are important parts of research and are used to ensure the quality of the findings (Noble & Smith, 2015). When a study is reliable other researchers able to replicate the processes in the study, and the outcomes are similar (Noble & Smith, 2015). Validity confirms the appropriateness of the tools used in the study and is also used to confirm the findings accurately represent the

phenomenon (Nowell et al., 2017). Without reliable and valid data, the accuracy, credibility, dependability, and confirmability of the research findings are questionable, and the research is unlikely to be recognized by other scholars.

Dependability

Dependability ensures that the research findings are consistent regarding a phenomenon (Harvey, 2015). I used member checking, the interview protocols, and document data interpretations in order to ensure consistency and reliability with the goal of increasing the dependability of the research. According to Morse (2015), rigor in research requires the use of an audit or decision trail to document decisions and interpretations made by the researcher. The member checking process reduces the risk for misunderstandings of the interview responses and increases the reliability of the study findings (Van Griensven et al., 2014). I also used a standard interview process to support the reliability of the research study process. Member checking and a standard interview protocol allowed the interview participants the ability to validate the dependability of the findings.

Credibility

When several pieces of information point to the same assertion or proposition, a study is deemed credible (Cope, 2014). Credibility occurs when the results of the study are reliable, believable, and accurately represent the participants' responses (Noble & Smith, 2015). To mitigate credibility concerns, I did not have a relationship with the interview participants, probing, and clarification questions were used, along with member checking. Researchers use interviews and member checking to provide a summary of

participant responses and the interpretations of their responses for clarity and a review of the responses and emergent themes (Harvey, 2015). Participants reviewed their interview responses, provide clarification, and validate emergent themes. According to Morse (2015), the results of the study must be believable from the participant's perspective to ensure credibility.

Transferability

The applicability of the findings to other occurrences and circumstances confirm the transferability of the results related to the phenomenon (Anney, 2014). By using a standard process for the study and providing a detailed description of the research context, researchers will be able to replicate the study. Assumptions of this study will be applicable and transferable to the findings of similar studies. A detailed account of the population and the study boundaries enable the researcher to transfer their findings to similar settings (Eckhardt & DeVon, 2017). I will present all planning and analysis steps along with associated documents. According to Burchett et al. (2013), researchers, provide detailed explanations of every research process from data collection, the context of the study, and finalization of the report to aide in transferability to replicate the results in the study.

Confirmability

Confirmability is the degree to which other researchers substantiate or verify the findings of a study (Anney, 2014). Garside (2014) also noted that confirmability was the extent to which others substantiate the results of the study. I remained objective and avoided researcher bias by ensuring the research only reflects participants' responses and

providing an audit trail of the decisions made. I used a field journal to document my decision making during the research process. Confirmability is the element that provides a level of confidence that the findings are based on the participants' narratives and words rather than personal biases (Connelly, 2016). Utilizing the interview data, conducting member checks, and following an interview protocol will support confirmability to reflect the participant's perspectives.

Data Saturation

To ensure data saturation, I used a purposeful sample of four participants to ensure an in-depth discussion of strategies to reduce IT project failure. The interview process continue until no new information was able to be obtained from the interviews. When there is no additional information or emerging ideas gained from the interview, the researcher has achieved data saturation (Faulkner & Trotter, 2017). Every participant's situation and interview details was different; therefore, I did not set a specific limit on the number of interviews. Researchers focus on obtaining saturation to ensure the collected information represents all aspects of a phenomenon (Fusch & Ness, 2015). By using an initial sample of four participants, data saturation occurred within the sample.

Transition and Summary

In Section 2, I provided a plan of action to complete the study by restating the purpose. Also, Section 2 included an overview of the role of the researcher, participants, methods, design, population sampling, ethical research, data collection instruments, data collection technique, data organization technique, data analysis, and reliability and validity. In Section 3, I presented the findings of the study. I also included

recommendations for action, recommendations for future research, and the implications for social change to improve the field of project management: research findings, recommendations for future research, summary, and conclusion to complete the section.

Section 3: Application to Professional Practice and Implications for Change

Introduction

The purpose of this qualitative multiple case study was to explore strategies that project managers use to reduce IT project failures in the insurance industry in the Birmingham, AL, area. IT projects' results impact an organization's information system(s) and are typically used to achieve an organization's business strategic goals and objectives through technical innovation (Standing et al., 2016). IT project failure presents organizational leaders with organizational and economic challenges (Engelbrecht et al., 2017), but Winter et al. (2019) found that only 29% of IT project results deliver what was required and are in line with expectations. The three themes emerging from the analysis included (a) scope management, (b) effective communication, and (c) managing priorities. The themes provided adequate insight into the strategies that project managers use to reduce IT project failures.

Presentation of the Findings

The overarching research question for this study was:

RQ: What strategies do project managers use to reduce IT project failures in the insurance industry?

The participants interviewed in the study were four certified project managers. Data saturation was achieved from the participants after the eighth interview session. I triangulated the data from the semistructured interviews with company documents, existing literature, and journal notes. The company documents consisted of project plans, communications plans, scope management plans, and lessons learned documents from

previous and ongoing projects. I was also able to identify multiple strategies to avoid project failure used by experienced and certified IT project managers in the insurance industry. The interview participants were identified after a canvas of the local Project Management Institute chapter meetings. Once the audio recorded interviews were complete, I transcribed and inputted them into NVivo for analysis and identification of themes. The three themes emerging from the analysis included (a) scope management, (b) effective communication, and (c) managing priorities. While discussing several strategies, the participants identified scope management as the predominant theme. The evaluation of project planning techniques connected the second theme of effective communication and the third theme of resource management. The identified themes and strategies linked to the conceptual framework and the literature reviewed in this study.

Theme 1: Scope Management

The theme of managing scope confirmed the findings from the existing knowledge that scope management is key to ensuring project success. Scope management is the process project managers use to identify project outcomes and document changes to the scope (Derenskaya, 2018). According to Ramage (2018), engineering technology projects undertaken without scope management are 90% more likely to fail than projects undertaken with scope management strategies. The participants indicated that they used scope management techniques when managing their IT projects. According to Khan (2006), managing the scope of a project is the most important function of a project manager. Most of the participants emphasized the importance of defining scope early in the process and documenting scope changes to ensure stakeholder confirmation when

managing a project. Managing scopes involves identifying the project outcomes required for a project to ensure success (Gasik, 2018). P1 indicated that "defining the scope and having a way to manage is key to avoiding project failure, especially in an environment that experiences constant change with strong stakeholders." The findings from Abdilahi et al. (2020) confirmed that project scope control has a direct impact on the implementation of projects.

The first strategy for managing scope was the importance of defining and managing project objectives. All the participants identified that scope management strategies reduce the chances of IT project failure. The first theme identified in the study was defining clear goals and objectives prior to starting the project. Each participant in the study identified that strategies to avoid unclear objectives and lack of direction cause project failures. The primary strategy identified was defining the key objectives of the project. P2 commented that if the scope is ambiguous or not agreed on by stakeholders, projects' outcomes are rarely accepted as a success.

Table 9

Strategies to Manage Scope

Strategy	N	%
Defining clear objectives	4	100%
Manage scope creep	3	75%

Defining Clear Objectives

Project objectives identify the desired project deliverables. P1 and P2 each said they use a charter early in their projects to define the scope and deliverable of the project. According to Mark and Lurie (2018), a project charter is an agreement between the project manager and project sponsor that defines the project's scope, objectives, and roles and responsibilities. P4 stated that they did not use a formal project chart but instead used the scope statement as the process to define objectives. Regardless of the tool used to capture the objectives, the participants all agreed that the strategy of meeting with the project sponsor to identify expectations, reduce assumptions, and agree to the project outcomes was critical to the project's success. The participants provided examples of common questions asked during the conversation with the sponsor.

- What is the purpose of this project?
- What is the scope of this project?
- What is the budget?
- What is the timeline?

According to Kinnunen (2016), when the project manager and sponsor work together, it allows for more informed decision making when defining the project scope and objectives. P3 mentioned that when the project's purpose and success criteria are identified early in the project, it reduces assumptions that lead to errors and, ultimately, project failure. When defining objectives, the participants identified the need to ensure that objectives are tangible as a strategy for success. According to Agwaye (2021) having a clear idea of the objective and desired outcomes of a system, is what will ensure a

successful implementation for CRM projects. P2, P3, and P4 each referenced the need to work with the project sponsor to ensure goals are measurable and timebound.

The use of quantifiable goals aligns with the conceptual framework and the use of SMART goals ensuring objectives are specific, measurable, achievable, relevant, and timebound. P1 and P2 indicated that when project requirements and deliverables are clear and agreed upon using SMART criteria, project success is "more likely to be achieved." Managing scope by defining clear objectives aligns with the MBO theory by Drucker, which addresses improving the performance of an organization by defining clear objectives (as cited in Sull & Sull, 2018).

Scope Creep

Seventy-five percent of the participants noted that managing the project against scope creep was crucial to preventing project failure. Literature confirmed that software engineering and software project managers viewed scope creep as one of the most common causes for project failure (Komal et al., 2020). Scope creep occurs when the project scope identified in the charter changes uncontrollably beyond the original expectations. According to Farok and Garcia (2016), scope creep is a leading cause of global project failure. Changes to IT projects are expected in a fast-paced environment; therefore, scope creep is common and can be expected, but uncontrolled changes can negatively impact the project outcomes and determination of project success (Larson & Larson, 2009). The scope management plan was the primary strategy used by the participants to avoid scope creep.

P1 and P2 noted that they created a scope management plan as a process that was part of the overall project plan early in the project with stakeholders that documented and controlled scope changes. A review of each participant's project management documentation supported scope management as a key document that was used in their project plans. The scope management plan's primary components include a scope statement, deliverables, stakeholder acceptance, and scope control. P3 noted that having a scope management plan allows flexibility in their project because it addresses the impact scope changes have on the triple constraint and resources and requires approval from stakeholders. A review of the company documents provided by the participants indicated that they consistently used a scope management plan to manage project changes. P1, P2, and P4 noted that many of their projects experienced scope creep, but when project managers and stakeholders accept the change, project failure is reduced.

Theme 2: Effective Communication

The second theme was the importance of effective communication throughout the project. The participants identified that when project managers executed effective communication strategies, project failure was reduced. The MBO theory aligns with the theme of effective communication because the theory focuses on the facilitation of communication between managers and subordinates regarding goals, action plans and decision making (Islam & Rahman, 2020). The strategy for effective communication strategy included building a communication plan. According to Aleksejevec (2020) effective communication, which includes the development of a communication plan, is the most important factor to project success.

Building a Communication Plan

The theme of effective communication and the communication plans strategy identified by the participants confirmed the finding from existing literature on project success. Greenberger (2016) noted that effective communication strategies prevent project delays and cost overruns, which result in project failure. During interviews, each participant mentioned that they had an agreed-upon strategy that they used to communicate with the project stakeholders. When relationship conflict is present, there is often a lack of communication willingness among project teams. Lack of communication results in the deterioration of the relationship between project teams, which is not conducive to the realization of project success. According to Awomolo (2017), a third of the time, lack of communication is the primary contributor to project failure. P1, P2, and P3 mentioned that poor communication contributed to a lack of coordination, conflict, and incorrect expectations, all of which have a negative impact on project success.

Each participant noted that they established a standard and agreed-upon communication process (plan) early in their project for all stakeholders. According to Mikhieieva and Waidmann (2017), a communication plan describes the method, timing, and the level of detail of the project team, which will improve communication with the stakeholders. In a project, stakeholders need to be aware of project objectives, risks, constraints, or changes to the project. My review of the company documents revealed that each participant created communication plans for their projects; however, when their peers conducted projects without an established communication plan, the project suffered, encountered numerous issues, or failed completely. According to P1, when

there is not a standard method of communication, information is not shared correctly with stakeholders. A communication plan ensures the stakeholders are provided with up-to-date information and allows for better decision making. Each participant remarked on the need to keep stakeholders informed on project status, risks, and changes throughout the progress of the project. To execute their communication strategies, the participants used multiple methods to communicate with their stakeholders such as (a) status meetings (in-person or video/telephony), (b) status reports, (c) collaboration apps, (d) emails, and (e) discussion boards.

Theme 3: Managing Competing Priorities

The third theme focused on the ability to manage competing priorities. Competing priorities present a problem for project managers due to a lack of resources. Three of the four participants referenced that competing organizational priorities requiring the same resources hindered their ability to effectively manage and coordinate project resources. The organizational documents provided by the participants identified that a lack of resource availability due to competing projects were common reasons for project delays. The inability to manage resources due to concurrent project was a common theme as to why projects fail for all participants and was evident in the organizational documents provided. Drucker's MBO theory aligns with the need for prioritization, according to Drucker (2021) leaders should do first things first and second things not at all. Drucker's MBO theory's five step process forces leaders to identify and prioritize objectives for resources to coordinate the work needed (Sull & Sull, 2018). The participants each identified a few common strategies to help reduce the chance of project failure due to a

lack of prioritization of objectives that lead to poor resource management. The strategies include ranking priorities, risk management planning, and the establishment of roles and responsibilities.

Table 10

Strategies to Manage Competing Priorities

Strategy	N	%
Rank priorities	3	75%
Risk management planning	4	100%
Roles and responsibility	2	50%

Rank Priorities

The insurance industry is fast-paced, and organizations typically have multiple IT efforts that are needed to contribute to their success. At times it becomes difficult to manage the priorities. As a result, project managers have to compete for the same resources. According to Almeida et al. (2020) if competing priorities in terms of manpower and finances are not identified at the beginning of the project delays, cost overruns, and reduced benefits can occur. P3 managed their project resource usage by meeting with project business owners early in the planning phase to identify projects that may have competing resource needs and request that competing projects are ranked to help determine proper resource allocation. P2 noted a similar method of identifying where human capital resources overlap with other efforts. P2 stated that when resources were needed during a similar time, a meeting with key stakeholders would be scheduled

to determine which project the resources would be allocated to support. According to Holgeid et al. (2018), competing priorities is a top 5 reason for failed digital IT efforts. P4 noted that during the development of the project, charter dependencies and constraints are identified and reviewed. Also, before the Charter is signed, the organizational priority of the project is confirmed. According to Rojas and Figueroa (2018), project prioritization maximizes project and organizational success through the effective management and allocation of resources to projects that are in alignment with the organization's strategic objectives. However, each participant stated that regardless of the priorities, the project manager must be flexible because priorities can change, and it may require a reprioritization of projects.

Risk Management Planning

Project managers frequently encounter issues that impact their projects, and their ability to prepare and manage the situation can determine the success of a project. According to Obondi (2020) study results indicated that all project risk management and practices positively related to project success. A common project issue identified by the participants is the lack of resource availability. The lack of resources can be a risk and barrier to the successful implementation of a project (Dandage et al., 2018). Each of the participants in the study identified the implementation of risk management strategies as a key component to ensure project success. Risk management strategies include (a) roles and responsibilities, (b) project schedule, and (c) impact analysis. Zaveckaite and Ulbinaite (2018), confirmed the participant's responses that the ability to manage risk properly is crucial to the success of a project.

Roles and Responsibilities

P2 and P3 stated that they primarily use a roles and responsibilities matrix to manage the risk of losing key resources on the project. According to Bhika and Pretorius (2017), the lack of resources is one of the highest challenges that influence project failure; however, clearly defined roles and responsibilities is a key factor that influences project success. According to Nyameke et al. (2020) managing roles and responsibility to develop a collaborative team is key to a successful multiproject. P2 stated that they use a role and responsibility document to identify the resources (person) responsible for carrying out tasks in the project. P2 also stated that creating the roles and responsibility document early in the project “helped secure resources or identified conflicts of interests,” which prompted conversations early to manage the risk by either accepting or mitigating the risk of lack of resources and adjusting their project plan accordingly. P3 identified the use of a RACI chart to categorize stakeholders by responsibility on the project and level of involvement. RACI is an acronym that stands for responsible, accountable, consulted, and informed. P3 stated that “the RACI chart identified resources gaps or where resources were overworked.” The RACI chart identifying work to be done by project resources and identifies clear accountability with roles and expectations (Yu, 2020). P2 used the RACI chart to visualize their roles and responsibility and identify accountability to help identify a lack of coverage for a task.

Applications to Professional Practice

The purpose of this study was to explore the strategies that project managers use to reduce IT project failures. Organizational leaders invest in their IT products to support

their organizational strategies, and they cannot afford the potential loss of a failed project or a compromise that negatively influences competitive advantage (Chi & Sun, 2015). The findings of this study may have a positive impact on the practices and strategies used to avoid IT project failure. By using the results and recommendations from this study, project managers and IT leaders may better understand why IT projects fail and implement strategies to improve the success rate of future IT projects. The results are relevant to professional practice because the findings of this study contained applied strategies such as managing scope, effective communication, and managing priorities from project managers who successfully implemented IT projects. The results offer insights into practices and strategies used to avoid IT project failures. According to Aranyossy et al. (2018) large and complex projects reach a failure rate of 40%. The results of the study can help project managers lead their IT projects by improving best practices and strategies. PMO's and individual project managers can use the findings from this study by using the strategies to improve their IT project success rate and increase their organization's performance and competitive advantage.

Implications for Social Change

The contributions to social change may include the improvement of project performance and reduce financial risks. Business leaders invest in IT projects to drive innovation that will provide a competitive advantage for business success. Business leaders strive to achieve their organizational goals, and a reduction in the number of failed IT projects can improve organizational performance and the economy. Organizational success allows for more financial flexibility within an organization,

ultimately creating the option for a reduction in product cost and services. When organizations achieve success through successful implementation of IT projects, success can have a positive impact on society by creating jobs and economic development. Successful IT project implementation allows organizational leaders to achieve their goals and focus on benefits such as employee development, customer satisfaction, and an increase in market share (Patah & de Carvalho, 2017). Customers may benefit from successful IT innovation efforts that support improved customer experience that encourage the usage of products and services, which will stimulate the economy. When businesses are successful in achieving their goal, they are more willing to become involved in civic engagement and support community programs and charitable giving (Scheuchner, 2017).

Recommendations for Action

The findings of this study may help project managers manage the challenges associated with IT projects. In this study, I explored explore strategies that project managers use to reduce IT project failures.

Based on the research results, I recommend current and future IT leaders develop:

- a communication plan to determine how the information will be distributed;
- a change control process for the project that includes a process for scope, resources, cost, and schedule changes;
- an effective communication network throughout the organization and within the project team;
- a project plan which identifies the requirements of the stakeholders;

- a clear project schedule;
- a project prioritization process or matrix;
- implementation of daily status meetings; and
- issue and risk management and mitigation strategies.

The results of this study benefit project managers, PMO managers, and organizational leaders because they can use the strategies the participants provided from their experiences successfully implementing IT projects. The strategies and the results of this study can be circulated through journal articles and professional literature. I will offer to present the study findings at the local PMI Birmingham Chapter.

Recommendations for Further Research

The purpose of this study was to explore the strategies that project managers use to reduce IT project failures. For this study, I identified two limitations. The first limitation was the small sample size of participants that may not fully represent the views of other project managers. The target population consisted of four IT project managers in Birmingham, AL. They have successfully used strategies to reduce IT project failures in the insurance industry located in Birmingham, Alabama. To overcome this limitation, future researchers could increase the sample size, and the target population can be expanded to a broader geographical region and other insurance firms. The second limitation was the researcher's professional experience with IT projects and the potential researcher bias. To overcome the second limitation, member checking should be used to review interview responses, along with a third-party review of the analysis and findings.

Based on the limitations and other considerations, I recommend that future research consider:

- expanding research to other multiple insurance companies,
- expanding research outside of the insurance industry to get a broader range of successful project management strategies,
- expanding the geographical region of the population to include other regions of the country or expanding into other countries,
- using other research methodologies and designs in order to reduce the subjectivity of the responses, and
- narrowing the scope of the study by taking a more in-depth review of a specific strategy.

Reflections

The DBA Doctoral study process posed a challenging yet fulfilling learning experience. Before I began the program, I underestimated the investment of time the research would require completing the doctoral study. I did not have any preconceived ideas or thoughts about the results of this study. My professional experience in project management posed the risk of researcher bias. However, I acknowledged the potential bias early and did not allow these biases to impact the findings. I followed the established protocol when conducting the participant interviews. I used member checking to review and confirm interview interpretations, in addition to the data analysis tool NVivo that generated the themes used in the study results. The interview participants were very knowledgeable about project management principles and strategies. I was able to learn

from many of the participant's experiences and identify strategies that can be used for all IT projects regardless of the industry. I am also more knowledgeable of the challenges business leaders face when projects are not successful. I identified three major themes associated with the effective management of IT projects. I believe the knowledge discovered during the study provides valuable information to IT project managers, PMO leaders, and business leaders. The participants requested a copy of the final study.

Conclusion

In this qualitative multiple case study, I explored the strategies that project managers used to reduce IT project failures. I collected data from four IT project managers in Birmingham, AL. I used methodological triangulation to analyze the data until I reached data saturation. Three major themes emerged from the data analysis with several strategies that IT project managers could use to improve IT implementation effectiveness. The three major themes included (a) scope management, (b) effective communication, and (c) competing priorities. The strategies recognized by the participants included (a) defining clear objectives, (b) managing scope creep, (c) building a communication plan, (d) ranking priorities, (e) risk management planning, and (f) defining roles and responsibilities. I analyzed each theme in relation to existing literature and used Drucker's MBO theory to address the complexity of managing IT projects. The main contribution to business practice is the identification of strategies that project managers to avoid project failure.

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Appendix: Interview Protocol

Interview: What strategies do project managers use to reduce IT project failures in the insurance industry?

A. In the initial email communication with potential participants, I will include the following screening criteria questions:

1. What strategies have you used to reduce IT project failures?
2. What strategies did you find worked best to minimize the risk of IT project failure?
3. How did the different strategies reduce IT project failure impact project outcomes?
4. What modifications did you apply to any of the strategies to improve the effect of IT project success?
5. What strategies were the least effective in reducing IT project failure, why?
6. Is there anything else you would like to add that you did not address about reducing IT project failures?

B. I will thank the participants for their assistance, introduce myself, and introduce the interview topic, at the beginning of the face-to-face interview.

C. I will present the informed consent form. I will also highlight the confidentiality portion of the process and the contact information for questions, concerns, or requests to withdraw from the study. I will bring two consent forms, so the participant has the option to take a hard copy with them at the end of the interview.

- D. Following the signing of the consent form, I will ask if the participant is ready to begin.
- E. Once the participant indicates they are ready to begin the interview, I will start the audio recorder, state the date and participant identification code, and initiate the interview questions.
- F. The interview will last between 30 and 45 minutes for the main interview questions, follow-up and clarification questions.
- G. During the interview, I will observe and record non-verbal cues, ask probing questions, and clarify as necessary. At the end of the scripted interview questions, I will ask if the participant has anything they would like to add.
- H. At the conclusion of the interview, I will again thank the participant for their time and responses. I will end the audio recording, and explain to the participant that I will follow-up within 5 days for member checking review to ensure I captured and interpreted the interview information accurately.

Sample conclusion includes:

Thank you for participating in this study. The next step will be to transcribe the audio recording of this interview, incorporate the notes and write the interview summary. Once complete, may I send the interview overview to you to check and validate the emergent themes I have captured both your words and meaning within your intended context?

- I. After all the interviews are complete, transcribed, and analyzed, I will provide a brief overview of the emergent themes to the participants for member-checking.

J. At the conclusion of the study, I will provide the participant a summary of the study findings for their review and records.