

# Walden University ScholarWorks

Walden Dissertations and Doctoral Studies

Walden Dissertations and Doctoral Studies Collection

2023

# Success Strategies for Information Technology Project Leaders

Angela D. DeBose Walden University

Follow this and additional works at: https://scholarworks.waldenu.edu/dissertations

# Walden University

College of Management and Human Potential

This is to certify that the doctoral study by

Angela DeBose

has been found to be complete and satisfactory in all respects, and that any and all revisions required by the review committee have been made.

Review Committee
Dr. Betsy Macht, Committee Chairperson, Doctor of Business Administration Faculty

Dr. Franz Gottleib, Committee Member, Doctor of Business Administration Faculty

Chief Academic Officer and Provost Sue Subocz, Ph.D.

Walden University 2023

#### Abstract

Success Strategies for Information Technology Project Leaders

by

Angela DeBose

MSPM, Keller Graduate School of Management, 2015

MSCS, Franklin University, 2005

BSEET, DeVry University, 1997

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

Walden University

August 2023

#### Abstract

A growing failure rate of information technology (IT) projects has the potential to create economic loss and low revenue. IT project leaders in the financial industry are concerned that IT project failure has the potential to negatively impact organization expenses. Grounded in Bass's transformational leadership theory and the Project Manager Book of Knowledge, the purpose of this qualitative multiple case study was to explore the strategies financial industry project leaders used to ensure IT projects succeed. The participants were five participants who had a minimum of 5 years of managing successful IT projects. Data were collected using semistructured interviews and company documentation. Thematic analysis identified five themes: (a) communication of project requirements, (b) planning and analysis, (c) leadership and collaboration, (d) risk management, and (e) governance and continuous improvement. A key recommendation is for skilled project managers to work closely with stakeholders to bridge the projects' scope, schedule, and cost. The implications for positive social change include the potential for a cascading effect of project success on organizational growth sustaining high-paying jobs and increasing philanthropic giving in communities.

# Success Strategies for Information Technology Project Leaders

by

## Angela DeBose

MSPM, Keller Graduate School of Management, 2015

MSCS, Franklin University, 2005

BSEET, DeVry University, 1997

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

Walden University

August 2023

# Dedication

I would like to dedicate this demonstration of perseverance, dedication, and effort to my children Tyrell and Tyla, and to my sister Pia. This accomplishment is for you Tyrell and Tyla demonstrating the sky is the limit.

#### Acknowledgments

I would like to express my deepest appreciation to my committee, Dr. Macht and Dr. Gottlieb for their guidance, correction, and helpful advice. I am deeply indebted to Dr. Burnside for her countless hours of encouragement and guidance. I would like to extend my deepest gratitude to Valerie, Eddy, and DiAnna for their support in the last leg of this process. Also, the support from Kevin, Arielle, Tanisha, and Yalonda was invaluable. You guys are awesome.

The completion of my study would not have been possible without the patience and love from my children Tyrell and Tyla. Completing this journey as a single working mom with no paternal or maternal grandparents was grueling but my kids understood the goal I was trying to accomplish and allowed me time to work. I would like to offer a special thanks to my sister Pia, always filled with unwavering support and encouragement.

# Table of Contents

List of Tables	
Section 1: Foundation of the Study	1
Background of the Problem	1
Problem Statement	2
Purpose Statement	2
Nature of the Study	3
Research Question	4
Interview Questions	4
Conceptual Framework	5
Operational Definitions	6
Assumptions, Limitations, and Delimitations	7
Assumptions	7
Limitations	7
Delimitations	8
Significance of the Study	8
Contribution to Business Practice	8
Implications for Social Change	9
A Review of the Professional and Academic Literature	9
Application to the Applied Business Problem	10
Project Success Using the PMBOK	20
Summary of Literature Review	43

Transition	44
Section 2: The Project	45
Purpose Statement	45
Role of the Researcher	45
Participants	47
Research Method and Design	49
Research Method	49
Research Design	51
Population and Sampling	52
Population	52
Sampling	53
Data Saturation	54
Ethical Research	54
Data Collection Instruments	56
Data Collection Technique	57
Data Organization Technique	61
Data Analysis	61
Compiling	62
Disassembling	62
Reassembling	63
Interpreting	63
Concluding	64

Reliability and Validity64
Reliability64
Validity64
Transition and Summary67
Section 3: Application to Professional Practice and Implications for Change69
Presentation of the Findings70
Theme 1: Communication of Project Requirements
Theme 2: Planning and Analysis
Theme 3: Leadership and Collaboration
Theme 4: Risk Management
Theme 5: Governance for Continuous Improvement
Applications to Professional Practice
Implications for Social Change91
Recommendations for Action
Recommendations for Further Research
Reflections94
Conclusion95
References
Appendix A: Interview Protocol
Appendix B: Recruitment Letter

# List of Tables

Table 1. Literature Review Sources	10
Table 2. Archival Support for Data Analysis	70
Table 3. Emerging Themes from Interviews	70

#### Section 1: Foundation of the Study

Digitization and modernization in the banking sector have grown in importance since the beginning days of the internet. Significant changes in the financial market due to digitization with the dot-com revolution have affected the delivery of stocks, bonds, and foreign exchanges (Sohil & Alzoubi, 2020). The banking sector must reduce the rate of information technology (IT) project failure to meet the demands of change (Rogers, 2019). The banking sector has invested heavily in IT projects with its spending exceeding 17% of the total operational costs to keep up with the fast-changing digitization of financial industry products (Jinasena et al., 2020). The sector continues to invest in IT projects to enhance the quality and security of its services and products, and to remain competitive.

#### **Background of the Problem**

Financial industry project leaders need strategies to reduce the growing failure rate of IT projects. The impacts of failed IT projects include economic loss such as low revenue and cost overrun (Rogers, 2019). Complex software development, combined with poor planning and management, can result in project delays, thus creating a critical project failure with large financial losses (Das et al., 2018). The poor quality of change management for IT projects by project leaders in the financial sector was cited as an issue that needs to be addressed (Jinasena et al., 2020). The financial industry has focused on investing in IT projects to provide new systems and processes designed to help achieve proper governance. Effective project leadership was imperative for the successful implementation of these IT projects. Failure could result in reduced bank operations that

would have negative consequences not only to the individual institution but also to the economy (Dennehy & Conboy, 2018). I used the lens of Bass's (2003) transformational leadership theory and the project manager's book of knowledge (PMBOK) to view the strategies financial industry Project leaders can use for change management and successful implementation of IT projects in the sector.

#### **Problem Statement**

The financial crisis of 2008 impacted the financial industry's competitiveness and relevancies, creating a need to increase innovation and modernize services through digitization of technological services (Das et al., 2018). Findings among reputable studies show that IT projects fail between 40%–86% of the time (Rogers, 2019). The general business problem was that IT project failure has the potential to negatively impact organization expenses. The specific business problem was that some financial industry project leaders lack strategies to ensure IT project success.

#### **Purpose Statement**

The purpose of this qualitative multiple case study was to explore the strategies financial industry project leaders used to ensure IT projects succeed. The target population consisted of five project leaders working in four financial organizations in the central Ohio area with documented methods and histories of implementing successful IT projects. The implications for positive social change included offering social service initiatives from the organization's ability to pay local taxes, partnering with local project stakeholders, and providing increased job opportunities. While IT project success can

help drive business sustainability, successful businesses pay taxes to the local government, thereby supporting local social programs.

#### **Nature of the Study**

The three research methods are qualitative, quantitative, and mixed methods. I chose to use the qualitative method for my research because I explored qualitative strategies. The quantitative research method examines variable relationships to help gain knowledge of the outcome of a study (Martin & Bridgmon, 2012). The quantitative method would not have supplied an understanding of the experiences of the participants in relation to my research question, as I did not seek to compare variables. The preferred use of the qualitative method helped understanding the experience of a study population (see Fleet et al., 2016). The qualitative research method should supply an understanding of the respondents' experiences through interviews. A mixed methods research study includes both quantitative and qualitative methods and requires statistical analysis (Venkatesh et al., 2013). My intent was for an interpretive view rather than a statistical analysis of variables' characteristics or relationships; therefore, the mixed methods were not appropriate.

I considered the following qualitative research designs: narrative, phenomenological, ethnography, and case study. The narrative design captures participants' experiences in the form of their personal life stories (Nigar, 2020). The narrative design was inappropriate for my study as I gained a deeper understanding of the strategies used by project leaders as opposed to capturing the stories of their personal lives. Participants' perspectives and the personal meanings of their experiences are the

focus of phenomenological studies (Moustakas, 1994). Phenomenology was not appropriate for my study as I did not focus on the personal meanings of the lived experiences of financial industry project leaders. An ethnographer explores the meanings and behaviors of a group of people (Korstjens & Moser, 2017). My research focused on successful IT project strategies for financial industry project leaders and not on understanding the cultural characteristics and behaviors of a group; therefore, ethnography was not a good choice for the design of the study. A multiple case study design reviews the results as they converge during emerging sights in a series of experiments (Yin, 2018). I explored IT project strategies in four organizations therefore, a multiple case study design was appropriate.

#### **Research Question**

What strategies do financial industry project leaders use to ensure IT project success?

## **Interview Questions**

I asked the following interview questions:

- 1. What strategies do you use to ensure the success of IT projects?
- 2. How do you determine IT project success?
- 3. How do you monitor the progress of IT projects to ensure success?
- 4. How does management connect strategies with individual performance in leading successful IT projects?
- 5. Based on your experiences, how has project governance played a role in the success or failure of IT projects?

- 6. How does management inspire and motivate project leaders to ensure IT project success?
- 7. What tools does management provide to IT project leaders to use in managing risks?
- 8. What other information would you like to share that will help improve my understanding of strategies your organization uses to improve IT project success?

#### **Conceptual Framework**

The composite conceptual framework I used for my study was the concepts for successful projects defined in the Project Leaders Institute (2016), PMBOK 6, and transformational leadership. Transformational leadership and project success are closely related, involving the implementation of mechanisms from PMBOK 6 (Aga et al., 2016). According to the Project Leaders Institute (2016), PMBOK 6 is the resource for effectively managing projects. PMBOK 6 includes 10 knowledge areas and 49 processes to guide projects to success. The PMBOK 6 concepts combined with transformational leadership provided a comprehensive lens for the study.

Transformational leadership, introduced by Bass in 1985 (Barbinta et al., 2017), was more effective than transactional leadership in that it generates commitment, extra effort, and followers who are more satisfied (Bass, 2003). Project leaders effectively improve project success when using a transformational leadership style (Iqbal et al., 2019). The transformational leadership style can promote project success by catalyzing employees to perform beyond expectations by creating an inspiring and convincing

vision (Aga et al., 2016). Researchers focused on four dimensions of transformational leadership: (a) individualized consideration, (b) intellectual stimulation, (c) inspirational motivation, and (d) idealized influence (Aga et al., 2016). PMBOK 6 and transformational leadership are the lenses through which I viewed the strategies that financial industry project leaders use to ensure IT projects succeed.

#### **Operational Definitions**

*Big data*: Big data is a large volume of data with attributes of management classifications, and analysis, put into volumes (Pradeep & Sundar, 2017).

*Chatbot*: Chatbot uses AI to create a human conversation for entertainment, virtual assistance, or completing tasks (Ranoliya et al., 2017).

*High-velocity data*: High-velocity data is ever-changing data streams that are too large to store but need real-time analysis and decision-making specific to data moving at a fast pace (Denham et al., 2020).

*Iron triangle*: The iron triangle is a central aspect of project leaders, also known as the triple constraint. The iron triangle is a measurement of project success using criteria of budget, scope, and schedule (Pollack et al., 2018).

*Sprint*: A sprint, in the agile methodology of project leaders, is iterations of the current product delivery process divides into four activities: planning, execution, review, and retrospective (Frydenberg et al., 2018).

Strong AI: Strong AI is artificial superintelligence or human-level artificial general intelligence (Mamela et al., 2020).

Waterfall: The waterfall methodology is a project leaders' method of managing projects by phases (requirements, design, coding, testing, and operations). The waterfall is a process focused on structure, and steps followed in sequential order, completed steps are not modified, and requirements are defined in the beginning and will not change during the project (Bogdan et al., 2019).

#### Assumptions, Limitations, and Delimitations

#### **Assumptions**

An assumption is the personalized beliefs and expectations about unknown aspects of a system of interest (Langdalen et al., 2020). My study was based on three assumptions. First, I assumed that all participants would honestly represent their experience related to the strategies for project success. Second, I assumed that all participants were knowledgeable of the PMBOK. Third, I assumed that the participants' views were a true reflection of the managerial behaviors/strategies adopted to manage IT projects.

#### Limitations

Limitations are restrictions imposed on researchers that are usually outside their control (Theofanidis & Fountouki, 2019). One of the limitations was the differing definitions set by financial institutions of IT project success. Abyad (2018) affirmed that there are standard processes used in evaluating the success of IT project success, but there are levels of implementing the standards based on the needs of the project. The second limitation was that in this qualitative study, the sample size is small, and this smallness may limit the scope of information acquired, which could in turn limit the

transferability to other contexts. Financial institutions have sensitive information, which includes personal information of the members and other critical data, which can make study participants withhold information.

#### **Delimitations**

Delimitations are decisions made by the researcher to define the boundaries for the study (Theofanidis & Fountouki, 2019). In my study, the first delimitation was related to the study area. The second delimitation was that the participants pool is restricted to five project leaders at four financial organizations who manage IT projects. Project leaders of other industries are not in my study. The third delimitation of my study was the adoption of a multiple case study approach as the research design. This delimitation may affect the study findings since the research will focus on a group of individuals; and therefore, the findings may not be universal.

#### **Significance of the Study**

The purpose of this qualitative multiple case study was to explore the strategies financial industry project leaders use to ensure IT projects succeed. Identifying strategies in an evolving environment can help identify managerial and process improvements for projects (Davies & Brady, 2016). Project leaders in the financial industry may find the study findings valuable since they will provide insight into the strategies to provide a positive social outcome and ensure project success.

#### **Contribution to Business Practice**

Successful projects are a product of an efficacious project leaders' model, upper management requirements, and realizing the customers' requests (Arsic, 2017). Project

leaders can potentially implement strategies to increase projects' success. Project leaders may face failure factors such as (a) political weakness, (b) complexity and budget mismanagement, (c) scope creep, and (d) flawed project leaders' methodology (Anthopoulos et al., 2016). The study findings may fill a knowledge gap on the approaches that increase a company's ability to plan projects more effectively and thereby improve overall business performance.

#### **Implications for Social Change**

Project leaders are growing in importance to ensure continued business growth besides positively contributing toward social, economic, and environmental concerns (Ma et al., 2020). When project leaders implement successful IT projects, the local unemployment rate may decline to result in low crime prevalence. Additional implications for positive social change include contributing to the creation of local jobs, supporting community programs, and contributing to local taxes, which can support social services to enhance citizens' lives.

#### A Review of the Professional and Academic Literature

The purpose of this qualitative multiple case study was to explore the strategies financial industry project leaders use to ensure IT projects succeed. This review of the literature evaluates such strategies offered as findings in published, peer-reviewed research articles. I performed a comprehensive literature review on IT project implementation, PMBOK, project management, and transformational leadership theory. I used various sources in conducting the review of the literature, including the PMBOK, and databases provided by the Walden University Library including Business Source

Complete, EBSCO host, IEEE, ProQuest, and ERIC. I used the following search terms:

(a) financial industry projects (b) IT projects, (c) project failure, (d) project leaders,
project managers book of knowledge, (f) project success, and (g) transformational
leadership. I used a total of 144 peer reviewed journal articles that accounted for 97% of
the total 150 references used. In addition, I used five books representing seminal texts, as
shown in Table 1.

Table 1

Literature Review Sources

Sources	Total #	< 5 years old	% < 5 years old
Peer-reviewed journals	150	136	91%
Books (Seminal texts)	5	5	100%
Other sources	1	0	0%
Total	156	141	90%

# **Application to the Applied Business Problem**

#### Conceptual Framework

The aim of this study was to find the strategies financial industry project leaders use to ensure IT project success. I have chosen the PMBOK and transformational leadership theory (TLT) to form the conceptual frameworks for my study. I interviewed five IT project managers using the PMBOK's standards to measure success and the transformational leadership theory to analyze project leaders' leadership traits.

Transformational leadership and IT project success are closely linked (Aga et al., 2016). Project leaders effectively improve project success using a transformational leadership

style (Iqbal et al., 2019). In the remainder of this section, I discussed PMBOK and transformation leadership theory in depth. I critiqued other theories that I did not choose to use.

#### Project Management Body of Knowledge

The PMBOK is an industry-wide standard used to manage projects of all types. The PMBOK is a book on project leaders' methodology used by project leaders to manage and sustain projects in an orderly fashion (Project Leaders Institute, 2016). Project leaders have used the PMBOK since 1996 as a guide to measure and track projects' success. When trained in the PMBOK approach, project leaders develop skills and apply techniques that are part of a globally recognized set of standards (Abyad, 2018). The descriptions of project requirements in the PMBOK use abilities, styles, and knowledge application as an internationally known group of standards (Abyad, 2018).

PMBOK consists of 10 knowledge areas and 49 processes to guide projects to success (Horváth, 2019). PMBOK organizes project leaders' work into five process groups: (a) initiating, (b) planning, (c) executing, (d) monitoring, and (e) closing to aid in project success (Huda, 2019). The five process groups add to order, consistency, checks, and balances when leading projects. The process groups demonstrate the strategies used to increase project success. All the strategies are to be used in the financial industry to ensure project success (Abyad, 2018). Teams focus on these to aid in ensuring success by using an iterative process.

The first step in the PMBOK project management process is project initiation, which occurs at the beginning of the project (Project Leaders Institute, 2016). There are

several steps in the project initiation phase: first, obtaining a clear project scope in agreement with the project stakeholders and getting skilled resources to work on the project to aid in project success. Next, project leaders will seek proper authorization to start project work during the project initiation phase (Chaves et al., 2016). In the initiation phase, project leaders pay attention to the project's "why" (Kamali, 2020). According to Chaves et al. (2016), and Kamali (2020), the initiation phase gives justification to the project, formally starts the project, and aligns the project with the organizational goals.

The second or planning phase of a project consists of gathering requirements, documenting project objectives, and tracking milestones. The planning process is an iterative process where the project manager creates a plan and documents the ideas and methods used throughout the project (Chaves et al., 2016). Similarly, Abyad (2018) described the planning phase as a process in which the project manager should map project deliverables to the business objectives, create the timeline and milestones, and allocate resources needed by project leaders to increase project success.

The third or execution phase begins after project leaders complete the initiation and planning phase; at this point, action on the project tasks begins. Resource assignments happen during the planning phase, and executing tasks occur during the execution phase. The implementation phase encompasses use of all five process groups concurrently. Ongoing reports and documentation are critical for project leaders when keeping the project's progress and updating the status of stakeholders (Chaves et al., 2016). During the execution process, the project team performs documented duties,

developing and acquiring the information needed to complete the project (Chaves et al., 2016). The project execution phase is the most extended and it is an iterative approach for task completion (Kamali, 2020). The execution phase's measurement reflects collaboration during the project initiation phase.

In the monitoring phase, project leaders evaluate the planning and execution phases. Project leaders control the project by adjusting timelines, products, and budgets (Chaves et al., 2016). Project leaders use monitoring and controlling to create and track testing and service completion with the developers' team (Ng, 2018). The project manager monitors the project to stay on track with the original plan and measures the modifying product's completeness.

In the closure phase, project leaders prepare final documentation and check the project quality ensuring to meet critical project attributes. The project leader checks for what did or did not go well as lessons learned. Documenting the lessons learned was a tool used to improve future project success and reduce repeated errors. The project leader's main activities within the closure phase are to account for budget monies used or unused, prepare project closure documentation, and track project performance (Kamali, 2020). In the project closure phase, the project leader delivers the project to the customer stakeholders and issues a declaration that the project was complete. The closure phase is when the project leader measures whether the project met all expectations (Abyad, 2018). The project leader's responsibility was to measure the final product based on project cost, project scope, and post project cost as a strategy for tracking project success.

#### Transformational Leadership Theory

I applied TLT to my research to assess the leadership characteristics of project leaders. The TLT contains the characteristics a leader needs to aid in project success, expressing how followers want a leader that cares about their well-being. Bass introduced the TLT in 1985 (Barbinta et al., 2017). There are four aspects of TLT: (a) individualized consideration, (b) idealized influence, (c) inspiration, and (d) intellectual stimulation that is to move followers' past self-interest (Bass, 1999).

When used by a leader, transformational leadership elevates its followers to a higher level of maturity for the organization considering others' well-being, self-actualization, and overall concern for achievements (Bass, 1999). Bass (1999) stated that identifying with transformational leaders helps followers to become more innovative and creative. In viewing leadership as a concept, there was a need to focus on coaching the follower's development. Leaders think outside of themselves and offer systematic guidance, development, and inspiration to their followers (Bass, 1999). Coaching and direction provided by leadership could potentially transform followers' behaviors.

There was a potential to change the environment within an organization.

Transformation is vital in the transformational leadership style, where the leader, system, and followers are working on change (Raziq et al., 2018). Transformational leadership is a process in which leaders elevate employee interests, create an environment of awareness and purpose, and challenge followers to think independently (Bass, 1999).

Transformative change is a process suitable for leadership and employees willing to

change the organization for the better. Financial IT project leaders may need to manage change and help team members make the changes needed to aid in project success.

Managers in financial institutions could use any leadership techniques, but this could influence IT project success. Transformational leadership establishes an employee's feelings of autonomy and creativity (Tse et al., 2017). Employees are motivated when they show signs of a willingness to change and adjust their employee skills to better the organization. Conversely, Chaves et al. (2016) noted that leaders or supervisors' perspectives created team conditions that directly or indirectly encouraged team performance changes instead of giving employees the freedom to create the team conditions. There was an effect of team achievement overall by transformational leadership in the organizational environment (Tabassi et al., 2017). Managerial leadership techniques are critical in IT project success.

Bass (1999) described transformational leadership in three different perspectives based on a relationship between leader and follower: (a) contingent reward and other rewards – leader explains to follower through participation and or directions of what the follower should do to earn a bonus, (b) active management-by-exception – leader takes corrective action when follower did not meet expectations, and (c) passive leadership – also known as laissez-faire leadership was where the leader waits and did not interfere with the status quo of things until problems that need to be resolved emerge.

Transformational leadership focuses on the leader-follower relationship and the influence and encouragement the leaders provide to their followers to succeed. Project leaders are

then better prepared to manage change and lead their teams aligned to a transformational leadership model.

The leader-follower relation defines the four dimensions of a transformational leader. Leaders such as corporate managers seek motivation and create a good feeling about the organizational culture (Esmi et al., 2017). The transformational leadership approach encourages followers to become the best they can be (Siangchokyoo et al., 2020). Adopting this model not only encourages IT project leaders to achieve their best performance but provides the foundational leadership skills to effectively manage their teams. According to Esmi et al. (2017), achieving best performance was evident in idealized influence element of TLT.

A leadership dimension in TLT was an idealized influence. The idealized influence referred to by Bass (1999) using the term charismatic. Bass defined idealized influence as an influencer over ideals, ideologies, and "bigger-than-life" issues. Bojović and Stojadinović's (2020) definition of idealizing influence of transformational leaders focused on ethical standards and emphasized the need for a moral high ground. The idealized influence as a transformational leader serving as a role model can create an environment where followers will attempt to copy their behaviors (Yin et al., 2019). Transformational leaders work together, adhere to a code of conduct, and treat other followers in a manner consistent with the values established through collaboration and aligned to the ethical framework of their code of conduct (Bojović & Stojadinović, 2020).

Another dimension of TLT was inspirational motivation. A study on Bass's effectiveness of transformational leadership theory used a survey of spinal cord injury

patients (Shaw et al., 2018). Inspirational motivation is inspiring visions of the future (Shaw et al., 2018). Shaw et al. (2018) concluded that there are benefits to inspirational motivation when adding verbal motivation and physical activities to inspire spinal cord injury patients' progress. Yin et al. (2019) and Shaw et al. noted that inspirational motivation articulates a leader's vision and how the leaders appeal to followers to motivate and embrace the leaders. Project leaders may find benefits from management visions through inspirational motivation.

Stimulating followers intellectually and giving them challenges to solve difficult problems can foster a positive environment and allow for organizational growth. Bojović and Stojadinović Jovanović (2020) stated that transformational leaders using intellectual stimulation challenged followers to evaluate a standard process for solving problems and bringing innovative methods to test the process validity. Encouraging intellectual stimulation, accordingly to Bojović and Stojadinović Jovanović, would help managers increase employees' analysis of standard practices, experiment with new ways to generate ideas, and potentially affect the organization's performance. Intellectual stimulation fosters independent thinking and innovation from leaders as a method for followers to solve problems creatively with logical and critical thinking. Choi (2019) focused on intellectual stimulation from a software development company's view and encouraged the leaders to inspire transformative behaviors within an organization. Project leaders could increase positive output from developers by using intellectual stimulation attributes.

Organizations should train project leaders as transformational leaders as an approach to fostering the achievement of project success. Anthony (2017) emphasized

that trained leaders could model individualized considerations with their followers during coaching sessions. Similarly, Bojović and Stojadinović Jovanović (2020) described individualized consideration as the amount a leader cares about their followers. Leaders add value when investing in the growth of their followers. Individualized consideration is the leader's ability to individually train and mentor their followers and stimulate them to obtain knowledge, development, and progress (Bojović & Stojadinović Jovanović, 2020). In the same manner, developing everyone adds value, and remains vital to aid in individual success. Project leaders need to inspire their team as followers with a common goal for project success using the skill set of a transformational leader.

There are critical differences between TLT and transactional leadership theory.

Bass (1999) emphasized how transactional leadership focuses on what an organization can do for the followers' interests, while transformational leaders stress good morals and motivation. Transformational leaders potentially create environments for followers to feel empowered and work in high involvement teams focused on quality, cost-effectiveness, and output (Bass, 1999). Transactional leadership does not focus on leader-follower collaboration, therefore not creating any bonding relationship and routinely producing organizational environments with no creativeness (Azizah et al., 2020).

Transformational leaders add a level of substance that did not exist in transactional leadership. To become a transformational leader takes extra effort, however this style of leadership fosters commitment, and the followers are more satisfied (Bass, 2003). Moreover, transformational leadership transforms followers into making effort for improved performance and individual output.

Transformational leadership theory and the four leadership dimensions focus on encouraging, inspiring, and motivating employees to a higher performance level. There was a direct correlation between project success and transformational leadership dimensions because it has a positive effect on project leaders (Rogo et al., 2020). A successful project leader should have a transformational leadership style fulfilling leadership and project leaders' requirements (Raziq et al., 2018). When project leaders apply the transformational leadership theory the chance of project success increases when also combined with good project leadership skills.

The project leader's soft skills play an essential role in successfully managing projects including leadership skills, management skills, and emotional intelligence. A transformational project leader's soft skills could include (a) achievement motivation, (b) effective communication, (c) cognitive skills, (d) collaboration, (e) conflict management, (f) teamwork, and (g) project success factors (Rogo et al., 2020). Strategies transformational project leaders use to manage successful projects could include the need to be knowledgeable on the skills needed to effectively lead projects. Project leaders' skill set should include effectively leading the project team, collaborating with stakeholders, coordinating work, solving problems, and good decision making (Fioravanti et al., 2020). There was no single aspect of good project leaders and leadership skills that can help the employees work towards success when they have low morale. Project leaders work closely with the team and gauge when a team member becomes overwhelmed by the project. High pressure to complete projects quickly can negatively affect the project team members, and project leaders must keep a pulse on the team members' emotions (Doan et

al., 2020). A project leader's skillset and ability to work closely with team members was key to project success.

A transformational leader's emotional intelligence makes up of five pillars: (a) self-awareness, (b) motivation, (c) self-control, (e) social skills, and (f) empathy (Fioravanti et al., 2020). Success strategies are important when managing projects, but emotional health plays a factor in project success. Emotional intelligence is critical to managing successful IT projects.

#### **Project Success Using the PMBOK**

The PMBOK is a project leaders' guide to project success. The PMBOK defines technical criteria and the Iron Triangle aspects (cost, time, and quality) used to measure project success (Winter et al., 2019). The Iron Triangle measure of success should include input from the project stakeholders (Cha & Maytorena-Sanchez, 2019). In contrast, project success was a three-fold process: (a) short term and extended team achievements of the results of the project, (b) basics of the Iron Triangle, and (c) the satisfaction of the customers and organizations affected by the project (Joslin & Müller, 2016). The measurement of project success was essential for the project manager to track how strategies help manage a project to a successful closure.

Project leaders measure project success or failure based on the project's benchmarks. The study of project success and project failure factors are across academic and business segments. Staff performance was a significant factor in IT projects faced with many challenges, including their employee skills and abilities (Sulova, 2018). Therefore, well-trained project leaders are important for the success of any project

(Vlahov et al., 2016). Transformational leaders could build a well-trained development team that would require vibrant management (Tabassi et al., 2017). Transformational leadership in project management was essential in ensuring project success. Proper project organizational structure and project execution are integral to project success. Other approaches measure project success based on a sample of projects and using the Iron Triangle as a success criterion (Prostějovská & Tománková, 2017). While there are different approaches possible for project management, the PMBOK was comprehensive offering an effective framework to build the skills needed to deliver project success.

#### Project leaders Methodologies – Waterfall and Agile

Information technology projects contain both hardware and software elements that have historically used waterfall methodologies and agile methodologies. Waterfall, introduced by Winston Royce in 1970, was the traditional software development life cycle (SDLC) method, which uses phrases like planning, scheduling, design, implementation testing analysis, deployment, and maintenance (Bhavsar et al., 2020). Software development used agile as a framework to develop software more efficiently, iteratively, and with customer input. Agile is a framework that uses iterative and incremental interactions from the planning phase to the deployment phase of the SDLC (Al-Saqqa et al., 2020). Agile is a popular SDLC framework, but some companies still use traditional waterfall SDLC methods for developing software. Agile and waterfall are methods used as strategies to improve the success of IT projects.

Software development lifecycle is also known as the traditional waterfall methodology. The waterfall method is a linear SDLC methodology compared to the

iterative framework of agile. The waterfall model contains the following six steps: (a) requirement gathering, (b) system analysis, (c) coding, (d) testing, (e) implementation, and (f) operation and maintenance (Gharajeh, 2019). There is a systematic method in the waterfall method to a fault. Once a step in the waterfall methodology has faults, the remaining steps will also have problems (Gharajeh, 2019). The second step of the process can only happen after the first step is completed because it was systematic. The traditional model stresses documentation, planning, contracts, procedures, and a complete and comprehensive list of the project requirements (Reddy & Kumar, 2020). The linear waterfall process was rigid and leaves no room for changing customer needs and implementing successful projects.

In contrast, the agile method is an iterative framework that uses groups of work called sprints. By definition, a sprint is a fixed length set of times when the agile team implements the customer's requirements from the backlog (Fireteanu, 2020). Unlike the linear, systematic method of a waterfall, the agile methodology has a manifesto to describe its framework. In 2001, a group of software engineers in Snowbird, Utah, developed the agile manifesto. Its focus was "individuals and interactions over processes and tools, working software over comprehensive documentation, customer collaboration over contract negotiation, and responding to change over following a plan" (Krehbiel et al., 2017). The agile manifesto requires constant feedback from the customer; therefore, perform the work then evaluate it by the customer for feedback. Agile follows this method: (a) writing easy to understand requirements and updated often during each iteration, (b) the creation of the product backlog containing all customer's needs, (c) the

defined requirements transformed into technical requirements, and (d) the technical specifications handed to the team to implement (Fireteanu, 2020). When project leaders use the agile method, they can offer customers a strategy used in implementing successful IT projects.

There are many shortcomings of the linear waterfall model, but the Agile model also falls short. One of the waterfall method's weaknesses was it does not leave room for change or improvement, and its rigid delivery methods fall short of basic customer requirements (Fireteanu, 2020). No one method used by project leaders can fit all projects and guarantee successful completion. The agile approach was not a one-size-fits-all. In some instances, agile does not work well with larger agencies with specific responsibilities, and agile was a fad created by management to practice the same techniques under new agile terminology and incorrectly implement development techniques without owning consequences (Vardhan & LingaReddy, 2020). Agile and waterfall methods significantly differ in delivering successful results and at a low cost on complex projects with requirements that need more development (Fireteanu, 2020). The strategies to implement a successful IT project take a combination of methods and understanding of the project to succeed.

#### IT Project Success

IT Projects are finite undertakings that have a beginning and an ending point. IT projects have a direct connective link to information technology and are critical to the organization (Kaczorowska et al., 2019). IT projects are defined as implementing new technology to develop, upgrade hardware by suppliers for information systems, and

improve outdated routine jobs using information systems (Kaczorowska et al., 2019). Strategies in the financial industry change to adjust to implementation of new information systems, therefore, project leaders must update IT project management methods to ensure success. Different industry applications requiring IT project leadership include incubator facilities, building with smart technology, implementation of e-commerce technologies, and business infrastructures using high-speed communications (Connecticut General Assembly, 2001). Project leaders consider IT projects to promote products or services and create and retain jobs on an economic basis. The type of jobs created are for products and services that encourage innovation and support or enhance job activities to improve an organization's critical economic grounds (Connecticut General Assembly, 2001).

Couto et al. (2022) noted the importance of communications to project success. Project leaders measure IT project goals by linking directly to define critical project goals.

#### IT Projects in Banking Sector

Information technology projects in the banking sector are susceptible to the same pressures to succeed as projects outside of the banking sector. The banking sector was experiencing a technology upswing due to digital products, new financial technology, and digital transformations (Priambodo et al., 2019). IT was an integral part of the banking sector and implements successful IT projects within banks to upgrade their digital capabilities. Project leaders measure project success using cost, time, and scope. Still, there was a gap in literature regarding how project leadership affects project success, precisely not factoring quality and people into a project's success (Shahibi et al., 2019).

There was increased pressure on IT projects and success, and project leaders struggled to meet success measurements in the banking sector.

Project success as a measurement was multifaceted when measuring the progress of IT projects in the banking industry. Factors that need evaluation when considering the implementation of IT banking projects successfully include customer, team, organization, and project (Shahibi et al., 2019). Project leaders need to establish a baseline to measure success and create adjustments to attain success. (Priambodo et al., 2019; Shahibi et al., 2019). A good understanding of critical success factors in the banking sector was vital because IT projects record time overruns (Shahibi et al., 2019). A project manager should focus on the project, the customer, the team, and the banking sector to help the manager and IT project succeed.

Outages in the banking industry are potential due to upgrades to hardware and software. In the banking industry, some specific protocols, and regulations such as exposing personal information about customers are critical. Downtime was costly and creates a negative customer experience (Shahibi et al., 2019). IT projects are an investment in the banking industry delivering updated infrastructure elements that enhance business and customer success. The measurements of success are beneficial in predicting and managing the costs and risks associated with projects (Priambodo et al., 2019). Both authors agree that IT projects' implications in the banking industry are risky and can potentially cause a negative customer perception, leading to loss of customers and revenue loss.

Project leaders define project approaches that can be used for measuring success. For instance, there was a total of ten critical success factors identified in a study by Priambodo et al. (2019), including (a) project leaders' skills, (b) communication, (c) management support, (d) development environment, (e) project team commitment, (f) project complexity, (g) developers' experience, (h) project control and monitor, and (i) project planning, these success factors were obtained by subject matter experts in IT project leaders. There was a defined set of critical success factors such as management support, project management skill, and experienced developments and extend beyond budgetary, technical, and human aspects (Priambodo et al., 2019; Shahibi et al., 2019). Project success was a combination of factors and relies heavily on teamwork, and project leaders.

## Customer Satisfaction in Financial Industry

Financial institutions have one thing in common, and that was the need for customer stratification (Priambodo et al., 2019). The customers are not merely buyers of goods and services in 21st-century organizations, but the customer was a strategic business partner (Hamzah & Shamsudin, 2020). The customer drives the business. Financial institutions work closely with their customers to understand their needs and meet their requirements (Hamzah & Shamsudin, 2020). Customers are crucial in the banking industry, and building customer satisfaction was key to success.

Successful IT project leaders may support customer satisfaction. A questionnaire of 250 customers on customer satisfaction, sales, and promotions showed a strong relationship between customer loyalty and customer satisfaction by meeting the

customers' needs (Ofosu-Boateng & Agyei, 2020). Establishing loyalty in business was due to the many banking options to satisfy customers. 274 Muslim banking customers in Indonesia was given a non-probability model questionnaire to show a customer's satisfaction, the corporation's image, and how much the customer trusts the corporation (Baziedy, 2018). Like Ofosu-Boateng and Agyei's (2020) study, Baziedy's (2018) review concluded that customer trust leads to customer loyalty. Two separate studies on two banks, one in Ghana and one in Indonesia, with similar outcomes, indicated that satisfied customers would become loyal customers once the bank establishes trust. Customers are a vital strategy for success.

For successful project leaders, there was a need for managers to consider customer satisfaction since it was critical to organizational sustainability. Sustainability and business survival rely on customer satisfaction, including increasing customers' numbers to maintain a foothold on the market share (Hamzah & Shamsudin, 2020). Organizations should focus on what makes the customer happy. The customers' needs can provide an understanding of what factors affect the customer, such as sales and promotions of different banking products (Ofosu-Boateng & Agyei, 2020). Technological developments provided by the banking sector are an increase in importance for customers.

Customers' needs with IT projects in the financial segment to meet internally and externally by upgrading or implementing new systems that enhance the external customer banking experience. Customer satisfaction in IT projects and the level of difficulties the project manager faced required detailed project planning (Vujović et al., 2020). IT

Project and construction projects are different as one focuses on technological developments and the other direction on structural results based on the customer needs. Project leaders must distinguish which of the processing groups should have more focus than others. Project leaders are essential in a vast sector of business. Researchers' discussions of the construction industry and IT industry, respectively, gave insight into ways a project manager can use the PMBOK to ensure success (Alwaly & Alawi, 2020; Vujović et al., 2020). The closing process and detailed project plan are a part of a project manager's responsibility when leveraging them according to the industry.

Industry leaders focus on how to make improvements and stay competitive with similar companies in the industry. IT projects help improve companies' bottom line and enhance their reputation and quality (Sorooshian & Mun, 2020). Companys' leaders rely on good management and strategic planning of IT projects to increase project success, and as a result, expanding the company's success (Vujović et al., 2020). An IT project at its base was software and hardware on network infrastructure. IT projects can create new developments or scientific advancements that enhance a company's infrastructure (Sorooshian & Mun, 2020). IT project selection was a complex task and an unavoidable function for many companies (Leyva-Vazquez et al., 2020). Deciding to select the correct project and reduce limitations and environmental uncertainties are essential when choosing a company's IT projects. Enhancements are to improve companies' infrastructure; however, making the correct project choice was difficult.

#### Digitization

Digitization in the banking sector was growing with the help of smartphones. The journey towards digitization started with the banking system in 1960, when installing the first ATM and allowed customers to access their money outside of regular banking hours (Mosteanu et al., 2020). Technological advances and digitization create products and services that attract customers. Smartphones have revolutionized the meaning of remote sales and customer service access due to the ability to make payments, purchases, and invest in any setting, opening the door for banks to offer more mobile solutions (Kozak & Golnik, 2020). Digitization has created an opportunity for banking leaders to develop new customer services that enable social distancing even during a pandemic.

Digitization was another way to meet customers' needs through technology.

Electronic banking and the products provided allow the banking sector to build upon the social restrictions during the COVID-19 pandemic and implement new communication technologies (Mosteanu et al., 2020). Bank leaders focus on allowing customers to continue accessing their services but abide by the social distancing rules of COVID-19.

Leaders in the banking sector quickly implemented a cashless system to adjust to the COVID-19 pandemic, which reduced banknotes and coinage contamination and maintained the banking system's stability as the shift from cashless went into effect (Allam, 2020).

Customers wanted to feel safe and conduct banking as usual due to the need to increase a cashless environment using technology to open doors for added risk and cyberattacks. Cybersecurity has forced banks to improve due to increased data breaches and

increased exposure to risking customers' information. (Mosteanu et al., 2020). To avert crises risk management assesses, identifies, and introduces responses Rodríguez-Espíndola et al., 2022). There are increased risks with digitization and exposure to personally sensitive information. Digitally based monitoring actives can mitigate the disadvantages of cyber-attacks. The benefits of digitization include enhanced processing of client data that bank records for individual accounts, faster processing, and publishing of bank offers. In addition, some banks sell products and services linked directly to technology applications. Digital systems can effectively monitor cyber-attacks and protect banks against a transaction that may be illegal (Kozak & Golnik, 2020). There are many benefits for customers in the banking sector.

Digitization has created several changes to banking structure when using information and communication technologies (ICT) techniques. The popularity of the internet has changed the way banks do business. A qualitative study performed in the European Union of 28 banking industries addressed how ICT aided in adopting and infrastructure growth over 1995-2015 (Del Gaudio et al., 2020). ICT created positive roles for improving banking performance and financial stability when using IT and financial technologies (Del Gaudio et al., 2020). Banking leaders who use ICT increase their options for strategies to enhance technological advances in the banking sector.

ICT can derive several improvements leaders could use in the banking sector.

Using ICT leaders could effectively and efficiently increase transaction volumes inside the Indian banking sector and worldwide, creating change in mobile banking debit cards, credit cards, and all virtual and electronic payments (Singh, 2020). A holistic view of the

banking industry was the approach used by ICT. There was a need for better banking services such as storing, analyzing, and processing information to enhance best practices for customer services and reduce risks in the competitive banking scenario (Kumari & Saharan, 2020). Digitization and ICT help with strategies to improve IT success in the banking sector.

### **Project Management Professional**

The International Organization for Standardization (ISO) acknowledged base standardization and professional expertise in a white paper (Seymour & Hussein, 2014). In 1996, the PMI extended the white paper into the PMBOK. PMBOK became the chosen standard way of managing projects, with carefully laid out frameworks for properly managing projects.

## Project Portfolio Management

Project leaders' success and project success depend heavily on the project management office (PMO). The PMO gives directions, standards, and guidelines for an organization's portfolios, programs, and projects (Clegg et al., 2018). PMI (2016) defined a project portfolio as a collection of projects or programs working on the exact strategic business needs. Projects grouped and managed under one budget for a common organizational goal are project portfolios (Clegg et al., 2018). The financial industry project leaders manage portfolios that align with corporate strategies that will aid in project success. Projects are a part of a plan, and programs are a part of portfolios.

Project leaders engaged in portfolio management establish high-level strategic goals for organizations. The project should align with the strategic vision. Barbosa and de

Ávila Rodrigues (2020) pointed out the importance of project portfolio management (PPM) and the responsibilities of negotiating with top management, communicating with department heads, and disseminating information with program and project leaders to aid in the efficient and effective execution of successful projects (Horváth, 2019). PPM was the key to communication with stakeholders, project leaders, and upper management.

PPM focuses on how projects align with corporate strategies. PPM determines which projects align with an organization's corporate strategy. Hadjinicolaou and Dumrak (2017) collected data from 35 executives with PPM concentrations stating the implications of project success weigh heavily on the manager's decisions of picking projects portfolio risk and tools used to determine project success. Furthermore, Bathallath et al. (2016) took PPM a step further by emphasizing the project and organizing projects based on priority and potential interdependencies. The PPM evaluates projects, creates a list of interdependencies for the project, and includes project selections. PPM takes the corporate strategies and prioritizes the interdependencies to choose projects aligned with the organizational goals and special projects that help with project success.

PPM focuses on aligning corporate vision with implementing the projects in the organization. Unger et al. (2102) performed a qualitative study of 278 portfolios in a PPM office and defined three key roles and their patterns. Unger et al. considered the following (a) the coordinator role was the first line to management, (b) controlling functions was a way of making decisions for the portfolio, and (c) supporting roles help with projects during implementation. Unger et al. (2012) focused on multiple unrelated

single projects dedicated to PPM. Clegg et al. (2018) looked at the PPM from a different view from Unger. Both authors discussed practice-based PPM research and ways it helps with the organization strategies translated into project practices. Unger et al. (2012) investigation of PPM-based practices strengthens understanding of the link between design and project leaders. The PPM-based method measures the success of the project and the alignment of the corporate visions.

# Modernization of the Banking Sector

Modernization and digitization of the banking sector are closely related. Banking leaders adopt digitization strategies to focus on a customer's needs and requests. Banking leaders recognize that digitization was no longer an option but a necessary element of their business strategy. Digital transaction services help banks maintain a competitive edge by upgrading customer services, transforming manual processes, and decreasing human error (Fathima, 2020). Modernizing the banking sector integrates the latest digital technologies, adds strategies to sustain financial industry success, and aids banking leaders in improving customer relations.

The modernization in the financial industry warrants a discussion on financial technology companies (Fintech) and their impact on the sector. Fintech leaders are innovation-driven, change the current financial markets, and promote the modernization of applications within the banking sector (Nguyen et al., 2020). Customers enjoy the technological advances used by Fintech. Fintech applications are easy for customers to use and include services that have a positive social impact by increasing accessibility to banking options and enhancing customer trust. Social impact and customer trust are

outputs from a study in the banking sector in Vietnam, which focused on identifying factors that influence the customers' intentions (Lien et al., 2020). Fintech's are modern and user-friendly, giving some customers comfort levels and ease of use when banking.

Advanced technology has had an impact in most industries, including the financial sector. FinTechs use technology that provides solutions for customers in the financial services industry (Abu Daqar et al., 2020). There are alternative banking solutions like person-to-person (P2P) lending that offer nonstandard banking loans. For example, Apple Pay (<a href="https://www.apple.com/apple-pay/">https://www.apple.com/apple-pay/</a>) offers a virtual wallet, and Bitcoin (<a href="https://bitcoin.org/en/">https://bitcoin.org/en/</a>) has established cryptocurrency. Facebook (<a href="http://Facebook.com">https://bitcoin.org/en/</a>) has proposed Libra as a non-money-based currency alternative to cash (Thakor, 2020). Alternate banking solutions rely on online technology, alternate loaning solutions, and mobile banking apps provided by the banking sector. Fintechenabled banking was a transition from physical to digital access when using financial services, and the users have a specific demographic such as age, gender, level of education (Singh et al., 2020). Alternative banking solutions are technological, allow unlimited access to customer access, and improve customer experience.

Technological advances in the financial industry include some disadvantages. Some claim that using Fintechs was a helpful service and easy to use but lacks a security dimension. Invasion of privacy is online frauds, password protection rules, and personal and digital interventions. (Singh et al., 2020). Thakor (2020) discussed risks in the Fintech industry from the perspective of nontraditional insurance practices. Thakor

(2020) noted that technological advances and modernization in the financial sector raise risk and a bonus of improved processes and monitor the chance for project success.

Modernization of banking sector impacts was vital, due to the increased use of smartphones, information, providing convenience and reliability. Physical branches and agencies are traditional structures within credit institutions. Smartphones provide an easy and convenient way to access banking systems. The security of individual banking data was a vital element to ensure a safe banking experience. Many banking applications automatically connect when the smartphone was online, making the exchange between customer and bank a security risk of exposing sensitive information (Alhosani & Tariq, 2020). The smartphone's impact was measurable in many facets including 24-hour access to banking. Improving technological advances within the banking sector improves relationships with customers and gives management strategies to increase success.

### Big Data

Data used by banking leaders in the banking sector relies on technological advances to improve the customer's experience. In addition to technological advances, banking leaders can use data analysis of large volumes of data (big data) to identify opportunities to improve services. Technological advancement and use of big data analytics in the Indonesia banking sector focused on operations, services, and products and the adoption of technology by banks will depend on: (a) position of the bank, (b) future goals, (c) focus on customers, (d) capabilities of the organization, (e) - bank promise for their brand, (f) regulatory banking rules, and (g) - bank capital (Indriasari et al., 2019). Banking leaders must become adaptable in the adoption of big data. Financial

services leaders face operational and ethical challenges with manipulating and acquiring big data and using governance to manage data usage within the bank (Arthur & Owen, 2019). Banking leaders must adapt and respond to technological changes and prioritize customer safety when implementing and updating technologies.

Big data in the bank section uses modernization to examine the success of its usage. Big data refers to the use of vast sets of data and uses exa-data (10^18), pet-data (10^19), and tera-data (10^12) prefixes to describe the size of the database. Big data provides banking leaders with the opportunity to compare available historical and current data sources, including social media posts and search engine data. Banking leaders can accumulate and study voluminous data on a large scale at high rates found worldwide and accessible, comprehensive resources (Jones, 2019). Big data usage has increased, and industry leaders need strategies to manage and keep the big data safe for customers in the banking sector. Governance, standards, and ethical frameworks are in place with data innovation within companies to protect payment card industry data and contextual data when companies use big data (Arthur & Owen, 2019). Data usage in the banking sector was delicate due to banking information and big data's private nature. Adding a needed level of caution to manage and strategically plan data to keep customers safe.

When banking leaders use big data, they have access to large amounts of complex data (high-velocity data). Banking leaders can take advantage of analyzed complex data used in the banking sector. Banking leaders use big data analysis as a holistic view of financial organizations' market and customers, potentially creating more business opportunities by offering fraud detections, accurate customer analytics, and risk analysis

(Indriasari et al., 2019). Leaders within the banks allow customers to express interest in signing up to register personal data such as date of birth, last four digits of the payment card, email, telephone number, and this transactional data maintained by the bank (Arthur & Owen, 2019). Banking customers rely on banks to keep their personal data collected securely and not abused. Big data analytics add governance to aid in making customers comfortable when using a bank.

# Artificial Intelligence

Modernization of the banking industry includes digital transformation, including AI which aids leaders in helping the banking experience be better for the customers. The adoption of AI by banking leaders significantly impacts consumers and makes banking products more personable for the customer (Jones, 2019). AI creates an environment to strategically achieve better positioning among competitors (Indriasari et al., 2019). AI aids in helping banking leaders enhance the banking experience for customers offering products that have an impact. Customers and clients using AI Financial advice and digital assistance in the banking sector calculate and measure how well the customer's financial standing was currently (Ryzhkova et al., 2020). Banking leaders can use AI and banking digital transformation to create an environment of customer satisfaction and position banks to become more successful.

Banking and AI are essential when keeping up with competition and staying current in the banking industry. Recognizing customers on social networks based on AI solutions and speech patterns analysis helps to improve communication between bank clerks and customers during banking transactions (Ryzhkova et al., 2020). Banking

leaders use AI to enhance the experience for customers in the banking sector. AI has a human-level artificial general intelligence component called strong AI and with the potential capabilities of surpassing human beings' cognitive abilities and can perform many banking industries tasks (Mamela et al., 2020). Mamela et al., 2020 stated tasks AI can help with, such as preparing reports for banks, can save time. The data gathered from reports for clients having fewer errors and other helpful AI tasks are simple funds transfers. Changes that follow a strategy and advancements in the banking sector due to AI can increase success with the banking sector.

AI has some advantages and disadvantages when used in the banking sector. In Indonesia's banking sector, observations and interviews of crucial persons found that banks were implementing an AI tool called a *chatbot* developed by the firm Natural Language Processing which personalizes customer service (Indriasari et al., 2019). Positive customer experience was an AI feature enjoyed by the banking sector, but AI has some shortcomings. Advancements in programming use banking knowledge, which increases the need for experts in understanding AI, which supports the application of this technology. The banking sector workforce requires that leaders train and support staff in implanting new AI features (Mamela et al., 2020). AI features positively create a new and improved environment in the banking sector, leaving management to train employees to date with new features.

#### Machine Learning

Modernization and digitization by leaders in the banking sector have involved AI and data machine learning in driving positive change. In analyzing and processing vast

amounts of data in the banking sector, raw data needs transformation into information banking leaders can use. Machine learning is a technique that allows computers to learn with raw data and no explicit programming; machine learning can use data to predict and classify data with high accuracy and reliability to come to correct decisions (Meng et al., 2020). Data was vital in financial institutions or banking sectors, and data analysis can find trends and other features to aid in the industry's success. Another definition of machine learning is algorithms to obtain knowledge from data, learn the behavior, and facilitate and understand the data's predictive ability (Hair & Sarstedt, 2021). Predictions made through high accuracy data are critical in the banking sector and can add value to keeping customers happy and prosperous.

Machine learning is helpful in the banking sector with data-rich complex problems. One of those complex problems in the financial industry was that the low prices of average options have their advantages. FinTech leaders incorporate mathematical models representing the average options of underlying asset averages and average prices to solve price manipulation when developing machine-learning programs effectively (Gan et al., 2019). The more complex the financial problem, project leaders have found that machine learning is quickly becoming the solution. The Federal Deposit Insurance Corporation (FDIC) backs banks, and if ever the banks experience a business failure and go bankrupt, the FDIC protects the customer from financial loss. The cost of failed banks is expensive and can affect the role banks play in the financial economy. Business failure in the banking sector needs a solution; machine learning adds a nonlinear separation solution to help predict bankruptcy and or failure before it happens (Le &

Viviani, 2018). Machine learning is a complex key to complicated financial industry problems and aids in predicting banks that are approaching failure.

One of the critical properties of machine learning was allowing leaders to use data and digital models to make predictions. Algorithms from machine learning like: (a) naïve Bayes binary classifier algorithm, (b) K means clustering algorithm, and (c) Support Vector Machine algorithms are the backbone of predictive analytics aiding public sentiment and public action (Ramesh, 2017). Banking leaders need help when predicting the future to assist in a successful organization and understand the organization's success—the leader's prediction of banking failures using machine learning and a more traditional approach to statistical analysis. Machine learning was more effective than the conventional method, not exponentially better (Le & Viviani, 2018). Success in the banking industry has many facets, and machine learning can give an advantage to early prediction using algorithms to promote banking success.

## Social Media – Transformation Leadership

Leaders share information using social media platforms such as Facebook,
Twitter, Instagram, Snapchat, and LinkedIn. Communication and sharing of information
are critical aspects of social media. Information sharing when using social media tools
gives project leaders an advantage during various project lifecycles (Kanagarajoo et al.,
2019). The topics discussed and user reactions to social media can set trends when
someone has communicated or discussed a topic liked or viewed by social media
followers. Social media usage compares results in different sectors between professional

employees and aid project leaders (Pivec & Maček, 2019). Setting trends and creating influence are some of the strengths of using social media.

Users of social media can influence large platforms like the transformational leadership theories of idealized influence. There is the potential for leaders to use social media to influence others (Barry & Gironda, 2018). A quantitative study by Barry and Gironda (insert year) that used transformational leadership theory as a guide found that 54% of 2,000 LinkedIn posts gave to 100 social media experts by individuals considered influencers and inspirational (Barry & Gironda, 2018). Employers can measure social media influence and strengthen an organization and how it influences employees. A connection that creates and establishes knowledge sharing, social interaction platforms, and software used in social media tools is the social media influence (Khan & Khan, 2019). An influencer aids in the ability to create strategies leadership can put in place to increase project success.

## Social Media Project leaders

Communication was a critical component for leaders, and social media platforms help with broad communication. Several social media tools like Dropbox, SlideShare, YouTube, Flickr, Instagram, and Crowdstrom focus on information sharing just as tools used in the project lifecycle to aid in project team communication and social media. Social media users provide the benefit of positively communicating with virtual project teams (Kanagarajoo et al., 2019). Effective communication by project leaders was vital in managing projects successfully. Defining success focuses on project objectives, facilitating communication effectively using project management tools (Faraji et

al.,2022). Social media positively impacted teamwork, enabling communication, and disseminating information to stakeholders and aiding in project results' sustainability (Pivec & Maček, 2019). Project success increases with the use of social media during the project lifecycle.

Social media use helps with globalization and the increased use of virtual teams used in project work. Project success positively affected virtual team concepts by providing the right competency mix and creating cost-saving using competent high-level workers from low-wage countries. Social media tools mimic the project team co-location and create virtual environments for teams that cannot meet face-to-face (Kanagarajoo et al., 2019). An increase in virtual teams working highlights the need for fast-paced communication. Social media tools have gradually emerged as a disruptive technology in enhancing data sharing, reducing asynchronous communication, and slowly phasing out brick and mortar information technology infrastructure giving strength to the virtual workforce (Mukherjee & Natrajan, 2019). Social media tools positively affect virtual teams, and virtual teams create a global environment that helps improve project success.

Social media has aided in cost reduction when using virtual project teams. Social media adoption identifies enablers like the ease of implementation and the low cost of social media tools, and the workforce's familiarity with the available social media technology (Kanagarajoo et al., 2019). Understanding and cost reduction are key drivers in adopting social media when managing a virtual team project. Software project leaders and social media offer low-cost platforms with the following collaboration advantages:

(a) lower decision time by enhanced group-based thinking, (b) resolving conflict amongst

the team, and (c) having clearly defined roles and responsibilities (Mukherjee & Natrajan, 2019). Project success reflects on reducing cost; cost saving is vital when measuring the success of a project.

The project leaders can potentially enhance communication and research methods using social media applications. Social media perceptions, opinions, and preferences are essential findings when the project team was looking for relevant work; 11% strongly agree that social media aids in finding suitable work information, while 28% disagree. However, when asked if social media information was reliable, 34% agree social media information was reliable, and 15% disagree (Pivec & Maček, 2019). Social media aspects that positively affect project teams are sharing relevant information found in the public domain. Workplaces gain and understand social media power when used as an intraorganizational communication tool, enhancing online activities, and building social capital (Mukherjee & Natrajan, 2019). Social media has a powerful impact on project teams and understanding how the teams feel about the information found on social media impacts projects' success. Social media technology was a tool imperative not only for connectivity among employees but a means for communicating with subordinates. Project leaders can utilize social media platforms for successful implementation. The project team's cohesion was important to ensure that there was collaboration and teamwork in the execution of processes.

#### **Summary of Literature Review**

In summary, I have expanded upon subjects that impact IT project success in the financial industry. The areas of research that I presented relate to project success using

the PMBOK and transformational leadership. I used the PMBOK as one of my conceptual frameworks, to explore benchmarks and iron triangle used to measure project success. The sections on project management professionals and project portfolio management describe the importance of hierarchy and structure within project leadership and guidance on how to improve project success. Modernization of the banking sector, including big data, artificial intelligence, and machine learning, highlights the importance of technological advancements in the evolution of banking.

#### **Transition**

In Section 1, I defined my study and investigated existing research highlighting different strategies for project leaders in the financial industry to ensure project success. I stated the background of the problem, purpose statement, and nature of the study, assumptions, limitations, delimitations, research question, conceptual framework, and operational lens. In addition, I provided a review of the existing literature, including an explanation of the two conceptual frameworks I used for my study: project leaders book of knowledge (PMBOK) and transformational leadership theory. My literature review also included themes identified from the extant literature relevant to my research. Such as project success, project leaders' methodologies, IT projects in the banking sector, digitization, modernization, big data, AI, machine learning, and social media in transformational leadership. In Section 2, the role of the researcher, participants, expanding on the nature of the study, methods and design, reliability, and validity are discussed. In Section 3, I present my findings, application to professional practice, the implication for social change, the recommendation for further research, and reflections.

#### Section 2: The Project

In my study, I examined the strategies that project leaders use in the financial industry to ensure IT project success. In Section 2, I provide an overview of the methodology that I used in the study. I addressed these aspects of the research: (a) participants, (b) research method and design, (c) population and sampling, (d) ethical research, (e) data collection instruments, (f) data technique, (g) data organization technique, (h) data analysis, and (i) reliability and validity.

#### **Purpose Statement**

The purpose of this qualitative multiple case study was to explore the strategies that financial industry project leaders use to ensure the success of IT projects. The target population consisted of five managers working in four financial organizations in the central Ohio area with documented methods and histories of implementing successful IT projects. The implications for positive social change include identifying social service initiatives that, if implemented, may further the organization's ability to pay local taxes, partner with local project stakeholders, and provide increased job opportunities. IT project success can help foster business sustainability, enabling successful businesses to pay taxes to the local government that supports local social programs.

#### Role of the Researcher

As the researcher, I was the lens of the study. The researcher's role in the qualitative data collection process was to affirm and listen to participants (Hagues, 2019). I answered the research question by analyzing the experiences of study participants. The researcher should ensure the (a) legality, (b) honesty, (c) confidentiality, and (d) quality

of the research (Dragga & Voss, 2020). I obtained information from interviews by (a) using an audio device to record interviews, (b) asking probing questions, (c) taking handwritten notes, and (d) performing follow-up questions for added clarity.

An essential document in the current research is the *Belmont Report*, a 1979 publication written by National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research to outline measures to protect the rights of humans in clinical trials (Sims, 2010). The *Belmont Report* has three ethical principles to protect the rights of human subjects: (a) justice, (b) beneficence, and (c) respect for persons (Sims, 2010). In the study, I adhered to the three ethical principles and treated potential participants with dignity and respect. I informed participants that (a) participation was voluntary, (b) no incentives or compensation offered, (c) confidentiality was critical, and (d) interview and research protocols are in place to ethically conduct the study. I clearly stated the purpose of the research when interacting with participants. Throughout the study, I emphasized ethical principles to protect participants.

I have experience in IT, with a career in the sector spanning over 20 years. My professional experience includes IT systems administration in the research and technology segment and IT project leaders in the financial industry. It was therefore essential to keep an open-minded interpretation of the participants' answers by eliminating my project methodology biases. The expectations of my employer regarding project leaders and racial or cultural discrimination may introduce the potential for bias in how I approached this study. In addition, I am very invested in the research topic I chose and may unintentionally have bias in that regard. To achieve the research purpose, it was

important to address my self-interest and avoid a slanted interpretation of study findings (see Dragga & Voss, 2020).

To mitigate the potential for bias, I used an interview protocol (see Appendix A) with open-ended questions to understand the strategies that financial industry project leaders use to ensure IT project success. As DeJonckheere and Vaughn (2019) noted, an interview protocol can promote a dialogue between participants and researchers. The interview protocol should incorporate broad questions that will not limit or create bias within the participant's response (Roberts, 2020); participants should be able to reply freely to the questions without judgment or interjections. I used member checking to ensure reliable and accurate results. These measures, along with diverse peer review, bracketing, thinking inductively, and investigator responsiveness (Wadams & Park, 2018), can help to reduce bias in qualitative research. Creating an open environment free of bias and limiting my opinion will be critical in my role as the researcher.

### **Participants**

In this study, I focused on strategies to ensure IT project success; therefore, I selected five participants involved in successful IT projects. I required participants to have a minimum of 5 years of experience managing IT projects in the financial industry. Identifying appropriate participants was essential and involves knowledge informing the study, the research question, and theoretical perspectives (Sargeant, 2012). Purposive sampling is when a researcher selects individuals who meet specific criteria until the required sample size is achieved (Naderifar et al., 2017). I selected participants from the

financial industry with experience in the PMO, IT project experience, or project leaders' experience within the banking sector.

I used LinkedIn to gain access to participants by posting an announcement for IT project leaders in the banking sector who are in central Ohio and who have established project leaders' success. I included participants with a minimum of 5 years of experience as project leader in an IT environment, familiarity with projects in the banking sector, and experience implementing project leaders' strategies discussed in the PMBOK to drive projects towards success. PMP was unnecessary as a criterion to participate in the study. Cost, scope, and schedule are performance factors used in the iron triangle of project leaders to detect and compare project planning and any necessary corrective actions impacting project performance (Muriana & Vizzini, 2017). I discussed the eligibility criteria with prospective participants of the iron triangle time, cost, scope, and schedule to define project success.

After I gained Walden University Institutional Review Board (IRB) approval, I sent an email to each potential participant with an explanation of (a) the purpose of the study, (b) the use of confidentiality measurements, and (c) how the study may benefit the industry. Finally, I emailed the consent form to potential participants. In addition to informing potential participants about the ethical aspects of the research, the consent form was a way to ensure that participants (a) understand the research question, (b) understand the importance of the phenomenon, and (c) have the qualifications to participate in the study. I received positive confirmation of the consent form via return email with the words "I consent," I contacted participants to coordinate interviews for the

study. I scheduled semistructured interviews with five participants. Building a good rapport with participants requires effective communication and understanding of the participant's abilities and interests to aid in the interviewing process (Xu et al., 2020). Providing a detailed explanation of the study's objective, clearly explaining that all responses are confidential, and following a strict interview protocol are key in establishing this rapport.

#### **Research Method and Design**

I conducted this qualitative research study using themultiple case study design. I focused on the financial industry in central Ohio and examined a population of project leaders who have successfully implemented IT projects in that sector. In this subsection, I explained the research method and design that I used.

#### **Research Method**

The three research methodologies are qualitative, quantitative, and mixed method. I chose to use the qualitative method for my research to look at strategies financial banking project leaders use to ensure project success. The importance of using the qualitative method in this study was that it allows for a survey method for data collection. The quantitative research method examines variable relationships to determine the outcome (Martin & Bridgmon, 2012). My focus was on the existing relationships between the variables and will gather knowledge on strategies through interviews. The quantitative analysis focuses on casual relationships explained by models and theories (Chowdhury et al., 2020). With the qualitative method, it was possible to understand the participants' experiences regarding my research question in terms of the relationship.

The qualitative research method was my preferred choice as it helps with understanding a study population's experience (see Chowdhury et al., 2020). The qualitative research method should potentially supply an understanding of the respondents' experiences through interviews (Fleet et al., 2016). Qualitative research methodology has the advantage of exploratory capability when conducting research and enables interpersonal and subjectivity to the research process (Alase, 2017). I used the expert knowledge of project leaders in the financial industry strategies to ensure project success. The qualitative method fits best with observing what unfolds through my data collection process.

A mixed methods research study includes quantitative and qualitative methods and requires statistical analysis (Venkatesh et al., 2013). My intent was for an interpretive view rather than a statistical analysis of variables' characteristics or relationships; therefore, the mixed methods are inappropriate. The mixed methods research brings together two types of information, sequential quantitative and qualitative data, researchers separately obtained into one study to understand the data and analysis (Bowen et al., 2017). For example, mixed-methodology research would use the findings from interviewing participants to explain quantitative data. It would be qualitative if I looked at an IT project between a period and compare strategies. However, it would be quantitative if, in my research, I viewed the numbers of projects during this period. Combining them both and using the qualitative and quantitative research methods was a mixed methodology, which was not suitable for the rationale of my study.

## **Research Design**

I considered the following qualitative research designs: (a) narrative, (b) phenomenological, (c) ethnography, and (d) case study. Case study data is interpreted from real-life experiences and participants' perspectives (Chowdhury et al., 2020). My review was focused on business and IT project success. A multiple case study fit my research as I looked at four financial institutions. I explored IT project strategies in four organizations therefore, a multiple case study design was appropriate. Numerous case studies approach understanding the phenomenon of interest by using several case studies to get insight into a particular study area (Chowdhury et al., 2020). I examined strategies to improve IT project success in four organizations, which was typical for researchers to use a multiple case study design.

I elected not to use the narrative, phenomenological, or ethnographic designs for my study. The narrative design was not appropriate for my study, as I did not use stories as the basis for collected data from interviews of project leaders in the financial industry. Researchers use narrative design to collect stories from participants directly related to their lived experiences (Astroth & Chung, 2018). The narrative design captures participants' experiences in their personal life stories (Nigar, 2020). The narrative technique was inappropriate for my study, as I tried to understand the strategies used by project leaders instead of capturing the stories of their personal lives. I also did not use phenomenological design for my study. Phenomenological research design focuses on participants' lived experiences and the interpretation of the impact on the subject (Alase,

2017). Participants' perspectives and the personal meanings of their experiences are the focus of phenomenological studies (Moustakas, 1994).

Phenomenology was not appropriate for my research, as I did not focus on the personal meanings of financial industry project leaders' lived experiences. I also decided that the ethnographic design did not suit my study. Ethnography research explores the social and cultural aspects of a group of people (Korstjens & Moser, 2017). In my research I did not focus on the social or cultural aspects of how project leaders in the financial industry deliver successful IT project strategies.

I achieved data saturation by interviewing additional respondents. A conceptual yardstick for assessing qualitative sample sizes and obtaining estimations is data saturation (Guest et al., 2020). I analyzed themes created during data collection and coded for data saturation (Naidoo et al., 2018). Data saturation was key to identifying additional themes or patterns emerging from the interviews and obtaining a complete set of data from the participants.

#### **Population and Sampling**

## **Population**

In my multiple case study, the targeted population included IT project leaders in the central Ohio area's financial industry. The target population consisted of IT project leaders who managed successful projects in central Ohio and comprised of approximately five IT project leaders. My goal was to study four organizations using purposeful sampling to find groups within the various organizations with experience in IT project success. Purposive sampling moves away from the random form of sampling and focuses

on specific cases being a part of the research final sampling (Denieffe, 2020). My study focused on strategies in the financial industry project leaders use to ensure IT project success. Based on my research question, a case study organization based in central Ohio used the study population coming from a four organization. My study population was comprised of IT project leaders who meet the selection criteria. I used purposeful sampling. This approach to sampling is a nonprobability method researchers use to select study participants (Naderifar et al., 2017). I tracked the steps that I used to find participants for my study. My requirement for research participants was to be 18 years of age or older, have experience running a successful IT project in the financial industry, and consent to participate in the study. My study used a multiple case study inside four organizations and I used the project leaders' office as the key contacts for my study to obtain participants.

## **Sampling**

I selected participants for my study using purposeful sampling. Purposeful sampling is a nonprobability method where the researchers choose the participants for the study (Naderifar et al., 2017). The participant selection criterion included (a) minimum of 5 years of project leader experience and (b) experience managing IT projects in the financial industry. Project practitioners in Indonesia chose a small sample size of respondents covering a diverse project based on an industry, which helped achieve its objective (Hartono et al., 2019). I used a small sample set from four organizations to obtain a deeper understanding of the phenomenon. My participants had the specific

knowledge, experience, and skill set to effectively answer the research question justifying the use of purposeful sampling.

#### **Data Saturation**

To ensure I obtained accurate and valid data, I sought to achieve data saturation. Data saturation happens when the data collection produces no new themes, ideas, or concepts (Guest et al., 2020). Researchers have studied mathematical models developed to reach data saturation in qualitative interviews for a given study; data saturation is a conceptual yardstick assessing and estimating qualitative sample sizes to the point of no new data (Guest et al., 2020). Therefore, in the interviews I conducted in the financial industry of IT project leaders who have run successful projects, I kept close notes on the themes that come from the interview to ascertain when I reached data saturation. I continued to interview an additional respondent after the fourth participant where I obtained data saturation, to achieve any responses that were even between participants.

#### **Ethical Research**

I obtained permission from participants before they participated in the study. I adhered to the overseer of human participants' research in the United States called the International Review Board (IRB). The IRB could approve, ask for modifications, or deny research activities that put research participants at risk (Lynch, 2018). The IRB approval number is 05-19-22-0723829. After receiving approval from the Walden University Institutional Review Board (IRB), I contacted participants.

I emailed participants after receiving approval from the IRB. The informed consent form informed participants of my study, guidelines of my potential study, and the

participants' protected confidentially. The consent form for my study included: (a) how I conducted the research, (b) details of my study, (c) withdrawal steps from the study, (d) how to contact me (email address and telephone number), and (e) how the findings from my study will benefit the participant. The recruitment letter (see Appendix B) was in the body of the email.

Prospective participants could withdraw from the study at their convenience and at any time without any penalty for withdrawing. I ensured adequate ethical protection for all potential participants. No participant received any incentives for participating in my study. Qualitative researchers face ethical challenges when participants withdraw from a study, the participants must remain anonymous and kept confidential (Ngozwana, 2018). The process to withdraw from the study was for the prospective participant to inform me via email or phone that they are no longer interested in being a part of my study. In addition, I informed participants if they wanted to withdraw from the study, I would not use any data collected.

I kept all data collected during my study confidential. There are three approaches in qualitative research to maintain participant confidentially: (a) models of good practice with ethical guidelines about normative codes and guidelines, (b) securing confidentially in research, and (c) managing confidentiality and any accidental or unintentional breaches of confidentiality (Surmiak, 2018). I assigned each participant a pseudonym. The pseudonym was a technical measure to protect the anonymity of participants and remove any identifiers helping to conceal the relationship between the participant and data (Surmiak, 2018). I assigned a pseudonym Org for the organization and for the participant,

pseudonyms P1, P2, P3. Using Microsoft Word, I maintained my pseudonyms in notes collected for my study.

I plan to maintain the collected data safely for 5 years after the approval of my study to protect participants' rights and keep it on an encrypted USB drive. I will use file destruction on the drive after 5 years. The completed doctoral manuscript included a Walden IRB approval number and did not include names or identifiable information from individuals or organizations.

#### **Data Collection Instruments**

I acted as the primary data collection instrument as the researcher. I used semistructured interviews, member checking, and company documentation. I used semistructured interviews in my study to collect data. Semistructured interviews are structured interviews where the interviewer follows prepared questions for the interviewee (Brown & Danaher, 2017). The semistructured interview technique allows for flexibility and probing of answers from participants (Iyamu, 2018). I used semistructured interviews to gather data from project leaders in the financial industry with successful IT projects. Therefore, semistructured interviews were my data collection instrument, and I used an interview protocol during the interviews.

Appendix A was the interview protocol that I used during my research. The protocol ensures I made participants aware of the purpose of the study, obtain consent, check for body language to avoid influences, and ask questions in the same order. I used the interview protocol to stay consistent in my interviews. I used the member checking process to share a summary of the participants interview and verify my interpretation for

accuracy. Engaging with participants before publishing my study through member checking establishes a mutual agreement and understanding of analysis (Caretta & Pérez, 2019). I relied on the interview protocol to conduct the interviews.

As part of the data collection process for my qualitative multiple case study, I used available documentation, and I requested the opportunity to review documents identified by each participant during the interview. I explored the strategies used for successful projects within an IT organization using company documentation utilizing internal websites and public websites. To understand the source and complexity of the study, researchers use documentation as a tool to analyze the nature and purpose of the company's policies (Cardno, 2019). Through documentation review, I collected additional data. This additional data will aid with the validity of my research.

## **Data Collection Technique**

My study used one primary data source and one secondary source. I used semisturctured interviews using an interview protocol (see Appendix A) as my primary data source and organizational documentation as my secondary source. Data was collected using Zoom to conduct interviews as a replacement for face-to-face interviewing due to the challenges associated with managing participant safety during the Covid-19 pandemic. I obtained available documents as an additional source of data using the organization's website and other sources. Qualitative interview method was used often to interview experts to gather information and gain specific knowledge (Döringer, 2020). Public documentation obtained from the organization websites used the

abbreviation Doc1, Doc2, Doc3 and Doc4. I explored what strategies financial industry project leaders use to ensure IT project success using semistructured interviews.

I used the interview protocol (see Appendix A) as a structured method during my semistructured interviews with IT experts in the financial field. An interview protocol acts as the mental framework, tuning each question to participants to each specific interview situation and not a verbatim script (Yin, 2012). I contacted participants after I received IRB approval for my study and identified participants using my LinkedIn network, I emailed the informed consent form to prospective participants for review and sign-off. The study participants signed their consent to me via email before the interview began. After receiving the signed consent form, I contacted participants to schedule a date, time, and Zoom number for the individual interviews. I contacted participants one week before the scheduled interview to provide interview questions for review, confirm the interview date, time, and Zoom number. For each interview, I followed the interview protocol (see Appendix A). During the interviews I took reflective notes to record my impressions and observations during the interview.

I followed the same format for each interview:

- 1. Review the purpose of the study,
- 2. Verified participant consent to be interviewed and recorded,
- 3. Advised the participant that I would take notes during the interview,
- 5. Digitally recorded each interview,
- 4. Observed and noted body language, and
- 5. Requested the opportunity to review documentation from the organizations.

To ensure confidentiality I used a numbering system with a consistent number in numerical order; (a) label each interview with name and interviewee letter at the top of the page, (b) ask interview questions and probing questions in the same order, (c) take notes from interviewee's response, (d) inform each interviewee that I transcribed the interview and conduct member checking, and (e) thank the interviewee for his or her participation.

My secondary data source method was organizational documentation and documents publicly available and seeking specific documents from the company management related to my research question. One of the major advantages of using the company document was related to the ease of accessing the files. However, the use of these files may affect the study findings due to possible errors in data entry. I sent an email asking for corporate documentation relating to strategies financial industry project leaders use to ensure IT project success before conducting semistructured interviews. Policies at an institution often generate mandates on organization policy documents and the need for subsidiary documentation (regulation reports and procedures) to get a complete collection for analysis (Cardno, 2019). I requested the opportunity to review documents such as project leader training requirements, the metrics process, project planning documentation, updates to leadership, and financial accounting. The company may classify some documents, and I negotiated for access. I used organizational documentation to increase my understanding of the findings from my study and semistructured interviews as my primary data source method.

I used semistructured interviews to collect data for my study. Interviewers used semistructured interviews to collect data from participants, aiding researchers in understanding the participants and their experiences (DeJonckheere & Vaughn, 2019). Semistructured interviews dig deeper than fully structured interviews by increasing dialogic exchange between the interviewee and participant (Husband comma2020). The advantage of using semistructured interviews was the opportunity to capture details on the topic, capture the perspective of the participant, and achieve data saturation. I used follow-up questions where needed to ensure I captured details.

There are several disadvantages for researchers using semistructured interviews. The researcher will experience these disadvantages when they: (a) ask poorly formed probing or follow-up questions, (b) do not practice active listening, (c) use closed-ended questions or using interview protocol, and (d) are insensitive in the way they ask questions (DeJonckheere & Vaughn, 2019). The researcher must be aware of these disadvantages while performing the semistructured interview. In addition, it was the researcher's ethical responsibility to make participants aware of the outcome of the semistructured interview (Husband, 2020). Therefore, my awareness of the disadvantages of semistructured interviews was essential to the success of data collection.

I used member checking to assist with achieving reliability and quality. Member checking has three elements that contribute to the trustworthiness of the study and findings (a) naivety, (b) haphazardness, and (c) intentionality (Carlson, 2010). Carlson (2010) also stated member checking happens with verification of transcripts or early interpretation of a single event, encouraging a continual revisit of data and scrutiny to

increase accuracy. I provided a summary of my interpretations of participant responses as my member checking process. I gave an overview to the participants and asked if it accurately reflects their response.

## **Data Organization Technique**

I used Microsoft Excel, OneNote, and Microsoft Word to create the transcripts from the interviews. In Excel, I maintained participants' contact information utilizing Microsoft Excel's password protection to protect participants' information. In Microsoft OneNote, I tracked and organized themes discovered from the interviews and company documents. I used Word documents to take notes during the interviews and create labels for each participant (participant -Part1, Part2, Part3).

Data collection and organization methods are essential in research design. If data organization lacks rigor, it can affect the value of the outcome (Williams & Moser, 2019). I collected data from company documentation from websites and notes from interview responses. In my study, I securely stored my data electronically using a secure thumb drive for 5 years. I plan to keep any physical documentation, such as hard copies, in a fireproof lockbox for 5 years. After 5 years, I plan to destroy all electronic information containing personal information on the thumb drive and destroy any hard copies.

#### **Data Analysis**

Analyzing the data gathered during the research process was vital to gaining answers to the research question. A timely and rigorous systematic review of narrative word data was qualitative data analysis (Ehrmin & Pierce, 2021). Methodological

triangulation method for data analysis used in this study. The deductive approach of data analysis uses a sequential manner to draw initial codes through the interviews or the phenomenon through interview questions, research questions, or research (Azungah, 2018). The inductive approach to data analysis was that the researcher thoroughly reads literature, assigns codes to paragraphs, and links to the research question's relevancy (Azungah, 2018). I conducted qualitative data analysis to link the data to the research question.

I used Yin's five-step thematic analysis procedure to analyze financial industry project leaders' strategies to ensure IT project success. Included in the five steps are: (a) compiling, (b) disassembling, (c) reassembling, (d) interpreting, and (e) concluding (Yin, 2018). Below was a discussion for each of Yin's five-step thematic analyses and how it aligns with the study.

# **Compiling**

I used semistructured interviews, company documentation, and notes during my initial data-gathering phase. Researchers use the compiling stage to add order to the data collected and create a sequential structure for the data (Yin, 2018). I used Microsoft Word to organize notes while collecting data and Microsoft OneNote to gather themes from the data collected. This process allowed me to understand the data thoroughly. I disasembled the data after completing the compiling process.

#### **Disassembling**

In the data analysis phase of disassembling the data, I identified themes, terms, and phrases. I used categories identified during the literature review to create tags during

the disassembling phase. I used a Microsoft Excel table to disassemble data. Each meaning unit transcribes into columns (raw data, code, categories) and uses the information from categories to reassemble into themes (Heleno et al., 2021). To gain data interpretation and meaning, I disassembled data into smaller segments.

#### Reassembling

When reassembling, disassembled data identified the emerging themes. Identifying common themes, sequencing, and grouping them happens during the reassembling phase (Yin, 2018). NVivo, among other software, helped with the planning phase of qualitative research by organizing, managing, and analyzing data (DeJonckheere & Vaughn, 2019). I used the NVivo software to aid with data management, analysis, and organization. NVivo and tools like it are suitable for managing and research, but researchers must also consider any associated cost and learning curves (DeJonckheere & Vaughn, 2019). I identified themes from the literature review. For my study, I used PMBOK and transformation leadership theory as my conceptual framework. Identifying themes was vital during the reassembling phase.

#### **Interpreting**

The interpretation phase depends heavily on the reassembling step, as the researcher needs to interpret the data deeper and organize it into groups from the reassembled data. Then, the interpreting phase investigates the meaning of those themes and patterns. Researchers use qualitative methods to code open-ended responses and categorize them into themes (Feng & Behar-Horenstein, 2019). I used open-ended questions to probe the information from participants to help with interpreting the

findings. In addition, I used the themes and patterns from interviews and company documentation to support interpretation using methodological triangulation.

### Concluding

Concluding is the final step of Yin's five-step thematic analysis procedure. I used the member checking method by giving each participant a chance for any needed clarification during the interview process, validating my interpretation. I refrained from personal thoughts or biases during data collection, enhancing accuracy and credibility during my study. The data analysis process helped me understand what strategies financial industry project leaders use to ensure IT project success.

# Reliability and Validity

### **Reliability**

Researchers strive to have reliable, trustworthy, and dependable research as a part of the study. I addressed dependability through member checking, use of an interview protocol, and consistency in procedures. In the qualitative research method, researchers should maintain reliability and establish trust within the research process. Researchers use validity and reliability to show the quality of research and demonstrate its importance during the research process (Hayashi et al., 2019). Therefore, reliability and credibility are essential for strategies to improve IT project success in the financial industry.

### **Validity**

Researchers rely on validity for the research findings. When using the qualitative research method, the acceptance criteria are not well established; researchers find it helpful to adopt a processual view to validity and not rely on a single test or step

(Hayashi et al., 2019). Researchers should maintain the validity of the data collected during the study. Qualitative research uses member checking to assess validity, providing insight to stakeholders (Madill & Sullivan, 2018). A way to achieve transactional reality was to use member checking, and interview protocol, which creates a more robust version of validity, reached through triangulation (Caretta & Pérez, 2019). I used member checking to crosscheck the data collected and confirm the accuracy of interpretation of the data.

#### **Credibility**

The credibility of the researcher is enhanced by using the interview protocols, reviewing participants' transcripts, triangulation, and member checking. Unreliable sources are a growing challenge for credibility; reporting standards could enhance credibility (Closa, 2021). Using triangulation and reviewing participants' interview transcripts will ensure credibility. Transparency was a significant part of increasing credibility and disclosing how qualitative research data aids in credibility and replicating the data (Closa, 2021). There are several ways to enhance credibility; (a) methodological triangulation, (b) reviewing the notes taken during interviews, (c) documentation on policy and procedures, and (d) evaluating results of research from other studies (Leonard & Needham, 2020). Triangulation and member checking are ways to increase credibility by reviewing participants' input during interviewing.

# **Transferability**

Transferability was the qualitative researcher's ability to transfer a respondent's context or settings using descriptive descriptions (Korstjens & Moser, 2017). Qualitative researchers use analysis techniques and data collection methods like interview protocol and reaching data saturation to demonstrate the transferability of findings. Transferability can transfer information from one study to the subsequent research, allowing growth in new research to improve IT project success.

### **Confirmability**

Enhancing confirmability in the study helps to improve the quality of the research results through follow-up member checking, techniques such as triangulation, and probing interview questions. By applying these processes, I ensured that my data were objective and not subjective. The qualitative research concept of objectivity was comparable to confirmability, ensuring that the conclusions are from the research, not the researcher's personal preferences but the respondents' experience and ideas (Abdalla et al., 2018). Data triangulation refers to a method using data gathered at various times of the year and other times of the day, collecting data from different types of individuals, and gathering data from multiple sites but the same phenomenon (Korstjens & Moser, 2017). Confirmability in a study ensured the respondent's ideas are used and not researchers' ideas, enhancing that study's results of improving project success.

#### Data Saturation

Data saturation is critical in qualitative research to learn the researcher discovers nothing new. Pre-determined codes or themes represented in data are adequate for saturation and linking saturation to the notion of content validity. During the research process, I evaluated themes from documents and interview protocol during my IT project leaders who have run successful projects to monitor data saturation. I continued to interview additional respondents until achieving data saturation at the fourth participant where no new themes appeared. I interviewed the fifth participant to verify that no new themes appeared.

# **Transition and Summary**

Section 1 contained background of the problem, problem statement, purpose stamen, and nature of the study. In Section 1: (a) research question, (b) interview questions, (c) conceptual framework, (d) operational definitions, (e) assumptions, limitations, delimitation, and (f) review of professional academic literature. The review of the literature contained a discussion of PMBOK, transformational leadership theory, project success using the PMBOK, project leader's methodologies, IT project success, and IT project success in the banking sector.

In Section 2, I provided a detailed overview of the research method and design that I used in my study. Then, I explained why a multiple case study works best for my research. Next, I explained the significance of the role of the researcher in my study, the selection criteria participants, data collection, and data analysis methods in detail in

Section 2. Finally, I discussed the study's reliability and validity, outlining the procedures I used for each.

In Section 3, I provide an introduction, including purpose of the qualitative multiple case study, research question, and findings. Section 3 includes the following: (a) presentation of findings and themes with collected data for support, (b) links to conceptual framework and literature review, (c) applications to professional practice (d) implications for social change (e) recommendations for action (f) recommendations for further research (g) reflections, and (h) a conclusion.

Section 3: Application to Professional Practice and Implications for Change

The purpose of this qualitative multiple case study was to explore strategies financial industry project leaders use to ensure IT project success. Five project leaders in central Ohio serving in the role of program manager or director –PMO participated in this study. Data analysis consisted of thematic analysis, mapping of themes, and methodological triangulation using data derived from five semistructured interviews and related organizational project documents. (See Table 2). I reviewed four publicly available documents obtained from the organizations' websites as follows: (a) business recovery strategy for Org 1, (b) transformational leadership case study for Org 2, (c) project management case study for Org 3, and project management trainings for Org 4. I interviewed five participants from four different organizations with P4 and P5 both representing the same organization. I identified five key themes. The five themes from the analysis included: (a) communication of project requirements, (b) planning and analysis, (c) leadership and collaboration, (d) risk management, and (e) governance and continuous improvement. Summaries from the five emerging themes from interviews are in Table 3.

**Table 2**Archival Support for Data Analysis

Organization Code	Document
Doc1	Business Recovery Strategy
Org 2	Transformational Leadership Case Study
Org 3	Training and Project Management Case Study
Org 4	Project Management Training
Org 4	Project Management Training

*Note*. A description of organization codes with associated organization documentation topics

Table 3

Emerging Themes from Interviews

Themes	Participants				
	1	2	3	4	5
Communication of Project Requirements	X	X	X	X	X
Planning and Analysis	X		X		X
Leadership and Collaboration		X	X	X	X
Risk Management				X	
Governance and Continuous Improvement	X		X	X	X

# **Presentation of the Findings**

The overarching research question for this study was "What strategies do financial industry project leaders use to ensure IT project success?" In this section, I discuss my findings, the link to related literature and the conceptual framework,

implications for social change, recommendations for future action and research, personal reflections, and conclusions.

# **Theme 1: Communication of Project Requirements**

The first theme is communication of project requirements. All participants and most of the documentation agreed communication of project requirements is important and effective to ensure the successful completion of a project. P1 remarked, "communicating with stakeholders and engaging them with required documentation and the overall framework of the project helps in guiding the project towards success." P4 emphasized the criticality of communications saying, "communication, communication, communication, number one, active day in and day out, detailed level awareness by the leads in the program and project managers who are driving an initiative." P1 stated, "the definition of project success is delivered on time, within budget, with minimal issues at the end, and adequate communication throughout the project." P2 highlighted the importance of "communication as it can mean success or failure to a project." P3 also stated that "upfront communication is important, helping the stakeholders think holistically and communicate in every step of the process. [A] second piece is interacting with the team and building a communication plan around weekly status." P5 said, "use conversation as a communication tool, managing risks, keeping tasks on track, and clearly communicate that the responsibility for project success lies on the team, not just the project/program manager." Communication is critical to IT project success.

According to P1, P3, and P5 gathering the project requirements during the initial phase of the project is a crucial strategy. P1 said, "Requirements documentation and

those types of things from our framework should be a guide." P3 said, "To make sure that the requirements that we provide to the development teams are solid, complete, and properly communicated to the project team with follow-ups was critical when gathering agreement on project planning requirements." P1 also stated, "minimum defects, you know, [requires] adequate communication throughout the project." In addition, P1 commented, "I hone [in] on communication a lot because you could deliver something in that the communication was terrible throughout, it could be a detriment to the project." Project leaders' use of project requirements is a guide to project success.

I was able to review a case study posted on Doc3's website to use in data triangulation against P3's interview data. The case study was posted by Doc3's PMO in January 2022. The PMO leadership that developed the case study emphasized the importance of stakeholder communication with the following observation, "This is no easy feat. It requires leveraging insights from their customers, targets, employees, and other stakeholders to devise ingenious ways to serve them that will build their organizations' brands and fulfill their missions." Most participants identified vetting critical stakeholders as a strategy to improve the success of IT projects in the financial industry.

In the publicly available business recovery strategy for Doc1, company leaders emphasized the importance of stakeholder communication when managing projects by stating, "communication is critical to business success" Based on this model, building a solid partnership with stakeholders is necessary to ensure a harmonious working relationship and avoid potential issues. P1 remarked, "figuring out who my stakeholders

[are] number one, understanding who has an interest in the program and what will be delivered. Stakeholders can help understand those things up front and point the project towards success." P3 echoed the value in stakeholder status commenting,

It is absolutely critical to make sure your stakeholders at all levels of your organization or any other engaged organization can have a full command of what is going on and be able to respond in a timely and effective manner.

This participant expressed that stakeholders must be adequately informed and updated about the project throughout the process.

P1 discussed the value of clearly communicating the project products stating that "giving the customer the most viable product a minimal viable product, and the availability to make changes to ensure the customer gets what they ask into production." For P1, it is vital for the customers to have adequate knowledge and information about the product. Furthermore, P2 stated, "If going to any major software vendors that develop and sell commercial software products, they have a very defined product and program development process that they follow. Following the product, the process helps with project success." The Agile methodology emphasizes products in the product backlog to manage the project. The responses of the participants identified the importance of product requirements and details for the overall project success linking the theme, participant responses, and extant literature.

#### Correlation of Theme 1 to the Literature

The findings in Theme 1 aligned with existing literature that communication is essential to project success, as evident by unanimous agreement by all participants. The

theme of communicating the project requirements is supported by the literature where Fireteanu (2020) suggested the following steps: (a) easy-to-understand requirements are written and updated often during each iteration, (b) the creation of the product backlog containing all customer's needs, (c) the defined requirements transformed into technical requirements, and (d) the technical specifications handed to the team to implement. The communication of project requirements includes proper planning, creation of a timeline, and resource allocation (Abyad, 2018). It is evident by the literature that communication is critical to project success.

In line with the responses that lead to Theme 1, Kanagarajoo et al. (2019) emphasized effective communication by project leaders was vital in successfully managing projects. According to Kanagarajoo et al., sharing knowledge and information that could help manage and implement a project is crucial to ensuring clear communication of project requirements. In the literature, ongoing reports and documentation are critical for project leaders to keep the project's progress and update the stakeholders' status (Chaves et al., 2016). Communication and project success have a strong connection throughout the reviewed literature.

#### Correlation of Theme1 to the Conceptual Framework

Theme 1, communication of project requirements, links to the PMBOK and the conceptual framework by demonstrating the importance of defining the project requirements. All the participants noted the importance of communicating project requirements to the project team members, cross-departmental partners, leaders, and stakeholders aligning with the tenants of the PMBOK, described as communication

management. The PMBOK emphasizes the need to define and communicate project requirements (Project Leaders Institute, 2016). Communication of project requirements links to inspirational motivation, a dimension of my transformational leadership conceptual framework. Tenants of the conceptual framework correlate to team engagement and leadership, inspiring teams to communicate. Leadership cultivates an environment of looking to the future and an inspirational motivator link to the importance of Theme 1 communicating project requirements. P1 "emphasized the need for project leaders to engage with team members, customers, and stakeholders in gaining insight when setting project requirements." Project leaders should have a good definition of the project and communicate the project requirements to aid in project success.

# Theme 2: Planning and Analysis

The second theme to emerge from the data was planning and analysis. Three of the five participants and documentation from Doc3 agreed that securing and communicating the correct project requirements during the planning phase of the project process was essential. P1 stated it is vital always to be prepared with the necessary project requirements, saying: "forward-thinking is important when it comes to requirements documentation, which should be used as a guide." Doc3 included a 2022 PMO case study indicating that "program managers are using [an internal program and process implementing] work breakdown structures and program plans[and] realistic estimates, more frequently and consistently." P1, stated that "requirements should be solid and complete prior to providing to the development team." P3 agreed with the importance of requirements documentation, stating "Establishing project metrics using

data to track project success is a best practice." P5 said, "A strong governance process is critical to the program, including communication reporting, risk management, and project requirements gathering." Participant 5 stated that it was vital for the organization to have a strict protocol to be followed even before starting the project.

The importance of detailed project planning was also demonstrated in P2's response, saying that "driving out a plan and schedule and understanding dependencies tied to projects upfront are important in the beginning phases of planning. P1 agreed on the importance of the planning phase.

One of the strategies that I use is planning, just the planning, figuring out who my stakeholders are, number one, who has an interest in the program who's got an interest, in the deliverables. That's one thing, figuring out target dates and timelines, you know, in those things, like knowing when the customer would like to have the project delivered so when that target date is now that might not be the data that we can deliver. Understanding what that data is and driving out a plan and a schedule for those things, in addition to understanding the dependencies that are tied to the program, and understanding the risk and issues that are involved within the planning.

P4 stated, "planning is critical across the organization; it's a standard that should be used and followed for success." Planning and project success show a strong connection in the participants' discussions.

Planning and analysis are key to project success in participants' company documentation. In the business recovery strategy for Doc1, business leaders stated that

planning to identify resources needed and ensure successful program implementation is key in planning. In their transformational leadership case study Doc2 leaders established five characteristics, one of which includes ensuring the alignment of cross-departmental teams to ensure success. Doc3 leaders used program planning to break work down into manageable project steps. Doc4 leaders established that planning includes budgeting and allocation of the budgets to projects based on project plan. P3 remarked, "Based on the requirements and the overview given, this adds stop gaps for the employees of understanding requirements with transparency and a better partnership helping in the project's success." Based on the participant responses and corresponding literature, project leaders have the key responsibility of facilitating the planning and analysis needed to make project success more attainable.

# Correlation of Theme 2 to the Literature

Theme 2 of planning and analysis supports the literature as an essential part of ensuring project success. Scheduling and plan coordination are processes that project managers depend on to complete tasks and accomplish project success (Imran & Soomro, 2022). A crucial part of the planning process is understanding the business and project needs, scheduling, and analyzing the requirements needed for project implementation and success. According to Chaves et al. (2016) and Faraji et al. (2022), the planning process is an iterative process where the project manager works to develop a plan, tests the ideas, and revises the methods until stakeholders are satisfied with the work. Furthermore, in correlation to the literature, Abyad (2018) added that under the planning phase, the project manager allocates resources that project leaders need to increase project success.

The importance of planning and analysis is supported by the literature and states the criticality of a detailed project plan. Project leaders can choose to use traditional project management, agile project management, or a blend of traditional and agile elements to aid planning and analysis by applying the unique process steps for each of the three project management styles (waterfall, agile, and hybrid). When applied by project leaders, the agile project management methodology can aid in the gathering of project requirements by (a) clarifying requirements during each iteration, (b) creating a backlog of customer needs, (c) transforming the technical requirements against customer needs, and (d) enabling project leaders to communicate updated technical specification to the team (Fireteanu, 2020). Abyad (2018) described how project leaders could use the planning phase to map the project deliverables, timelines, milestones, business objects, and allocation of resources and increase project success. The review of literature shows a strong connection of project success and project planning.

### Correlation of Theme2 to the Conceptual Framework

Theme 2 of planning and analysis is in alignment with the conceptual framework as it consists of the PMBOK tenants of gathering requirements. It is key that project managers take notes of project objectives, report project progress, and keep track of milestones. In the PMBOK, the emphasis in the five process groups to organize project leaders was that planning aids in project success (Huda, 2019). The PMBOK and participants agreed that planning to define the communication of project requirements is vital to project success. The planning phase of the PMBOK consists of gathering the needed requirements, taking note of project objectives, and keeping track of milestones.

The tenant that correlates to my conceptual framework of transformation leadership is intellectual stimulation. Intellectual stimulation and the planning process allows the project manager the freedom to own the development of a project plan to implement project success. The project manager is challenged to create a plan that can sustain risks and issue and deliver successful results.

# Theme 3: Leadership and Collaboration

The third theme leadership and collaboration encompasses the importance of ensuring the presence of competent leaders and their ability to work effectively with their members for the success of the IT projects. All five participants reported the need for capable leaders and ones who can work well with their members. As a strategy to improve the success of IT projects in the financial industry leadership and collaboration is critical. The five participants shared that aside from competence, there must also be collaboration and a supportive environment within the organizations.

Participants' documentation conveys the key to leadership and collaboration. In the Doc1 business recovery strategy business leaders stated regulations provide direction, but leaders need to go beyond. P4 stated the importance of leader support for project managers, "Supporting them publicly and privately, being respectful to them for what they do. Not having an unreasonable set of expectations. ...we're not doing the work; we're just making sure all the parts of the orchestra belong and get us to the end the finish line." In the Doc2 transformational leadership study, business leaders noted that it was important "that the customer experience be as easy as buying something from Amazon" and to keep customer experiences "top-of-mind" to ensure project leaders meet and

exceed customer expectations. In the training and project management case study from Doc3 clarifies that project leaders must ensure that "it is important to align project and strategic goals" particularly in the financial sector.

All participants identified the importance of the structure of the project team improving the chances of success in implementing IT projects. Participants discussed the flow of information to organizations and defining the precise roles and responsibilities of each member as integral to the mission of establishing goals for the project. Participant 3 mentioned the importance of effective and capable organizational leaders and members, "as organizations increasingly rely on transformation to ensure their success, business, and IT leaders are expected to master its art and science to maximize competitive advantage." Participant 4 stated, "within our organization, the guide to the mission of the project and practitioners to build the best practices and methodologies is the project manager of the organization." In this regard, the theme highlighted the value of the leaders' ability and competence to motivate, manage, and lead their team members and the organization.

All five participants identified the importance of team leadership and collaboration to improve the chances of success in implementing financial industry IT projects. Participants 1, 2, and 4 agreed on the value of team collaboration as fundamental for success in IT projects. The significance of team collaboration was detailed by Doc2 in their transformational leadership case study. The context of the case study built upon a blog post by their executive Vice President from January 2022 that supported P2's interview. In that post the Vice President noted, "rapidly changing

expectations of getting to market require building and training teams in an agile development method." Participant 5 emphasized the importance of collaboration, stating, "I build a team atmosphere; everybody helps each other." In summary, participants believed that projects, deadlines, and goals happen with good collaboration and teamwork between the members.

The participants recognized the importance of support from the leaders and management for successful IT project implementation. According to all five participants, employees feel more motivated and dedicated to fulfilling their roles and responsibilities when they see that their leaders and the management give support. For example, P1 said, a project leader could enhance leadership and collaboration by connecting and communicating the overall corporate mission and goals, ...tying ...projects and programs to [the] .... missions and goals, [thus enabling] ... the leaders [to] relay the company's mission to employees and supporting their efforts toward accomplishing those goals.

P5 emphasized leadership support stating,

Project Manager is as I referred to us as a traffic cop, we're just the big. orchestra conductor, we're not doing the work, we're just making sure all the parts of the orchestra belong and get us to the end the finish line. So, you know, respecting that role, understanding that role by management supports the project manager and helps with their role and responsibilities that come with it.

P3 stated the importance of supporting employees,

So, one of the things that is very important, whenever you're trying to implement a strategy, as a leader, is not just saying, here's what we're doing. But spending time with your team, to educate them on why we're doing what we're doing, how it's going to impact the business, how it affects them, what they get out of it. As well as, at the end of the day, what value is that strategy going to come up with, because being a part of any new strategy impacts how a project manager performs in their roles.

Participants 1, 3, and 5 believed in the need for management to create an environment that would inspire employees, build trust with more responsibilities, and reward them for a job well done. For example, P3 indicated,

Bringing them into the process of creating that strategy, getting their feedback, and allowing them to have a voice is one thing. And then the other things, giving them an opportunity to kind of stretch outside of their room to get visibility.

P4 agreed with P5 stating "Supporting them publicly and privately, being respectful to them for what they do. Not having an unreasonable set of expectations". P5 also noted,

To inspire people, they must understand their purpose and our mission, you know, the function that they have, they really need to buy in. And even if they don't buy in, they need to understand the value that they bring to the table.

P3 stated it is up to leadership to give the team opportunities to stretch outside their current duties to get visibility; leadership must allow their team to shine. P3 continued by saying, "if leadership shows the team they are appreciated and rewarded,

they will make the project successful with supportive leadership." P5 stated that leadership does not always have all the answers and needs to rely on the team to know the project sufficiently to make good decisions. The support of the leadership, even if the team makes the wrong choices, encourages the team to learn from failures towards their journey to project success.

### Correlation of Theme 3 to the Literature

The theme of leadership and collaboration is supported by the review of literature and how competent leadership and skills of project managers is critical to project success. Employees feel motivated when leadership inspires them and motivates them to perform at their highest level. The literature also supports the importance of leadership in project success. Rogo et al. (2020) furthered that the project leader's skills play a vital role in successfully managing projects, including leadership skills, management skills, and emotional intelligence. Project leaders' skill set should include effectively leading the project team, collaborating with stakeholders, coordinating work, solving problems, and good decision making (Lydia Fioravanti et al., 2020).

# Correlation of Theme 3 to the Conceptual Framework

The theme of leadership and collaboration is in alignment with transformational leadership inspirational motivation by inspiring and motivating members of the team. The inspirational motivation tenant clarifies leadership's vision and inspires the team to achieve and make the leadership vision their own. Aga et al. (2016) and Couto et al. (2022) believed that the transformational leadership style could help promote project success by motivating and inspiring employees to perform beyond expectations as leaders

create an inspiring and convincing vision for them and their firms. The transformation leadership style enables IT project leaders to be successful in leading their teams.

Furthermore, a successful project leader should have a transformational leadership style (Raziq et al., 2018).

PMBOK is one of my two conceptual frameworks. The PMBOK includes the necessity to focus on the importance of collaboration as a common purpose the team shares. The literature correlates to the PMBOK as interpersonal skills project managers use to establish relationships with the team. Leadership and collaboration are critical to employees and leaders working together to reach a common goal of project success.

# **Theme 4: Risk Management**

All five participants emphasized risks and the potential of a risk of derailing a project. The fourth theme, risk management, was the importance of managing risks during a project. Participant 1 advised "Many risks cannot be insured, so a preparedness program may be the only means of managing those risks". Several participants mentioned the importance of managing risk in the financial industry, as risk can impact customers negatively. P2 stated, "engaging in the project with a timeline is risky [if the project leader is unable] to align [team performance] with the timeline. The resources may need additional time, which can increase the risk of the project during initiation or when the project is ending." P4 remarked, "that ranking and filing the risks are critical for senior management to review and understand". P4 also indicated,

... the captured issue risk, let's call it the risk register is a critical tool in providing that visibility, making sure that the people that are the senior

management that is has awareness, but also the rank and file, understands what their priorities are, what the impacts are, and what is on their to do.

By addressing the risk, senior management will have priorities and rankings to improve any chances for the customer or project, aiding in understanding the impact and resolving for a successful outcome.

The documentation from the participants organization supported the importance of managing risks. The Doc1 business recovery strategy included the need for project leaders to identify potential risks and hazards and mitigating the impact of risks. Doc3 training and project management case focused on the needs to optimize management of global systems to minimize risk to customers. A PMO has five fundamental pillars as part of their mission including risk as one of the pillars. Doc4 project management training document emphasized building a customer focused organization you can reflect the voice of the customer avoiding the risk of developing products that do not meet customer needs.

#### Correlation of Theme 4 to the Literature

The theme of managing risk correlates to the literature by demonstrating the importance of risk management and importance of recognizing and mitigating risks. Averting a crisis risk management assesses, identifies, and introduces responses (Rodríguez-Espíndola et al., 2022). Risks not addressed may impede the progress of a project and derail success. Effective management of risk through big data and risk analysis was critical to the successful implementation of financial industry IT projects (Indriasari et al., 2019). Again, this strategy is another element in measuring project

success, as predicting and managing the costs and risks associated with projects could help manage the stakeholders' expectations (Priambodo et al., 2019). Proper risk management is critical to project success.

# Correlation to Conceptual Framework

The theme of managing risks is in alignment with the conceptual framework of the PMBOK as risk management is a core process defined in the PMBOK guide. P5 stated.

There's a lot of different indicators if you're not ... working through at the right pace. So being on top of that, monitoring your risks, those types of things, are things you really need to do to make sure the project is successful.

PMBOK identifies 3 types of risks (a) short-term strategic risks, (b) operational risks, and (c) long-term strategic risks (Project Leaders Institute, 2016). Risks are critical to identify and maintain a successful project. The theme of managing risks correlates to literature as the PMBOK core process called risk management. The PMBOK has a defined risk management process: (a) risk management planning, (b) qualitative risk analysis, (c) risk identification, (d) quantitative risk analysis, (e) risk response planning, and (f) risk monitoring and control (Project Leaders Institute, 2016). Project managers analyze, identify, and proactively respond to risk as a process outlined by the PMBOK.

The theme risk management aligns with one of my two conceptual frameworks' transformational leadership theories. Transformational leadership theory focuses on transformational leaders to create an environment of comfort for their employees and encourage them to take risks. Participant 5 added, "So, I think what I said in the

beginning was to inspire people, they must understand their purpose and our mission and there, you know, the function that they have, they really need to buy in. And even if they don't buy in, they need to understand the value that they bring to the table."

Transformational leadership theory inspires employees to bring their skills to the table with any involved risks.

#### **Theme 5: Governance for Continuous Improvement**

Governance for continuous improvement emerged as the fifth theme. Four participants (P1, P3, P4, and P5) and the Doc1 business recovery strategy aligned on the need for governance for continuous process improvement and indicated that it is important to have an effective governance and continuous improvement process as the framework to assess and manage risk. In addition, this framework needs to achieve a successful financial industry IT project implementation and ensures project leaders stay aligned to deliver continuous improvements. P5 stated, "The following are the criteria that implementing companies and organizations can use as indications of a well-implemented project: leadership and good governance. P4 talked about project governance as creating an organizational state stating:" ... it's creating that little brain trust within the organization to where you have relationships with anyone and everyone you can think that you would ever need an answer from".

Doc1's business recovery strategy emphasized the importance of governance for continuous improvement indicating: "During testing or an actual incident, weaknesses in the program are likely to be revealed through documentation, lessons learned and strategies for addressing such problems in the future." P3 stated, "Overall governance

ensures everyone is at the table and has a voice. Governance saves time, money, rework, and customer impact. "In addition, P4 said, "governance helps with team morale by minimizing additional code rework." P5 added to the concept of governance stating that "providing governance, oversight, direction, and a friendly push and prod to get a technical resource to deliver aids with success." The project manager's responsibility was to provide governance to execute the project successfully. Hence, for risk management, it would also be beneficial to follow a strict governance model that could guide and assist the stakeholders in the project process and sustain the efforts for continuous improvement.

### Correlation of Theme 5 to the Literature

The literature supports the theme of governance and continuous improvement to provide structure in projects to aid in project success. Financial services leaders face operational and ethical challenges with manipulating and acquiring big data and using governance to manage data usage within the bank (Arthur & Owen, 2019). The financial industry invests in IT projects and new systems specifically designed to help achieve proper governance (Jinasena et al., 2020). Governance provides structure in managing projects. Projects managers document lessons learned for each project to gain insight and continuously improve for the next project's success.

#### Correlation of Theme 5 to the Conceptual Framework

The theme of governance and continuous improvement is in alignment with the conceptual framework of transformational leadership and its tenant of idealized influence. Organizational leaders demonstrate the importance of achieving goals as an

example for employees to strive and reach their goals. My second conceptual framework, the PMBOK aligns with the theme governance and continuous improvement as governance is a process in PMBOK guide. PMBOK describes governance as providing guidance, oversight and decision making. The three pillars of governance (a) structure, (b) people, and (c) information (Project Leaders Institute, 2016).

# **Applications to Professional Practice**

Identifying ways to improve IT project success in the financial industry is an ongoing discussion within the IT and financial industries considering the ever-changing environment of both industries. Assessing IT project leaders' strategies in the financial sector to ensure IT project success is a challenging practice. With the firsthand data collected from participants, the strategies uncovered in the study could create efficient project plans for businesses and firms struggling with their current systems and processes, hence being unable to succeed in their projects. The five key themes of the study could serve as an indispensable guide for professional application in the IT financial industry.

The first strategy, communication of project requirements, highlights the need for the project leaders and their members to take the time and effort to get to know and understand the project goals before proceeding to the next steps of the process. A process model is critical to projects process, resource alignment, and tracking tasks to align without communication gaps (Imran & Soomro, 2022). Furthermore, capable leaders can inspire and motivate a more systematic and efficient work process among their members and within their respective organizations.

The second strategy in planning and analysis demonstrates the need for project leaders to stay on track. Project goals and objectives and the level of goals achieved are strongly related to project success (Faraji et al.,2022). The PMBOK aligns planning with the defined project requirements and communicates the status of the project plan.

In the third strategy, leadership and collaboration, participant responses indicated that leaders and their employees as members must not only examine but also give value to the needs, preferences, and input of customers as stakeholders. Collaboration from leadership with stakeholders increases their understanding and aids with project success Couto et al. (2022). By doing so, the customers would feel heard and appreciated, reducing issues and conflicts.

The fourth strategy is risk management, using governance techniques to manage risk and expectations so stakeholders can focus more on their assigned tasks and responsibilities. Risk management is essential when managing information and liaising between project management and stakeholders (Rodríguez-Espíndola et al., 2022). Risk management techniques manage tasks that are a risk to the project, increasing the chances of project success.

In the fifth strategy, governance and continuous improvement are closely related to the first theme of communication and requirements. Alignment and continuous communication with stakeholders and other project team members help with the project's scope, expectations of requirements, and successful delivery (Khatib et al., 2022). Project leaders can manage and implement proper strategies and sustain outcomes for the organization to ensure project success.

These five themes embody the true meaning of a successful project. By securing the capacity and competence of project leaders and other requirements, project leaders can realize and fulfill their customers' requests (Arsic, 2017). With the proper implementation of the five strategies, expectations of the company's ability to plan projects would become more effective and improve its overall business performance. The end goal of these strategies would be to avoid and reduce project failures that negatively impact on organizations' expenses and find ways to become more competitive and sustain the businesses further.

#### **Implications for Social Change**

With the development of the IT project leaders' strategies, project leaders, managers, members, and other relevant stakeholders now have a framework consisting of the five key themes they could try employing to improve their current project systems and processes. Ensuring the financial health and well-being of firms and businesses is crucial. When businesses struggle and fail so does the overall economy and society. As previously reported, when project leaders fail to implement successful IT projects, people may lose their jobs, and unemployment rates would increase. Looking at the unemployment issue further and the lack of available jobs and opportunities, the overall welfare and living conditions of the local citizens affected would decline. Hence, by focusing on the five key strategies leaders and decision-makers could assess their needs and improve business systems. With an improved business system and performance, they could then have the capacity to contribute to the creation of local jobs, help the surrounding communities in need, and enhance the citizens' lives in general.

#### **Recommendations for Action**

The strategies developed in the analysis of the study could be adequate and valuable in helping to increase the success of projects. In line with the five strategies uncovered, one recommendation is for project leaders and their management to integrate these strategies into their current models. These strategies formed based on actual experiences, proven previously their effectiveness and potential success factors. The five approaches adopted by the stakeholders, companies may incorporate these into their training programs and continuously embed them into their systems and processes.

Another recommendation is for IT project leaders to adopt an agreement and analysis of project requirements. Agreement and project requirements analysis are crucial as they align the overall project elements and set the tone of the whole project. It is more than a closed-door discussion with the management. It involves careful planning, communicating, and collaborating with the team, the relevant lines of business, and leadership. Further, another recommendation is for IT project leaders to vet the necessary stakeholders to ensure project success. Stakeholder alignment is crucial to gain project support across various lines of business and effectively managing project cost, complexity, and timeline. IT project leaders could better assess and manage project related risks. By employing risk management and governance tools to track and report known risks that could affect the project, the stakeholders' expectations will be managed, and proper project management could be applied.

I plan to disseminate the results in my current company's townhall meetings and through writing articles. Managers can receive the results of my study through lectures, meetings, and conferences.

#### **Recommendations for Further Research**

My purpose in this qualitative multiple case study was to explore evidence that some financial industry project leaders lack strategies to ensure IT project success. The study findings expanded my understanding of communication leadership involvement and stakeholder input to ensure project success. Researchers could repeat this same study or adjust the scope to include participants from different business segments and a wider range of organizational departments. Another option would be to explore the same research question in different geographic regions. The results of this study given via conference presentations or lectures in financial institutions. The following are my recommendations for future research.

One limitation of this qualitative multiple case study was my chosen geographical location and sample size. I recruited five IT project leaders from the central Ohio area with a minimum of 5 years of project experience, limiting the chosen geographical location, which impacted the scope of my findings. Future research could expand on the number of participants and broaden the geographic region to gain additional insight. Therefore, my first recommendation is for future studies to increase the number of participants and expand the geographical area. This could help with a broader understanding of IT professionals' strategies to ensure project success.

A second limitation of this qualitative multiple case study was delimiting my participants to only the program and project manager. The second recommendation for future research is to conduct a study to include additional participants invested in the success of IT projects in the financial industry to provide a broader perspective on the strategies needed to ensure IT project success.

The third limitation of this qualitative multiple case study is the variation of IT project success in different financial institutions. A fundamental element of this research is what defines project success. I recommend that future research compare IT project success in different segments.

#### Reflections

In conducting this study, I realize that there are many similarities in how people think about achieving project success, and that some disconnects also exist. Many participants would emphasize similar aspects, such as risk management and stakeholder influence. At the same time, some of the participants emphasized communication and governance. Many of these elements are related, and I wanted to uncover links between the PMBOK and the Agile Manifesto in attaining project success.

I have been in the industry for over 20 years and have watched the methodical strategy of waterfall project management evolve into the new methodologies of agile and lean management. I have also witnessed the need for a hybrid waterfall and agile methodology to complete a project successfully. Despite my years of experience, this project was crucial in developing a better understanding of the research phenomenon explored in the study.

The Doctor of Business Administration journey was a process in developing perseverance, resilience, and dedication to stay in the program. This process made me realize that if one has the commitment and desire to stay in the course, one must have the grit to pursue their dreams and faith in one's abilities that one could accomplish anything. The feedback received along the way guided the development of my true abilities as a writer and researcher. In performing this study, my knowledge increased of how project leaders in the industry view success. Therefore, with the study, my view of success was initially based on the iron triangle of scope, time, and budget. However, after the study, I learned that success is measured by (a) communication of project requirements, (b) planning and analysis, (c) leadership and collaboration, (d) risk management, and (e) governance for continuous improvement.

#### Conclusion

In this qualitative multiple case study, I explored strategies IT project leaders used to successfully manage projects in the IT industry. Well-trained project leaders are essential for the success of any project (Vlahov et al., 2016). I used two conceptual frameworks, the PMBOK and transformational leadership. I used semistructured interviews with five IT project leaders in central Ohio to gather data from each participant's experience. I used input from the literature and company documentation in the data gathering and analysis, which identified the five themes. In my findings I recommended that IT leaders use the strategies of developing (a) communication of project requirements, (b) planning and analysis, (c) leadership and collaboration, (d) risk

management, and (e) governance for continuous improvement to remain competitive and manage project successfully.

#### References

- Abdalla, M. M., Oliveira, L. G., Azevedo, C. E., & Gonzalez, R. K. (2018). Quality in qualitative organizational research: Types of triangulation as a methodological alternative. *Administração: Ensino e Pesquisa*, 19(1), 66-98. https://doi.org/10.13058/raep.2018.v19n1.578
- Abu Daqar, M. A. M., Arqawi, S., & Abu Karsh, S. (2020). Fintech in the eyes of millennials and Generation Z (the financial behavior and Fintech perception).
  Banks and Banking Systems, 15(3), 20-28.
  <a href="https://doi.org/10.21511/bbs.15(3).2020.03">https://doi.org/10.21511/bbs.15(3).2020.03</a>
- Abyad, A. (2018). Project leaders: Motivation theories and process management. *Middle East Journal of Business*, 13(4), 18–22. <a href="https://doi.org/10.5742/mejb.2018.93502">https://doi.org/10.5742/mejb.2018.93502</a>
- Aga, D., Noorderhaven, N., & Vallejo, B. (2016). Transformational leadership and project success: The mediating role of team-building. *International Journal of Project Leaders*, 34(5), 806-818. <a href="https://doi.org/10.1016/j.ijproman.2016.02.012">https://doi.org/10.1016/j.ijproman.2016.02.012</a>
- Alase, A. (2017). The interpretative phenomenological analysis (IPA): A guide to a good qualitative research approach. *International Journal of Education and Literacy Studies*, 5(2), 9. <a href="https://doi.org/10.7575/aiac.ijels.v.5n.2p.9">https://doi.org/10.7575/aiac.ijels.v.5n.2p.9</a>
- Alhosani, F. A., & Tariq, M. U. (2020). Improving service quality of smart banking using quality management methods in UAE. *International Journal of Mechanical and Production Engineering Research and Development*, 10(3), 2127-2140.

  <a href="https://doi.org/10.24247/ijmperdjun2020199">https://doi.org/10.24247/ijmperdjun2020199</a></a>
- Allam, Z. (2020). The forceful reevaluation of cash-based transactions by COVID-19 and

its opportunities to transition to cashless systems in digital urban networks. In *Surveying the Covid-19 Pandemic and its Implications: Urban Health, Data Technology, and Political Economy*, (pp.107-117). Live+Smart Research Lab School of Architecture and Built Environment Deakin University. <a href="https://doi.org/10.1016/b978-0-12-824313-8.00008-5">https://doi.org/10.1016/b978-0-12-824313-8.00008-5</a>

- Al-Saqqa, S., Sawalha, S., & AbdelNabi, H. (2020). Agile software development: methodologies and trends. *International Journal of Interactive Mobile*Technologies, 14(11), 246–270. <a href="https://www.online-journals.org/index.php/i-jim">https://www.online-journals.org/index.php/i-jim</a>
- Alwaly, K. A., & Alawi, N. A. (2020) Affecting the application of Project Leaders

  Knowledge Guide (PMBOK® GUIDE) in construction projects in Yemen.

  International Journal of Construction Engineering and Management, 9(3), 80–91.

  <a href="https://doi.org/10.5923/j.ijcem.20200903.01">https://doi.org/10.5923/j.ijcem.20200903.01</a>
- Anthony, E. L. (2017). The impact of leadership coaching on leadership behaviors.

  \*\*Journal of Management Development, 36(7), 930–939.\*\*

  https://doi.org/10.1108/jmd-06-2016-0092
- Anthopoulos, L., Reddick, C. G., Giannakidou, I., & Mavridis, N. (2016). Why e-government projects fail? An analysis of the healthcare.gov website. *Government Information Quarterly*, 33(1), 161–173. https://doi.org/10.1016/j.giq.2015.07.003
- Arsic, S. (2017). Key factors of project success in family small and medium-sized companies: The theoretical review. Journal of Sustainable Business and Management Solutions in Emerging Economies, 23(1), 33–40. <a href="https://doi.org/10.7595/management.fon.2017.0013">https://doi.org/10.7595/management.fon.2017.0013</a>

- Arthur, K. N. A., & Owen, R. (2019). A Micro-ethnographic study of big data-based innovation in the financial services sector: Governance, ethics and organizational practices. *Journal of Business Ethics*, *160*(2), 363–375. https://doi.org/10.1007/s10551-019-04203-x
- Astroth, K. S., & Chung, S. Y. (2018). Exploring the evidence quantitative and qualitative research: Focusing on the fundamentals: Reading qualitative research with a critical eye. *Nephrology Nursing Journal*, 45(4), 381-386. <u>Nephrology Nursing Journal</u> | <u>American Nephrology Nurses Association (annanurse.org)</u>
- Azizah, Y. N., Rijalb, M. K., & Nuri, R. U. (2020). Transformational or transactional leadership style: Which affects work satisfaction and performance of Islamic university lecturers during COVID-19 pandemic *Systematic Reviews in Pharmacy*, 11(7), 577-588.
- Azungah, T. (2018). Qualitative research: Deductive and inductive approaches to data analysis. *Qualitative Research Journal*, 18(4), 383-400.

  <a href="https://doi.org/10.1108/qrj-d-18-00035">https://doi.org/10.1108/qrj-d-18-00035</a>
- Barbinta, A., Dan, I. S., & Muresan, C. (2017). Bernard Bass Founder of the transformational leadership theory. *Review of Management & Economic Engineering*, 16(4), 758–762.
- Barbosa, M. W., & de Ávila Rodrigues, C. (2020). Project portfolio management teaching: Contributions of a gamified approach. *International Journal of Management Education*, 18(2), 100–388.

https://doi.org/10.1016/j.ijme.2020.100388

- Barry, J. M., & Gironda, J. (2018). A dyadic examination of inspirational factors driving b2b social media influence. *Journal of Marketing Theory and Practice*, 26(1-2), 117-143. https://doi.org/10.1080/10696679.2017.1389244
- Bass, B. M. (1999). Two decades of research and development in transformational leadership. *European Journal of Work and Organizational Psychology*, 8(1), 9–32. <a href="https://doi.org/10.1080/135943299398410">https://doi.org/10.1080/135943299398410</a>
- Bass, B. M. (2003). Face to face Power to change: A conversation with Bernard M. Bass. *Leadership in Action*, 23(2), 9–11. <a href="https://doi.org/10.1002/lia.1013">https://doi.org/10.1002/lia.1013</a>
- Bathallath, S., Smedberg, Å., & Kjellin, H. (2016). Project Interdependency management in IT/IS project portfolios: From a systems perspective. *Procedia Computer Science*, 100, 928–934. https://doi.org/10.1016/j.procs.2016.09.250
- Baziedy Aditya Darmawan. (2018). The loyalty of Muslim customers on the Indonesian Islamic banks: the role of corporate image, satisfaction, and trust. *Jurnal Siasat Bisnis*, 22(2), 132–143. <a href="https://doi.org/10.20885/jsb.vol22.iss2.art2">https://doi.org/10.20885/jsb.vol22.iss2.art2</a>
- Bhavsar, K., Shah, V., & Gopalan, S. (2020). Scrum: An agile process reengineering in software engineering. *International Journal of Innovative Technology and Exploring Engineering*, 9(3), 840-847.

  https://doi.org/10.35940/ijitee.C8545.019320
- Bogdan, A., Cosmin, A., Sorin, C., & Costin, A. (2019). A study on using waterfall and agile methods in software project leaders. *Journal of Information Systems & Operations Management*, 13(1), 129-131
- Bojović, I., & Stojadinović Jovanović, S. (2020). Transformational leadership and

- psychological needs of employees. *Technium Social Sciences Journal*, 7, 226–235. https://doi.org/10.47577/tssj.v7i1.512
- Bowen, P. W., Rose, R., & Pilkington, A. (2017). Mixed methods theory and practice: Sequential, explanatory approach. *International Journal of Quantitative and Qualitative Research Methods*, 5(2), 10–27.
- Brown, A., & Danaher, P. A. (2017). CHE principles: Facilitating authentic and dialogical semisturctured interviews in educational research. *International Journal of Research & Method in Education*, 42(1), 76-90. https://doi.org/10.1080/1743727x.2017.1379987v
- Caretta, M. A., & Pérez, M. A. (2019). When participants do not agree: Member checking and challenges to epistemic authority in participatory research. *Field Methods*, *31*(4), 359-374. <a href="https://doi.org/10.1177/1525822x19866578">https://doi.org/10.1177/1525822x19866578</a>
- Cardno, C. (2019). Policy document analysis: A practical educational leadership tool and a qualitative research method. *Educational Administration: Theory and Practice*, 24(4). <a href="https://doi.org/10.14527/kuey.2018.016">https://doi.org/10.14527/kuey.2018.016</a>
- Carlson, J. A. (2010). Avoiding traps in member checking. *Qualitative Report*, *15*, 1102–1113.
- Cha, J., & Maytorena-Sanchez, E. (2019). Prioritizing project leaders competencies across the software project life cycle. *International Journal of Managing Projects in Business*, 12(4), 961–978. https://doi.org/10.1108/ijmpb-11-2017-0145
- Chaves, M. S., Araújo, C., Teixeira, L., Virginio, D., Júnior, I. G., & Dias, C. (2016). A new approach to managing lessons learned in PMBOK process groups: The

- Ballistic 2.0 model. *International Journal of Information Systems and Project Leaders*, 4(01), 27–45. https://doi.org/10.12821/ijispm040102
- Choi, Y. (2019). The mediating role of the aesthetic experience between transformational leadership and innovation. *Cogent Business & Management*, 6(1). https://doi.org/10.1080/23311975.2019.1662630
- Chowdhury, M. S., Ahmmed, F., & Hossain, I. (2020). Methodological dilemma in microfinance research: Applicability of a qualitative case study design. *Qualitative Report*, 25(2), 271-290.
- Clegg, S., Killen, C. P., Biesenthal, C., & Sankaran, S. (2018). Practices, projects and portfolios: Current research trends and new directions. *International Journal of*Project leaders, 36(5), 762–772. <a href="https://doi.org/10.1016/j.ijproman.2018.03.008">https://doi.org/10.1016/j.ijproman.2018.03.008</a>
- Closa, C. (2021). Planning, implementing and reporting: Increasing transparency, replicability and credibility in qualitative political science research. *European Political Science*. <a href="https://doi.org/10.1057/s41304-020-00299-2">https://doi.org/10.1057/s41304-020-00299-2</a>
- Connecticut General Assembly. (2001). 2001sb-00823-r00lco08197-fna Fiscal note amendment. <a href="https://www.cga.ct.gov/2001/fna/2001SB-00823-R00LCO08197-FNA.htm">https://www.cga.ct.gov/2001/fna/2001SB-00823-R00LCO08197-FNA.htm</a>
- Couto, J. C., Kroll, J., Ruiz, D. D., & Prikladnicki, R. (2022). Extending the project management body of knowledge (PMBOK) for data visualization in software project management. *SN Computer Science*, *3*(4). https://doi.org/10.1007/s42979-022-01168-z
- Das, P., Verburg, R., Verbraeck, A., & Bonebakker, L. (2018). Barriers to innovation

- within large financial services firms. *European Journal of Innovation Management*, 21(1), 96–112. https://doi.org/10.1108/ejim-03-2017-0028
- Davies, A., & Brady, T. (2016). Explicating the dynamics of project capabilities.

  \*International Journal of Project leaders, 34(2), 314–327.

  https://doi.org/10.1016/j.ijproman.2015.04.006
- DeJonckheere, M., & Vaughn, L. M. (2019). Semistructured interviewing in primary care research: A balance of relationship and rigour. *Family Medicine and Community Health*, 7(2), 57. https://doi.org/10.1136/fmch-2018-000057
- Del Gaudio, B. L., Porzio, C., Sampagnaro, G., & Verdoliva, V. (2020). How do mobile, internet and ICT diffusion affect the banking industry? An empirical analysis.
  European Management Journal. <a href="https://doi.org/10.1016/j.emj.2020.07.003">https://doi.org/10.1016/j.emj.2020.07.003</a>
- Denham, B., Pears, R., & Naeem, M. A. (2020). HDSM: A distributed data mining approach to classifying vertically distributed data streams. *Knowledge-Based Systems*, 189, 105-114. https://doi.org/10.1016/j.knosys.2019.105114
- Denieffe, S. (2020). Commentary: Purposive sampling: complex or simple? Research case examples. *Journal of Research in Nursing*, 25(8), 662-663. https://doi.org/10.1177/1744987120928156
- Doan, T. T., Nguyen, L. C., & Nguyen, T. D. (2020). Emotional intelligence and project success: The roles of transformational leadership and organizational commitment. *The Journal of Asian Finance, Economics and Business*, 7(3), 223-233. <a href="https://doi.org/10.13106/jafeb.2020.vol7.no3.223">https://doi.org/10.13106/jafeb.2020.vol7.no3.223</a>
- Döringer, S. (2020). 'The problem-centred expert interview.' Combining qualitative

- interviewing approaches for investigating implicit expert knowledge. *International Journal of Social Research Methodology*, 24(3), 265-278.

  <a href="https://doi.org/10.1080/13645579.2020.1766777">https://doi.org/10.1080/13645579.2020.1766777</a>
- Dennehy, D., & Conboy, K. (2018). Identifying challenges and a research agenda for flow in software Project leaders. *Project leaders Journal*. 49, 103–118.
- Dragga, S., & Voss, D. (2020). Research Ethics Is a Tricycle Not a Unicycle: The Role of Researchers, Reviewers and Editors. *AMWA Journal: American Medical Writers*\*Association Journal, 35(4), 172–176. Retrieved From: <a href="http://www.amwa.org">http://www.amwa.org</a>
- Ehrmin, J. T., & Pierce, L. L. (2021). Innovative qualitative research data collection and analysis activities that engage nursing students. *Journal of Professional Nursing*, 37(1), 38-42. https://doi.org/10.1016/j.profnurs.2020.11.009
- Esmi, K., Piran, M., & Hayat, A. A. (2017). The mediating effect of organizational culture on the relationship between transformational leadership and organizational citizenship behavior. *Journal of Health Management & Informatics*, *4*(4), 114–119. https://jhmi.sums.ac.ir/
- Faraji, A., Rashidi, M., Perera, S., & Samali, B. (2022). Applicability-compatibility analysis of PMBOK seventh edition from the perspective of the construction industry distinctive peculiarities. *Buildings*, *12*(2), 210. https://doi.org/10.3390/buildings12020210
- Fathima, S. J. (2020). Digital revolution in the Indian banking sector. Shanlax *International Journal of Commerce*, 8(1), 56-64.

  <a href="https://doi.org/10.34293/commerce.v8i1.1619">https://doi.org/10.34293/commerce.v8i1.1619</a>

- Feng, X., & Behar-Horenstein, L. (2019). Maximizing NVivo utilities to analyze openended responses. *The Qualitative Report*. <a href="https://doi.org/10.46743/2160-3715/2019.3692">https://doi.org/10.46743/2160-3715/2019.3692</a>
- Fioravanti, M. L., Sena, B., & Barbosa, E. F. (2020). Assessing the development of soft skills for project leaders using PBL: A case study, 2020 IEEE Frontiers in Education Conference (FIE), 2020, 1–8.

  http://doi:10.1109/FIE44824.2020.9274099
- Fireteanu, V. (2020). Agile methodology advantages when delivering Internet of things projects. 2020 12th International Conference on Electronics, Computers and Artificial Intelligence (ECAI). https://doi.org/10.1109/ecai50035.2020.9223172
- Fleet, D., Burton, A., Reeves, A., & Dasgupta, M. P. (2016). A case for taking the dual role of counselor-researcher in qualitative research. *Qualitative Research in Psychology*, *13*(4), 328–346. <a href="https://doi.org/10.1080/14780887.2016.1205694">https://doi.org/10.1080/14780887.2016.1205694</a>
- Frydenberg, M., Yates, D. J., & Kukesh, J. S. (2018). Sprint, Then Fly: Teaching Agile Methodologies with Paper Airplanes. *Information Systems Education Journal*, 16(5), 22–36. Retrieved From: <a href="https://isedj.org/">https://isedj.org/</a>
- Gunawardhana, N & Chandana, P. (2015). Classification of Failure Factors in Information Systems. *International Journal for Innovation Education and Research*. 3. 10.31686/ijier.vol3.iss3.339.
- Gan, L., Wang, H., & Yang, Z. (2019). Machine learning solutions to challenges in finance: An application to the pricing of financial products. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.3446042

- Gharajeh, M. S. (2019). Waterative model: An integration of the waterfall and iterative software development paradigms. *Database Systems Journal*, 10(1), 3-24.

  Retrieved From: <a href="http://www.dbjournal.ro/">http://www.dbjournal.ro/</a>
- Guest, G., Namey, E., & Chen, M. (2020). A simple method to assess and report thematic saturation in qualitative research. *PLoS ONE*, *15*(5), 1–17

  <a href="https://doi.org/10.1371/journal.pone.0232076">https://doi.org/10.1371/journal.pone.0232076</a>
- Hadjinicolaou, N., & Dumrak, J. (2017). Investigating association of benefits and barriers in project portfolio management to project success. *Procedia Engineering*, 182, 274–281. <a href="https://doi.org/10.1016/j.proeng.2017.03.191">https://doi.org/10.1016/j.proeng.2017.03.191</a>
- Hagues, R. (2019). Conducting critical ethnography: Personal reflections on the role of the researcher. *International Social Work*, 64(3), 438-443.
  <a href="https://doi.org/10.1177/0020872818819731">https://doi.org/10.1177/0020872818819731</a>
- Hair, J. F., & Sarstedt, M. (2021). Data, measurement, and causal inferences in machine learning: Opportunities and challenges for marketing. *Journal of Marketing Theory and Practice*, 1-13. https://doi.org/10.1080/10696679.2020.1860683
- Hamzah, A. B., & Shamsudin, M. F. (2020). Why customer satisfaction is important to business? *Journal of Undergraduate Social Science & Technology*, 2(2). www.jusst.abrn.asia
- Hartono, B., Sulistyo, S., & Umam, M. (2019). Leadership profiles of successful project leaders in Indonesia. *Journal of Industrial Engineering and Management*, *12*(2), 274. https://doi.org/10.3926/jiem.2735
- Hayashi, P., Abib, G., & Hoppen, N. (2019). Validity in qualitative research: A

- processual approach. *The Qualitative Report*. <a href="https://doi.org/10.46743/2160-3715/2019.3443">https://doi.org/10.46743/2160-3715/2019.3443</a>
- Heleno, E., Andias, R., & Silva, A. G. (2021). What do community-dwelling older adults with chronic pain value in a program of combined pain neuroscience education plus exercise? *Patient Education and Counseling*.

  <a href="https://doi.org/10.1016/j.pec.2021.04.017">https://doi.org/10.1016/j.pec.2021.04.017</a>
- Horváth, V. (2019). Project leaders competence definitions, models, standards and practical implications. *Vezetéstudomány / Budapest Management Review*, *50*(11), 2–17. https://doi.org/10.14267/veztud.2019.11.01
- Huda, M. S. (2019). Study of Parameters for Improving Performance and Competitiveness of Construction Companies in Indonesia. *International Journal* of Civil Engineering and Technology, 10(8), 90–100. Retrieved from: <a href="https://ssrn.com/abstract=3450304">https://ssrn.com/abstract=3450304</a>
- Husband, G. (2020). Ethical Data Collection and Recognizing the Impact of

  Semisturctured Interviews on Research Respondents. *Education Sciences*, 10(8),

  206. https://doi.org/10.3390/educsci10080206
- Imran, R., & Soomro, T. R. (2022). Mapping of Agile processes into project management knowledge areas and processes. 2022 International Conference on Business Analytics for Technology and Security (ICBATS). <a href="https://doi.org/10.1109/icbats54253.2022.9759013">https://doi.org/10.1109/icbats54253.2022.9759013</a>
- Indriasari, E., Gaol, F. L., & Matsuo, T. (2019). Digital banking transformation:

  Application of artificial intelligence and big data analytics for leveraging

- customer experience in the Indonesia banking sector. 2019 8th International Congress on Advanced Applied Informatics (IIAI-AAI). https://doi.org/10.1109/iiai-aai.2019.00175
- Iqbal, S. M. J., Nawaz, M. S., Siddiqui, S. H., & Imran, M. K. (2019). Influence of transformational leadership factors on project success. *Pakistan Journal of Commerce and Social Sciences*, 13(1), 231–256.
  <a href="https://www.econstor.eu/handle/10419/196195">https://www.econstor.eu/handle/10419/196195</a>
- Iyamu, T. (2018). Implementation of the enterprise architecture through the Zachman framework. *Journal of Systems and Information Technology*, 20(1), 2-18. https://doi.org/10.1108/jsit-06-2017-0047
- Jinasena, et al., (2020). Success and Failure Retrospectives of FinTech Projects: A Case Study Approach. Inf Syst Front. <a href="https://doi.org/10.1007/s10796-020-10079-4">https://doi.org/10.1007/s10796-020-10079-4</a>
- Jones, M. (2019). What we talk about when we talk about (big) data. *Journal of Strategic Information Systems*, 28(1), 3–16. Retrieved From:

  https://www.journals.elsevier.com/the-journal-of-strategic-information-systems
- Joslin, R., & Müller, R. (2016). Identifying interesting project phenomena using philosophical and methodological triangulation. *International Journal of Project leaders*, *34*, 1043–1056. https://doi.org/10.1016/j.ijproman.2016.05.005
- Kamali, A. (2020). Applying PMBOK in Project-Based ERP Logistics Systems CiiT

  International Journal of Programmable Device Circuits and Systems, 3(12) 51–61. http://www.ciitresearch.org/
- Kaczorowska, A., Słoniec, J., & Motyka, S. (2019). Portfolio approach to project leaders

- in creation of the 'organization's value. *MATEC Web of Conferences*, 252, 601 https://doi.org/10.1051/matecconf/201925206011
- Kanagarajoo, M. V., Fulford, R., & Standing, C. (2019). The contribution of social media to project leaders. *International Journal of Productivity and Performance* Management, 69(4), 834-872. <a href="https://doi.org/10.1108/ijppm-09-2018-0316">https://doi.org/10.1108/ijppm-09-2018-0316</a>
- Khan, N. A., & Khan, A. N. (2019). What followers are saying about transformational leaders fostering employee innovation via organisational learning, knowledge sharing and social media use in public organisations? *Government Information Quarterly*, 36(4), 101391. <a href="https://doi.org/10.1016/j.giq.2019.07.003">https://doi.org/10.1016/j.giq.2019.07.003</a>
- Khatib, M. E., Mulla, A. A., & Ketbi, W. A. (2022). The role of blockchain in E-governance and decision-making in project and program management. *Advances in Internet of Things*, 12(03), 88-109. <a href="https://doi.org/10.4236/ait.2022.123006">https://doi.org/10.4236/ait.2022.123006</a>
- Korstjens, I., & Moser, A. (2017). Series: Practical guidance to qualitative research.

  Part2: Context, research questions and designs. *European Journal of Genera lPractice*, 23(1), 274–279. https://doi.org/10.1080/13814788.2017.1375090
- Kozak, S., & Golnik, B. (2020). Migration of the banking sector to digital banking in Poland. *Economic and Regional Studies / Studia Ekonomiczne i Regionalne*, 13(3), 284-294. https://doi.org/10.2478/ers-2020-0021
- Krehbiel, T. C., Salzarulo, P. A., Cosmah, M. L., Forren, J., Gannod, G., Havelka, D., Hulshult, A. R., & Merhout, J. (2017). Agile Manifesto for Teaching and Learning. *Journal of Effective Teaching*, *17*(2), 90–111. Retrieved From: <a href="https://uncw.edu/jet/">https://uncw.edu/jet/</a>

Kumari, A., & Saharan, T. (2020). Knowledge management as a catalyst to sustainable development in banking industry. 2020 International Conference on Computer Science, Engineering and Applications (ICCSEA).

https://doi.org/10.1109/iccsea49143.2020.9132880

Langdalen, H., Abrahamsen, E. B., & Abrahamsen, H. B. (2020). A new framework to identify and assess hidden assumptions in the background knowledge of a risk assessment. *Reliability Engineering and System Safety*, 200.

<a href="https://doi.org/10.1016/j.ress.2020.106909">https://doi.org/10.1016/j.ress.2020.106909</a></a>

Le, H. H., & Viviani, J. (2018). Predicting bank failure: An improvement by implementing a machine-learning approach to classical financial ratios. *Research in International Business and Finance*, 44, 16-25.

<a href="https://doi.org/10.1016/j.ribaf.2017.07.104">https://doi.org/10.1016/j.ribaf.2017.07.104</a>

- Leonard, D. J., & Needham, C. (2020). Strategies hospital manager use to improve customer services. *Open Journal of Business and Management*, 08(02), 820-854. <a href="https://doi.org/10.4236/ojbm.2020.82051">https://doi.org/10.4236/ojbm.2020.82051</a>
- Leyva-Vazquez, M., Quiroz-Martinez, M. A., Portilla-Castell, Y., Hechavarria-Hernandez, J. R., & Gonzalez-Caballero, E. (2020). A new model for the selection of information technology project in a neutrosophic environment. Neutrosophic Sets & Systems, 32, 344-346.

Lien, N. T., Doan, T. T., & Bui, T. N. (2020). Fintech and banking: Evidence from Vietnam. *The Journal of Asian Finance, Economics and Business*, 7(9), 419-426.

https://digitalrepository.unm.edu/nss\_journal/vol32/iss1/22

# https://doi.org/10.13106/jafeb.2020.vol7.no9.419

- Lynch, H. F. (2018). Opening closed doors: Promoting IRB transparency. *Journal of Law, Medicine & Ethics*, 46(1), 145-158.

  https://doi.org/10.1177/1073110518766028
- Ma, J., Harstvedt, J. D., Jaradat, R., & Smith, B. (2020). Sustainability driven multicriteria project portfolio selection under uncertain decision-making environment. *Computers & Industrial Engineering*, 140, Article 106236. <a href="https://doi.org/10.1016/j.cie.2019.106236">https://doi.org/10.1016/j.cie.2019.106236</a>
- Madill, A., & Sullivan, P. (2018). Mirrors, portraits, and member checking: Managing difficult moments of knowledge exchange in the social sciences. *Qualitative Psychology*, 5(3), 321-339. https://doi.org/10.1037/qup0000089
- Mamela, T. L., Sukdeo, N., & Mukwakungu, S. C. (2020). Adapting to artificial intelligence through workforce re-skilling within the banking sector in South Africa. 2020 International Conference on Artificial Intelligence, Big Data, Computing and Data Communication Systems (icABCD).
  <a href="https://doi.org/10.1109/icabcd49160.2020.9183817">https://doi.org/10.1109/icabcd49160.2020.9183817</a>
- Martin, W. E., & Bridgmon, K. D. (2012). *Quantitative and statistical research methods:*From hypothesis to results. John Wiley & Sons.
- Meng, T., Guo, X., Lian, W., Deng, K., Gao, L., Wang, Z., Huang, J., Wang, X., Long, X., & Xing, B. (2020). Identifying facial features and predicting patients of acromegaly using three-dimensional imaging techniques and machine learning.
  Frontiers in Endocrinology, 11. <a href="https://doi.org/10.3389/fendo.2020.00492">https://doi.org/10.3389/fendo.2020.00492</a>

- Mosteanu, N. R., Faccia, A., Pio, L., & Bhatia, S. (2020). Digital technologies' implementation within financial and banking system during socio distancing restrictions back to the future. *International Journal of Advanced Research in Engineering and Technology*, 11(6), 307-315. <a href="http://doi.org/10.34218/IJARET.11.6.2020.027">http://doi.org/10.34218/IJARET.11.6.2020.027</a>
- Moustakas, C. (1994). Phenomenological research methods. SAGE Publications.
- Mukherjee, D., & Natrajan, N. S. (2019). Managing Virtual Teams in Software Projects through Social Media: A Multi-case Approach. *South Asian Journal of Management*, 26(1), 118–135. <a href="https://sajm-amdisa.org/">https://sajm-amdisa.org/</a>
- Muriana, C., & Vizzini, G. (2017). Project risk management: A deterministic quantitative technique for assessment and mitigation. *International Journal of Project leaders*, 35(3), 320-340. <a href="https://doi.org/10.1016/j.ijproman.2017.01.010">https://doi.org/10.1016/j.ijproman.2017.01.010</a>
- Naderifar, M., Goli, H., & Ghaljaie, F. (2017). Snowball sampling: A purposeful method of sampling in qualitative research. *Strides in Development of Medical Education*, *14*(3). <a href="https://doi.org/10.5812/sdme.67670">https://doi.org/10.5812/sdme.67670</a>
- National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research. (1979). *The Belmont report: Ethical principles and guidelines for the protection of human subjects of research*. U.S. Department of Health and Human Services. <a href="https://www.hhs.gov/ohrp/regulations-and-policy/belmont-report/read-the-belmont-report/index.html">https://www.hhs.gov/ohrp/regulations-and-policy/belmont-report/read-the-belmont-report/index.html</a>
- Naidoo, K., Lawrence, H., & Stein, C. (2018). The concept of caring amongst first year diagnostic radiography students: Original research. *Nurse Education Today*, 71,

- 163-168. https://doi.org/10.1016/j.nedt.2018.09.025
- Ng, J. J. (2018). Statistical process control chart as a project leaders tool. *IEEE Engineering Management Review*, 46(2), 26-28.

  https://doi.org/10.1109/emr.2018.2834379
- Ngozwana, N. (2018). Ethical dilemmas in qualitative research methodology:

  Researcher's reflections. *International Journal of Educational Methodology*, 4(1),

  19-28. https://doi.org/10.12973/ijem.4.1.19
- Nguyen, D. D., Dinh, H. C., & Nguyen, D. V. (2020). Promotion of Fintech application for the modernization of banking-finance system in Vietnam. *The Journal of Asian Finance, Economics and Business*, 7(6), 127–131. https://doi.org/10.13106/jafeb.2020.vol7.no6.127
- Nigar, N. (2020). Hermeneutic phenomenological narrative enquiry: A qualitative study design. *Theory and Practice in Language Studies*, *10*(1), 10–18. https://doi.org/10.17507/tpls.1001.02
- Ofosu-Boateng, I., & Agyei, S. D. (2020). Effect of customer satisfaction and marketing communication mix on customers' loyalty in the Ghanaian banking industry.

  \*European Journal of Management and Marketing Studies\*, 5(4), 29-40. <a href="https://">https://
  10.46827/ejmms.v5i4.89</a>
- Pivec, M., & Maček, A. (2019). Employment background influence on social media usage in the field of European project leaders and communication. *Journal of Business Research*, 94, 280-289. <a href="https://doi.org/10.1016/j.jbusres.2018.03.021">https://doi.org/10.1016/j.jbusres.2018.03.021</a>
- Pollack, J., Helm, J., & Adler, D. (2018). What is the iron triangle, and how has it

- changed? *International Journal of Managing Projects in Business*, 11(2), 527-547. https://doi.org/10.1108/ijmpb-09-2017-0107
- Pradeep, D., & Sundar, C. (2017). Big Data analysis: a step to define. *Advances in Natural and Applied Sciences*, 11(7), 573. Retrieved From:

  <a href="http://www.aensiweb.com/">http://www.aensiweb.com/</a>
- Priambodo, A., Handayani, P. W., & Pinem, A. A. (2019). Success factor for IT project implementation in banking industry: A case study. 2019 3rd International Conference on Informatics and Computational Sciences (ICICoS).

  https://doi.org/10.1109/icicos48119.2019.8982404
- Project Leaders Institute. (2016). Project leaders Book of Knowledge (PMBOK) (6th ed).

  Project Leaders Institute.
- Prostějovská, Z., & Tománková, J. (2017). Project leaders: How to assess a project's success. *Business & IT*, 7(1), 2–7. https://doi.org/10.14311/bit.2017.01.01
- Ramesh, R. (2017). Predictive analytics for banking user data using AWS machine learning cloud service. 2017 2nd International Conference on Computing and Communications Technologies (ICCCT).

  https://doi.org/10.1109/iccct2.2017.7972282
- Ranoliya, B. R., Raghuwanshi, N., & Singh, S. (2017). Chatbot for university related FAQs. 2017 International Conference on Advances in Computing,

  Communications and Informatics (ICACCI).

  <a href="https://doi.org/10.1109/icacci.2017.8126057">https://doi.org/10.1109/icacci.2017.8126057</a>
- Raziq, M. M., Borini, F. M., Malik, O. F., Ahmad, M., & Shabaz, M. (2018). Leadership

- styles, goal clarity, and project success: Evidence from project-based organizations in Pakistan, *Leadership and Organization Development Journal*, 39(2), 309-323. https://www.emerald.com/insight/publication/issn/0143-7739
- Reddy, S. M., & Kumar V. V. (2020). Necessity of agile development model now-a-day software development. *A journal of composition theory*.

  <a href="http://www.jctjournal.com">http://www.jctjournal.com</a>
- Roberts, R. E. (2020). Qualitative Interview Questions: Guidance for Novice

  Researchers. *Qualitative Report*, 25(9), 3185–3203.

  <a href="https://nsuworks.nova.edu/tqr/">https://nsuworks.nova.edu/tqr/</a>
- Rodríguez-Espíndola, O., Chowdhury, S., Dey, P. K., Albores, P., & Emrouznejad, A. (2022). Analysis of the adoption of emergent technologies for risk management in the era of digital manufacturing. *Technological Forecasting and Social Change*, 178, 121562. https://doi.org/10.1016/j.techfore.2022.121562
- Rodrigues, M. C., Domingues, L., & Oliveira, J. P. (2023). Tailoring: A case study on the application of the seventh <u>principle</u> of PMBOK 7 in a public institution. *Procedia Computer Science*, 219, 1735-1743. <a href="https://doi.org/10.1016/j.procs.2023.01.468">https://doi.org/10.1016/j.procs.2023.01.468</a>
- Rogers, T. M. (2019). Project success and project team individuals. *European Project leaders Journal*, 9(1), 27–33. <a href="https://doi.org/10.18485/epmj.2019.9.1.4">https://doi.org/10.18485/epmj.2019.9.1.4</a>
- Rogo, V., Rarasati, A. D., & Gumuruh, H. (2020). The influence of transformational leadership and soft skills on project manager for project success factors. *IOP Conference Series: Materials Science and Engineering*, 830, 022057.

  <a href="https://doi.org/10.1088/1757-899x/830/2/022057">https://doi.org/10.1088/1757-899x/830/2/022057</a>

- Ryzhkova, M., Soboleva, E., Sazonova, A., & Chikov, M. (2020). Consumers' perception of artificial intelligence in banking sector. *SHS Web of Conferences*, 80, 01019. https://doi.org/10.1051/shsconf/20208001019
- Sargeant, J. (2012). Qualitative research part II: Participants, analysis, and quality assurance. *Journal of Graduate Medical Education*, *4*(1), 1-3. https://doi.org/10.4300/jgme-d-11-00307.1
- Saunders, B., Sim, J., Kingstone, T., Baker, S., Waterfield, J., Bartlam, B., Burroughs, H., & Jinks, C. (2017). Saturation in qualitative research: Exploring its conceptualization and operationalization. *Quality & Quantity*, 52(4), 1893-1907. https://doi.org/10.1007/s11135-017-0574-8
- Seymour, T., & Hussein, S. (2014). The history of project leaders. International Journal of Management & Information Systems, 18, 233-240.

  <a href="https://doi:10.19030/ijmis.v18i4.8820">https://doi:10.19030/ijmis.v18i4.8820</a>
- Shahibi, M. S., Sarifun, S. A., Hussin, N., Ibrahim, Z., Ali, J., & Wan Fakeh, S. K. (2019). Factors influencing information technology project leaders success in the financial industry. *Journal of Theoretical and Applied Information Technology*, 97(10), 2775-2784. Retrieve From: <a href="https://www.jatit.org/">https://www.jatit.org/</a>
- Shaw, R. B., McBride, C. B., Casemore, S., & Martin Ginis, K. A. (2018).

  Transformational mentoring: Leadership behaviors of spinal cord injury peer mentors. *Rehabilitation Psychology*, 63(1), 131–140.

  <a href="https://doi.org/10.1037/rep0000176">https://doi.org/10.1037/rep0000176</a>
- Siangchokyoo, N., Klinger, R. L., & Campion, E. D. (2020). Follower transformation as

- the linchpin of transformational leadership theory: A systematic review and future research agenda. *The Leadership Quarterly*, *31*(1), 101–341. https://doi.org/10.1016/j.leaqua.2019.101341
- Sims, J. M. (2010). A brief review of the Belmont report. *Dimensions of Critical Care Nursing*, 29(4), 173-174. https://doi.org/10.1097/dcc.0b013e3181de9ec5
- Singh, S. (2020). Impact of ICT on workforce performance: A study of Indian banking sector. Research Review *International Journal of Multidisciplinary*, *5*(*3*).

  Retrieved From: https://www.rrjournals.com
- Singh, S., Sahni, M. M., & Kovid, R. K. (2020). What drives FinTech adoption? A multimethod evaluation using an adapted technology acceptance model. Management Decision, 58(8), 1675-1697. https://doi.org/10.1108/md-09-2019-1318
- Sohil, S., & Alzoubi, H. M. (2020). Does Digitization Impact Financial Markets?

  Evidence from Dubai. *MS Jameaba Available at SSRN*, 1-13.

  <a href="http://www.papers.ssrn.com">http://www.papers.ssrn.com</a>
- Sorooshian, S., & Mun, S. Y. (2020). Literature review: Critical risk factors affecting information-technology projects. *Quality Access to Success*, 21(175), 157–161 <a href="https://www.srac.ro/calitatea/en/index.html">https://www.srac.ro/calitatea/en/index.html</a>
- Sulova, S. (2018). Association Rule Mining for Improvement of IT Project leaders. *TEM Journal*, 7(4), 717–722. <a href="https://doi.org/10.18421/tem74-03">https://doi.org/10.18421/tem74-03</a>
- Surmiak, A. (2018). Confidentiality in Qualitative Research Involving Vulnerable

  Participants: Researchers' Perspectives. Forum: *Qualitative Social Research*,

  19(3), 393–418. https://doi.org/10.17169/fqs-19.3.3099

- Tabassi, A. A., Roufechaei, K. M., Bakar, A. H., & Yusof, N. (2017). Linking team condition and team performance: A transformational leadership approach. *Project leaders Journal*, 48(2), 22–38. https://doi.org/10.1177/875697281704800203
- Thakor, A. V. (2020). Fintech and banking: What do we know? *Journal of Financial Intermediation*, 41. https://doi.org/10.1016/j.jfi.2019.100833
- Theofanidis, D., & Fountouki, A. (2019). Limitations And delimitations in the research process. *Perioperative nursing (GORNA)*, 7(3), 155–162. http://doi.org/10.5281/zenodo.2552022
- Tse, H. H., To, M. L., & Chiu, W. C. (2017). When and why does transformational leadership influence employee creativity? The roles of personal control and creative personality. *Human Resource Management*, *57*(1), 145–157.

  <a href="https://doi.org/10.1002/hrm.21855">https://doi.org/10.1002/hrm.21855</a>
- Unger, B. N., Gemünden, H. G., & Aubry, M. (2012). The three roles of a project portfolio management office: Their impact on portfolio management execution and success. *International Journal of Project leaders*, 30(5), 608-620. https://doi.org/10.1016/j.ijproman.2012.01.015
- Vardhan, T. S., & LingaReddy, N. (2020). Agile software development: Novel approaches for software development. *International Journal of Research in Engineering and Science (IJRES)*, 8(10), 35-39. <a href="https://www.ijres.org">https://www.ijres.org</a>
- Venkatesh, V., Brown, S. A., & Bala, H. (2013). Bridging the qualitative-quantitative divide: Guidelines for conducting mixed methods research in information systems. *MIS Quarterly*, *37*(1), 21–54.

# https://doi.org/10.25300/misq/2013/37.1.02

- Vlahov, R. D., Mišić, S., & Radujković, M. (2016). The influence of cultural diversity on project leaders competence development The Mediterranean experience.

  \*Procedia Social and Behavioral Sciences\*, 226, 463–469.

  https://doi.org/10.1016/j.sbspro.2016.06.212
- Vujović, V., Denić, N., Stevanović, V., Stevanović, M., Stojanović, J., Cao, Y.,
  Alhammadi, Y., Jermsittiparsert, K., Van Le, H., Wakil, K., & Radojkovic, I.
  (2020). Project planning and risk management as a success factor for IT projects in agricultural schools in Serbia. *Technology in Society*, 63, 101371.
  https://www.journals.elsevier.com/technology-in-society
- Walden University. (2021, July). Traditional doctoral study capstone checklist. https://academicguides.waldenu.edu/ld.php?content\_id=62645373
- Williams, M., & Moser, T. (2019). The art of coding and thematic exploration in qualitative research. *International Management Review*, 15(1), 45–55. <a href="http://www.usimr.org">http://www.usimr.org</a>
- Winter, R., Rohner, P., & Kiselev, C. (2019). Mission impossible? Exploring the limits of managing large IT projects and ways to cross the line. *Proceedings of the 52nd Hawaii International Conference on System Sciences*.

  https://doi.org/10.24251/hicss.2019.768

- Xu, A., Baysari, M. T., Stocker, S. L., Leow, L. J., Day, R. O., & Carland, J. E. (2020).
   Researchers' views on, and experiences with, the requirement to obtain informed consent in research involving human participants: A qualitative study. *BMC Medical Ethics*, 21(1). https://doi.org/10.1186/s12910-020-00538-7
- Yin, J., Ma, Z., Yu, H., Jia, M., & Liao, G. (2019). Transformational leadership and employee knowledge sharing: Explore the mediating roles of psychological safety and team efficacy. *Journal of Knowledge Management*, 24(2), 150–171. <a href="https://doi.org/10.1108/jkm-12-2018-0776">https://doi.org/10.1108/jkm-12-2018-0776</a>
- Yin, R. K. (2012). Applications of case study research. SAGE Publications.
- Yin, R. K. (2018). *Case study research and applications*: Design and Methods (6th ed.). SAGE Publications.

## Appendix A: Interview Protocol

Date:	Location:	
Interviewer:	Interviewee:	
Introduction:		

The purpose of this qualitative multiple case study is to explore strategies some PMO IT project leaders use to manage projects successfully in the financial industy. This study contributes to positive social change IT project success can help drive business sustainability, successful businesses pay taxes to the local government, thereby supporting local social programs.

### **Central Research Question**

What strategies do financial industry project leaders use to ensure IT project success?

Profile Question

- 1) Enlighten the interviewee of the purpose of the study.
- 2) Ensure the interviewee consents to be interviewed and recorded. Collect company documents.
- 3) Watch my body language to avoid influencing any responses.
- 4) Each interview will be digitally recorded and assigned the company code label A, B, and so forth for the organizations, M01, M02 and so forth for leaders, and D01, D02 and so forth for the company documents with a consistent number in numerical order.
- 5) Each interview will be labeled on the top of the page next to their name with the interviewee's letter and number on top.

- 6) All interview questions will be asked in the same order.
- 7) Take notes regarding the interviewee's responses.
- 8) I will let the participants know that once I transcribe the interview, the participant will conduct member checking.
- 9) Thank the interviewee for his/her participation.

### **Interview Questions**

- 1. What strategies do you use to ensure the success of IT projects?
- 2. How do you determine IT project success?
- 3. How do you monitor the progress of IT projects to ensure success?
- 4. How does management connect strategies with individual performance in leading successful IT projects?
- 5. Based on your experiences, how has project governance played a role in the success or failure of IT projects?
- 6. How does management inspire and motivate project leaders to ensure IT project success?
- 7. What tools does management provide to IT project leaders to use in managing risks?
- 8. What other information would you like to share that will help improve my understanding of strategies your organization uses to improve IT project success?

**Concluding Question:** What additional experiences have you had that would contribute to improving the management of IT projects successfully using portfolio management initiatives?

**Thank you for your participation in this study**. The next step in this process is for me to transcribe the audio recording of this interview verbatim. I typed a summary of the interview. May I have your permission to share my interview summary with you for your validation prior to me writing my final report?

### Appendix B: Recruitment Letter

#### RECRUITMENT LETTER

	<date></date>
	<name></name>
	<address></address>
Hello :	

My name is Angela DeBose and I am a Doctor of Business Administration candidate at Walden University currently living in Columbus Ohio. I am conducting a doctoral research study to explore strategies financial industry project leaders use to ensure IT project success.

Based on your professional experience as a successful IT project leader, I would like to interview you to gather information about the strategies financial industry project leaders use to ensure IT project success. Participating in this study will help create new knowledge for future IT leaders in the financial industry to mitigate project failure. I project the interview to take less than 1 hour. I would like to meet at a quiet location of your choosing. I would like to follow up after our initial interview to conduct member checking via, in-person, telephone to review the recording and interpretation of the interview for approximately 30 minutes. The transcribed interview will come in email 2 days after the interview for a review.

I will send each participant an informed consent form to review. This consent form provides background information on the study and outlines the research purpose, process, participants' privacy, and rights during the interview process. Any information gathered during this process is held with the highest confidence.

Please contact me if you have any questions or need additional information. You can reach me at *phone* # or via email at *email address*. Thank you in advance for your consideration and support of my research study.

Sincerely,

Angela D. DeBose

Walden University Doctoral Candidate