

PROJECT MANAGEMENT AND STRATEGY ALIGNMENT IN ACADEMIA

by

Kelly Atkins

---

Doctoral Study Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Business Administration

---

Liberty University, School of Business

December 2019

## Abstract

This study analyzed the understanding of project and strategy alignment in higher education institutions. Literature revealed many projects fail because projects are not aligned to strategy. There is an abundance of project management literature in many industries; however, literature on project management in academia is deficient. This qualitative case study sought to close the gap of understanding project management and strategy alignment in academia. The researcher conducted a review of literature and interviews in order to gain insight in the understanding of project and strategy alignment in two higher education institutions. Three themes were developed based on these interviews: alignment, leadership and culture, and communication. The study revealed employees perceived more successful projects when they understood how projects are aligned with strategy. Recommendations for action and further study were suggested, along with the biblical foundations supporting project management and strategy alignment.

*Key words:* project management, strategy, academia, higher education, strategy alignment.

PROJECT MANAGEMENT AND STRATEGY ALIGNMENT IN ACADEMIA

by

Kelly Atkins

Doctoral Study Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Business Administration

Liberty University, School of Business

December 2019

---

Dr. David Duby, Dissertation Chair

---

Dr. Christopher Huseman, Dissertation Committee Member

---

Dr. Edward Moore, DBA Program Director

## Dedication

I dedicate this to my husband, David. You are my person and best friend. Your unconditional love and support keeps me motivated.

## Acknowledgments

There are many people who helped me through this journey. I would like to thank my husband for enduring this process with me, as supporter, listener, and companion. I would like to thank my children, Chaz, Michael, Evan, and Bailey, you all make me a better person. Thank you to my parents, Larry and Christy, who instilled in me the importance of an education. Melissa and Ronda, your encouragement and friendship are like no other, and my gratitude for your support is forever. I love you all in ways words cannot express.

Thank you to my friends and colleagues! Your support and encouragement has been amazing. I appreciate that you all took the time to ask about my journey through this process. Especially Frank, your prayers for me and unwavering faith in me is a blessing!

A huge thank you to the Liberty University DBA Faculty and administration. I would not have completed this process without Dr. Duby's feedback, motivation, and prayers. My appreciation is abundant.

Thank you Father God for your grace and mercy. My faith was strengthened through this process. "...With man this is impossible, but with God all things are possible" (Matthew 19:26).

## Table of Contents

List of Tables .....	vi
List of Figures .....	vii
Section 1: Foundation of the Study.....	1
Background of the Problem .....	1
Problem Statement .....	3
Purpose Statement.....	4
Nature of the Study .....	4
Research methods .....	4
Research designs.....	5
Approach to Method .....	6
Research Questions.....	7
Conceptual Framework.....	8
Relation to the Study.....	10
Definition of Terms.....	11
Assumptions, Limitations, Delimitations .....	11
Assumptions.....	11
Limitations .....	11
Delimitations.....	12
Significance of the Study .....	12
Reduction of gaps .....	13
Implications for Biblical integration.....	13
Relationship to field of study .....	15

A Review of the Professional and Academic Literature.....	16
Project Management .....	17
Success factors .....	18
Nature of projects.....	19
Project management frameworks.....	21
Leadership, traits, and culture in project management .....	24
Project management body of knowledge.....	26
Project integration management .....	26
Project scope management.....	27
Project schedule management.....	27
Project cost management .....	27
Project quality management.....	27
Project risk management.....	28
Project procurement management.....	28
Project stakeholder management .....	28
Project resource management .....	29
Project communications management .....	29
Strategy .....	30
Strategy and projects.....	32
Governance strategies.....	34
Agency theory.....	35
Stewardship theory.....	36
Agency and stewardship .....	37

Organizational and business strategies. ....	37
Resource-based view .....	38
Project portfolio management.....	40
Academia (Higher Education Institutions) .....	42
Project management in academia.....	43
Strategy in academia. ....	45
Strategy and alignment in projects.....	46
Admissions/retention process .....	46
Curriculum development .....	47
Accreditation.....	48
Conclusion .....	50
Transition and Summary of Section 1 .....	51
Section 2: The Project.....	52
Purpose Statement.....	52
Role of the Researcher .....	53
Participants.....	54
Research Method and Design .....	55
Method .....	55
Design .....	56
Population and Sampling .....	57
Population .....	57
Sampling .....	57
Data Collection .....	59

Instrument .....	59
Data collection technique.....	60
Data organization techniques .....	61
Data Analysis .....	61
Reliability and Validity.....	63
Reliability.....	64
Validity .....	64
Transition and Summary of Section 2 .....	65
Section 3: Application to Professional Practice and Implications for Change .....	66
Overview of the Study .....	66
Anticipated Themes/Perceptions .....	68
Presentation of the Findings.....	68
Emergent themes.....	69
Alignment .....	70
Leadership and culture .....	73
Communication.....	78
Relationship of themes/patterns to research questions .....	81
Relationship of themes/patterns to conceptual framework and literature review.....	82
Analysis of findings based on the themes.....	83
Triangulation and saturation .....	84
Summary of the Findings.....	85
Applications to Professional Practice .....	88
Project management.....	88

Academia .....	89
Biblical implications .....	90
Recommendations for Action .....	91
Recommendations for Further Study .....	93
Reflections .....	94
Summary and Study Conclusions .....	95
References .....	97
Appendix A. Open Interview Questions .....	125

List of Tables

Table 1. Perceived Success of Projects by % .....81

## List of Figures

Figure 1. Relationships between concepts.....	7
---	---

## Section 1: Foundation of the Study

In today's vigorous and fast-paced business environment, the use of project management as a strategic weapon to help companies leverage competitive advantage can be beneficial (Shenhar, 2004). Unfortunately, project management is mostly seen as an operational tool rather than a strategic tool. This is a problem because 30% of projects fail due to being misaligned with strategy (Alsudiri, Al-Karaghoul, & Eldabi, 2013). The use of project management is not prevalent in higher education and data are scarce (Atkinson & Hartshorne, 2013); consequently, the failure rate of projects in academia that are misaligned with strategy could be even higher.

Aligning projects to strategy can help organizations to increase capabilities and success. The introduction of an industry wide framework to align projects to strategy has not been found for selecting and implementing projects to strategy. Many industries have found that the misalignment of projects and strategy cause project failure; however, there are no cases in academia where this problem has been researched. The researcher sought to find cases in academia to find how project management and strategy are aligned.

### **Background of the Problem**

Capabilities of an organization help drive competitive advantage and strategy forward (Siriram, 2018) and project management is one of the building blocks of strategy (Shenhar, 2004). So, while projects are temporary endeavors, each project contributes to the success of an organization (Parker, Parsons, & Isharyanto, 2015). Allen, McLees, Richardson, and Waterford (2015) detailed the most effective projects are aligned with organizational strategy. However, according to Naaranoja, Haapalainen, and Lonka (2007), a large portion of managers do not give acknowledgement to the context projects have within organizational strategy. Each project has the potential to add to an organization's capabilities, but a large number of projects and

organizational strategies are misaligned; therefore, more often than not, managers choose projects that do not contribute to organizational strategy (Milosevic & Srivannaboon, 2006). The impact of misalignment between projects and strategy is misused resources, capabilities, and bad decision making leading to unsuccessful projects.

The understanding of strategy and the way it is practiced differs from project manager to project manager and this is why there is not a universal framework for how projects are aligned to strategy (Young, Young, Jordan, & O'Conner, 2012). For this reason, many companies lack a systematic approach to align projects to strategy (Srivannaboon, 2006). This lack of a systematic approach can affect strategy and project alignment.

Many researchers have created frameworks to try to determine if organizations were aligning projects to strategy. These were met with limited success. One strategic framework suggested by Pressly (2012) helped companies detail a project that is consistent with the mission and strategic goals of the organization, but found most managers do not have or devote the time it takes to document detailed project plans consistent with the organization's mission and vision. Similarly, a framework by Shenhar (2004) outlined seven principles that can be followed to have successful projects that are created from strategic planning. Another model that was researched was the Project Management Maturity Model by Stefanovic (2008). This three-dimensional approach, using short term strategy, long term strategy, and human resource leadership, found that all three dimensions were determined to be important to the success of the organization. However, this study found that while some organizations may have aligned business strategy and projects, most do not monitor or control changes after initial project selection meaning even a small change in the strategy or the project could lead to misalignment. Patanakul and Shenhar (2012) furthered previous research by saying that project strategy has three distinct parts –

perspective, position, and plan – that help the organization to achieve the highest competitive advantage. However, only 50% of the case studies observed found project success and most of the alignment was implicit and not easily reproduced because a consistent process could not be created. Each of these frameworks are looking at how strategy and projects can be aligned for success in many industries, but none of the studies looked at how the projects and strategies are aligned in academia.

### **Problem Statement**

The general problem to be addressed is the high level of project failures across all industries because business strategy and project management are misaligned. Organizations with poor alignment of business strategy and project management have less successful projects (Alsudiri et al., 2013). Cullen and Parker (2015) stated an average of 50% of projects fail across many different industries, whereas Alsudiri et al. (2013) found 30% of those failures are due to misalignment between strategy and projects. Project managers are concerned with the misalignment between business objectives and projects because project management is often not seen as an important business process or as a part of strategy (Srivannaboon, 2006). Recently, The Project Management Institute (2017) documented that executives of many organizations struggle to bridge the gap between strategy and execution. Baptestone and Rabechini (2018) suggested this problem is an issue in the project management field today, as organizations still face the challenge of implementing projects that are aligned to organizational goals. Oliveira, Jurach, Pinto, and Kerchirne (2017) found that many industries have much research on project and strategy alignment; however, research was lacking for higher education. Thus, the specific problem addressed was the misalignment of strategy and projects that leads to project failures in private higher education institutions in the state of Florida.

## **Purpose Statement**

The purpose of this qualitative case study was to understand how projects are aligned to organizational strategy. This is important because research shows over 50% of projects do not finish successfully (Cullen & Parker, 2015), and projects aligned with strategy may result in more successful projects. There is little project management research in the field of academia. This study helps to fill the literature gap of understanding project management and strategy alignment in academia.

## **Nature of the Study**

There are three types of study designs: quantitative, mixed method, and qualitative. After reviewing the three types of study designs, it has been determined that the qualitative designs fits best with understanding how things work (Stake, 2010). The nature of this study was understanding actions of people which is best investigated through the qualitative method design. This qualitative research will help to understand how each project is aligned with organizational strategy and why many projects are not aligned with strategy.

**Research methods.** Thamhain (2014) stated quantitative methods support numeric measures for simple and current evaluations and rankings. However, this research is more than just which projects are aligned with strategy and deemed successful based on numbers. Understanding the alignment between projects and strategy is a complex part of project management that quantitative data will not aid in understanding. Thus, a quantitative study was not appropriate for this research.

According to Cameron and Molina-Azorin (2014), mixed method research is becoming a legitimate methodological choice by academics and researchers in many different fields of study. However, Bentahar and Cameron (2015) posited mixed methods research is still underutilized in

management fields of study, specifically project management. Halcomb and Hickman (2015) stated a deeper, more integrative study can be conducted using mixed methods; however, the time it takes to conduct a mixed methods research project is long and arduous. The mixed methods design will not work because in mixed methods research there should be a balance between qualitative methods and quantitative methods (Thamhain, 2014), and data collection in this study did not involve quantitative information.

Stake (2010) posited qualitative research aims for explanation and understanding. Creswell and Poth (2018) stated qualitative research is used when a problem or issue needs to be explored. Many authors have determined that strategy and project misalignment is an issue and a better understanding is required. Therefore, the qualitative research method was chosen for this research.

**Research designs.** There are five research designs in the qualitative method: case study, phenomenological, narrative, ethnography, and grounded theory. The case study design is an approach for presenting an in-depth study of how something works within a bounded system (e.g., time and place) and can be used to describe a decision process and to understand a concern (Creswell & Poth, 2018). Since this study sought to understand how organizational strategy and projects are aligned and why projects and strategy become misaligned, a case study presented the best fit. The phenomenological design approach explores the essence of a phenomenon and is investigated through interviews of subjects who have all experienced the same phenomenon (Creswell & Poth). The case study design works better than phenomenological because the problem is not focused on a phenomenon or describing the essences of project management. The narrative design approach delves into experiences and stories of individuals weaving a detailed description of the experiences (Creswell & Poth). A narrative would not work because there is

little consensus in the field of project management on why projects are not aligned with strategy, especially in academia. The ethnography design of research looks to describe the culture of a group through observing the development of shared values, language, and behavior patterns (Creswell & Poth). The focus of the research was not interpreting a culture sharing group, so ethnography was not be appropriate. The grounded theory design looks to uncover a theory for developing a framework for an action or process (Creswell & Poth). This study was not focused on creating a theoretical framework to create a new process, only in understanding current processes. Therefore, the reason the qualitative research method and case study design approach were the best fit for this research was because the field of project management is so diverse, and seen from many different perspectives (Creswell & Poth, 2018). Understanding the process of project and strategy alignment in higher education may help the industry create a more unified approach to the problem of project and strategy alignment.

### **Approach to Method**

Much of project management literature focuses on government agencies, construction, healthcare, and IT fields. The participants for this case study were the education sector, specifically universities in the state of Florida. The process for gaining access to these participants was to explore universities in Florida to investigate project managers in higher education. Finding a list of the universities in Florida, and choosing private, not for profit universities allowed for a comprehensive case study. Using email and phone calls to garner participation in the interview process for this case study, the research sought to understand the alignment process of strategy and project management. The project manager titles in education that might have been the best fit were faculty, learning designers, or accreditation specialists. A main strategic goal for most universities is engaging students for retention through innovative

course offerings and being accredited (which helps to ensure quality and rigor). Ensuring all data collected were confidential and providing a detailed research plan and types of questions asked went a long way in gaining access to the needed information.

## Research Questions

Research questions for a case study design help to explore a process (Doody & Bailey, 2016). The following questions guided the research to help to address the problem statement:

RQ1: How are projects aligned to organizational strategies?

RQ2: How does academia view aligning strategy and projects?

RQ3: What does it mean to the overall success of the organization when projects and organizational strategy are aligned?

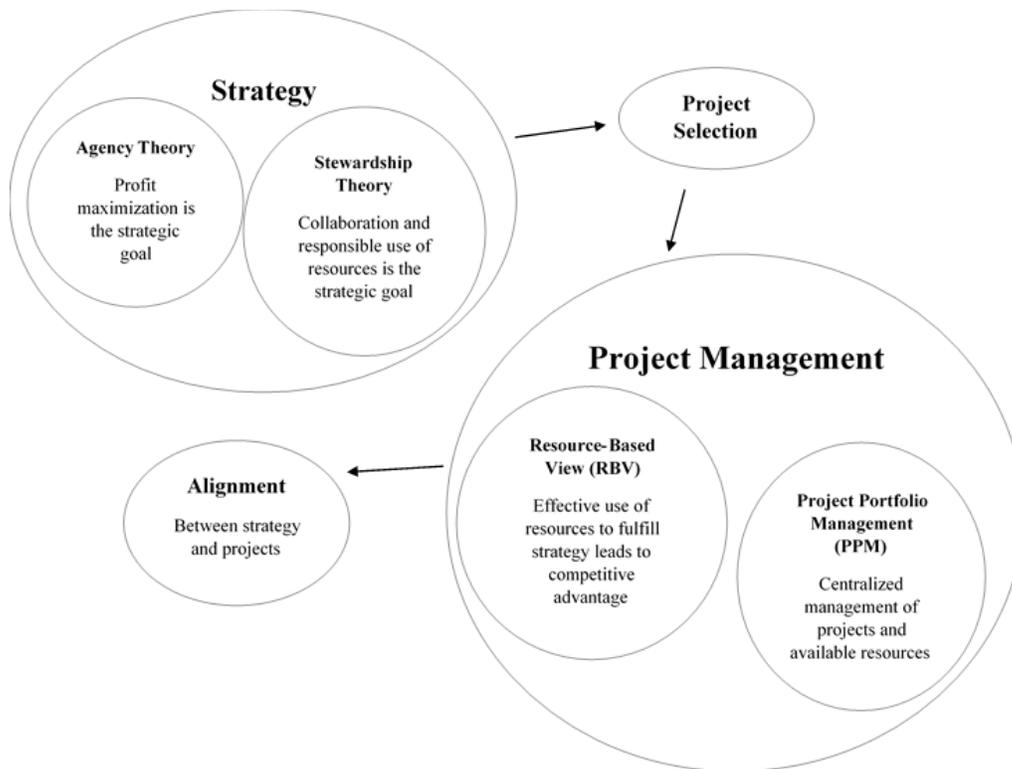


Figure 1. Relationships between concepts.

## Conceptual Framework

Many organizations' strategy and projects are misaligned (Alsudiri et al., 2013). The conceptual framework, shown in Figure 1, for this study utilized strategy theories and project management theories to explore the problem. Over 50% of projects fail across industries (Cullen & Parker, 2015). Having projects become part of an organization's strategy and forming a stronger understanding of how projects contribute to strategy could make these projects more successful and help to increase the bottom line for a company. Because of the high failure rate, procuring resources, earning a profit and gaining competitive advantage can be a risk for many companies. All of these factors require understanding of the alignment between the work being done and the reason why the work is being done. Strategy and project misalignment is a problem that exists within projects in most industries and this misalignment can cause organizations to miss tangible goals and objectives (Alsudiri et al., 2013). The conceptual theories and concepts used to explore the problem are agency theory, stewardship theory, resource-based view (RBV), and project portfolio management (PPM; Figure 1).

The predominant strategy theories that were foundational to explore this problem were the agency theory and the stewardship theory (Figure 1). Agency theory is a leading theory in business strategy and corporate governance (Bendickson, Muldoon, Liguori, & Davis, 2016). Agency theory is based on McGregor's theory X and profit maximization (Glinkowska & Kaczmarek, 2015). Agency theory calls for synchronization between shareholder and organizational interest with the decision makers of the organization (Borlea & Achim, 2013). This synchronization is scarce because many times the roles of the principal and the agent are contradictory and information asymmetry is rampant (Panda & Leepsa, 2017). Hernández and Ibarra (2016) stated higher education institutions have issues putting their resources to good use.

While agency theory strives for profit maximization, misalignment of strategy and projects may cause project failure and managers need to find processes that better align projects and strategy to hopefully realize higher profits for the organization.

On the other hand, the stewardship theory is based on McGregor's theory Y (Glinkowska & Kaczmarek, 2015) and Borlea and Achim (2013) posited that managers are responsive to the needs of the organization and will be responsible with resources. Insiders have more knowledge about day-to-day activities than outsiders (Borlea & Achim, 2013) which can be likened to project managers helping strategic planners to choose projects that fulfill organizational objectives because strategy alignment is clear. Collaboration is assumed in stewardship theory; however, understanding is blurred, and performance may suffer when the manager's objectives are different from the organization's (Van Puyvelde, Caers, Du Bois, & Jegers, 2016). Kaymaz, Demircan, and Eroğlu (2016) posited when goals are shared managers are more motivated to achieve organizational outcomes. When these objectives and goals are different, strategy and project alignment suffer.

Businesses use many strategies and concepts to achieve competitive advantage in project management (Figure 1). One such strategy is the resource-based view (RBV). RBV uses resources to create value, and therefore competitive advantage for organizations (Bronnenmayer, Wirtz, & Göttel, 2016). Having strong capabilities can help organizations achieve success through strategic projects. The highest strategic resources fulfill the VRIN (valuable, rare, inimitable, and non-substitutable) criteria (Bogodistov & Wohlgemuth, 2017). Several authors, as cited in Lacruz and Cunha (2018), found that success is a result of resource and strategy interaction. This research indicated resources tied to strategy used to complete projects may also

be more successful. Organizations need to make a deliberate effort to commit resources to projects because efficient projects use resources to achieve expected outcomes (Mainga, 2017).

Project portfolio management (PPM) coordinates projects that are pursuing the same strategic goals and vying for the same resources and a balanced portfolio contributes considerably to the organizational strategy (Vacík, Špaček, Fotr, & Kracík, 2018). PPM was created to help bridge the gap between strategy and project alignment (Filippov, Mooi, Weg, & Westen, 2012). However, Oosthuizen, Grobbelaar, and Bam (2016) stated while one of the key objectives of PPM is to choose projects that are aligned with strategy, it is also one of its main challenges in that many projects are not seen as strategic in nature and project managers are not seen as strategic leaders, just operational leaders.

### **Relation to the Study**

These theories and concepts were important to this study because they clarify how organizations choose and align projects within strategic boundaries, as shown in Figure 1. All four relate to the study because it is important for organizations to understand resources and relationships while keeping profit maximization as one of the goals for aligning strategy and projects. While agency theory and stewardship theory seem contradictory on the surface, when used together, they complement each other by assuming distrust and misunderstanding, and learning how to prioritize goals and organizational needs (Glinkowska & Kaczmarek, 2015). The perception of interconnecting these concepts is that managers and project managers will learn to work together to ensure collaboration, profit maximization, resource stewardship, and managing multiple projects to ensure alignment with strategy.

## Definition of Terms

*Business (organizational) operations:* implement set strategies into action (Patanakul & Shenhar, 2012).

*Business strategy:* creating competitive advantage while attracting customers and dealing with competition (Srivannaboon, 2006).

*Objectives:* specific, measurable targets that explain how things will be accomplished for organizations to fulfill the mission and vision (“Goals and Objectives,” n.d.).

*Organizational strategy:* plans established by top administration to realize outcomes that are consistent with the mission and goals of an organization (Patanakul & Shenhar, 2012).

*Project management:* work identified in five steps: initiation, planning, execution, monitoring and controlling and close out (Cullen & Parker, 2015) where the work logically translates strategic goals into implementable tasks (Pressly, 2012).

*Project manager:* support the implementation of an organizations business strategy through successful completion of projects (Milosevic, 2003, as cited in Srivannaboon, 2006).

## Assumptions, Limitations, Delimitations

**Assumptions.** The emphasis of this case study was to understand how organizations align projects to strategy and why there is still misalignment. One assumption made was that the organizations chosen for the case study used projects as a part of business operations at the least and in business and organizational strategy at the most. Another assumption was that the participants understood both strategic planning and project management and the questions asked. Finally, it was assumed that the participants answered the questions honestly.

**Limitations.** A few of the limitations of this study were geographic area and size of participant group. The researcher only looked at private universities doing business in Florida.

Also, a case study design research paper should have no more than four to five cases (Creswell & Poth, 2018). Inherent to the case study, there would be lack of statistical generalizing to an entire population because of the limited amount of cases that can be looked at in the timeframe (Yin, 2014).

**Delimitations.** Instead of looking at delimitations as weakness, this section set up the boundaries of the research. This qualitative, case study designed research paper focused on project management professionals and managers involved in projects that are significant enough to support organizational strategy when successful or hurt organizational strategy when it is a failure. The organization may or may not had project manager job titles but was committed to projects as a means of gaining competitive advantage.

### **Significance of the Study**

The significance of this research was that all industries implement strategy through projects; however, there is often misalignment of strategy and projects. Project managers, especially in higher education institutions, will be able to use the findings to ensure projects become a more integral part of the organizational strategy by understanding how projects are beneficial to and align with the strategy of an organization. This research will lay a foundation for managers to be able to apply the findings so that organizational strategy is fulfilled by each project chosen. The findings of this research are expected to help project managers in academia to better align projects into the organizations strategy and they could realize more successful projects. The greater demand organizations have to fulfill strategic outcomes through projects the more project management will be incorporated into the process. The study will help uncover why projects have not been fully aligned with organizational strategy.

**Reduction of gaps.** Researchers have communicated the need of aligning projects to strategy to ensure more successful projects (Alsudiri et al., 2013; Baptestone & Rabechini, 2018; Srivannaboon, 2006). Many of the articles suggest the reason for misalignment is due to the lack of processes or frameworks in place for consistent alignment (Baptestone & Rabechini, 2018; Pressly, 2012; Shenhar, 2004; Stefanovic, 2008). This research helps to fill the gap because little to no research has been completed on strategy and project misalignment in the field of academia. The intent of this research is to explore how projects are aligned with strategy to ensure more successful projects.

**Implications for Biblical integration.** Another aspect of this research was to explore the implication of Biblical integration. The Bible has many instances where God uses projects to fulfill a strategic goal and objectives: Moses and the Ten Commandments, Nehemiah and Jerusalem's wall, stopping the Tower of Babel, the building and rebuilding of the tabernacle, and Noah and the Ark, to name a few. While the projects that were accomplished in Biblical times were stand-alone projects that had a beginning and an end, each one contributed to the future success of humankind. All of these actions were part of a bigger plan, God's strategy to ensure the people of the world would have salvation.

To understand how strategy and project alignment can garner success, the story of Noah and the Ark is helpful. God was questioning His creation of humans and animals because of the evilness that had infiltrated the Earth. "So the Lord said, "I will wipe from the face of the earth the human race I have created—and with them the animals, the birds and the creatures that move along the ground—for I regret that I have made them" (Genesis 6:7). However, one man found favor with God – Noah. God gave Noah a detailed scope of the Ark project. God's strategy was to destroy the people on the Earth and to rebuild civilization with righteous people. The Ark

project aligned with God's strategy, "The Lord then said to Noah, "Go into the ark, you and your whole family, because I have found you righteous in this generation" (Genesis 7:1). Noah built the Ark according to God's specifications and remained safe with his family and all the animals until the flood God created wiped away the traces of evil on Earth. It was about a year for the project to be completed and God's strategy was satisfied. "Then God said to Noah, "Come out of the ark, you and your wife and your sons and their wives. Bring out every kind of living creature that is with you—the birds, the animals, and all the creatures that move along the ground—so they can multiply on the earth and be fruitful and increase in number on it" (Genesis 7:16-17).

Noah's Ark is only one example of the perfect strategy project alignment. To fulfill God's plan for His children, God chose to use projects to accomplish His ultimate strategy of saving humanity through Jesus Christ, "...when the set time had fully come, God sent his Son, born of a woman, born under the law, to redeem those under the law, that we might receive adoption to sonship" (Galatians 4:4-5). Because of this perfect alignment to strategy of all of the projects God gave to the world His projects were successful. "For we are God's handiwork, created in Christ Jesus to do good works, which God prepared in advance for us to do" (Ephesians 2:10). The alignment between strategy and projects were not only successful from a learning standpoint but from a redemption standpoint, "He provided redemption for his people he ordained his covenant forever—holy and awesome is his name" (Psalm 111:9) which was the Lord's ultimate objective.

Integrating the Biblical worldview did not change the approach to the research. "Do not merely listen to the word, and so deceive yourselves. Do what it says" (James 1:22). Being more diligent in the literature review will enable the forethought to know if this research will add

to the field of project management in a meaningful way, not add to the field in way that misleads or deceives others.

**Relationship to field of study.** The researcher approached the concept of strategy and projects through various concepts and theories to look at understanding the theme of aligning projects to strategy. This relates to the general knowledge of project management and strategy. In addition, specifically, for academia and higher education institutions where there is little research on project and strategy alignment. This research will be useful in finding ways to lessen failure rates of projects due to strategy and project misalignment.

Agency theory and stewardship theory are governance theories that have roles in decision-making and information sharing processes of organizations (Glinkowska & Kaczmarek, 2015). According to Nuijten, Keil, and Commandeur (2016), these strategy theories can affect project management because managers are seen as opponents or partners. These are relevant to the field project management because the way managers are perceived can affect decision-making and communication during the strategy project alignment process.

One application to the field of project management relates to one of the knowledge areas: project resource management. Milkovich (2015) found smaller universities could begin projects with less of a demand on resources as larger universities; therefore, larger universities are more likely to use project portfolio management to align and allocate resources to improve institutional performance. This could be one resolution to the problem posed in this study.

Another application to the field of project management relates to another one of the knowledge areas: project communications management. Using the resources-based view as a means to capture intangible resources of the project management process as a strategic means of competitive advantage (Jugdev & Mathur, 2013). Gaining knowledge from communications at

each phase of a project could possibly be used to ensure project and strategy alignment for future projects. This could also be one resolution to the problem posed in this study.

While projects are an integral part of academia, such as curriculum development, research, and teaching, the work performed in higher education is not seen as project driven (Atkinson & Hartshorne, 2013). The research questions were developed to understand how strategies and projects are aligned in universities. This provided insight into how project management is viewed and how successful projects are the more they are aligned to strategy.

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

“A major reason for project failure is that most organizations do not ensure that the projects they implement are aligned with their core strategies” (Van Der Waldt, 2016, p. 1). The general problem of this study was the high level of project failures across all industries because business strategy and project management are misaligned. The specific problem addressed was the misalignment of strategy and projects that leads to project failures in higher education institutions in the state of Florida. The focus of this study was to examine how higher education institutions in Florida align projects to strategy, what alignment or misalignment looks like, and what successful projects look like when aligned to strategy. This literature review includes an overview of project management and the knowledge areas that impact project management as they relate to strategic alignment. It also examined governance and organizational strategy that affect project selection and implementation. Because the application of project management is varied, several strategies were chosen for review to determine how strategy and projects are aligned so that organizations may be able to reap more successful projects that align with organizational goals. The literature reviewed for this dissertation revealed the groundwork of

previous discoveries that help further the academic research of project management, strategy, and project alignment to organizational goals, especially in academia.

### **Project Management**

The Project Management Institute (2019) defined projects as being temporary and unique endeavors which include work that has a beginning and an end, with a specific scope and need for resources, and non-routine work with a specific set of actions to achieve a singular goal. Thus, project management is management and facilitation of these temporary and unique endeavors to meet stakeholder and organizational needs (Zahra, Nazir, Khalid, Raana, & Majeed, 2014). Jugdev and Mathur (2013) suggested project management is an experiential process that is learned on the job and is a set of processes that incorporates tools, methods, and knowledge-based activities to realize organizational outcomes through project activities. In addition, project management is work that is identified in five steps: initiation, planning, execution, monitoring and controlling, and close out (Cullen & Parker, 2015) where the work logically translates strategic goals into implementable tasks (Pressly, 2012).

Battistuzzo and Piscopo (2015) stated project management is a large contributor to a business's competitive success. Organizations are expected to be more competitive because of the rapid growth of business development and expansion worldwide (Siriram, 2018). And, organizations can gain this competitive success through its strategic resources (Schelini, Martens, Piscopo, & Garcez, 2017). Project management can add value to an organization by not only increasing income, saving money and time, and improving quality, but also by improving capabilities, cultivating human capital, and increasing customer satisfaction (Alsudiri et al., 2013). However, most of the time project management is seen as an art form, not as a science, so many organizations do not spend the money and time needed to develop the

knowledge and methods required to implement projects (Austin, Browne, Haas, Kenyatta, & Zulueta, 2013). Unfortunately, the essential aspects of a project – temporality and uniqueness – are the main barriers for organizational learning (Sareminia, Shamizanjani, Mousakhani, & Manian, 2016) limiting project knowledge and implementation development.

**Success factors.** The typical success factors of projects are known as the iron triangle: time, cost, and scope (Alsurdi et al., 2013; Battistuzzo & Piscopo, 2015). Many project managers feel that a project is successful if a project is completed on time, within budget, and within scope. Albert, Balve, and Spang (2017) found that this way of thinking goes against project management concepts of the Project Management Body of Knowledge (PMBOK) because it ignores relationships with stakeholders. However, Cullen and Parker (2015) found that even when projects are run by using the principles identified by PMBOK, many still fail to achieve success. Alsudiri et al. (2013) suggested adding business impact to the iron triangle, as a fourth project success factor, to measure project and strategy alignment through organizational objectives and goals met through project activities.

Montes-Guerra, Gimena, Perez-Ezcurdia, and Diez-Silva (2014) found many researchers believed one universal list for project success through aligning projects to strategy could not exist because every project is unique. However, Longman and Mullins (2004) listed seven key tools for implementing strategy and gaining project success:

- Make a persuasive business case;
- Make project management practical and relevant at all times;
- Provide project management training;
- Make procedures and software user friendly;
- Use positive reinforcement to make project management a win for everyone;

- Make project management a continuing experience; and
- Use historical data for continuous improvement.

Along with these tools, two deliverables that are a must for any project – the actual end product and the knowledge gained from the “learning” that took place during planning and executing the project (Mainga, 2017). McClory, Read, and Labib (2017) stated most organizations only partially engage in using historical data so these organizations do not benefit from the “lessons learned” process of gaining knowledge from successful and failed projects.

Gray and Ulbrich (2017) posited that soft skills need to be included in influencing project success. Many researchers find that soft skills are just as important as hard skills when leading a project. Albert et al. (2017) cited a study by Muller and Judgev (2012) where it was found that hard criteria are responsible for 50% of project success measures and soft criteria for the other 50%. On occasion, exemplary soft skills may be able to take the place of more traditional knowledge of project management and project managers may perform on projects quite successfully. Larson and Gray (2014) postulated that project managers need to be in control of their emotions to be able to respond to people in many different situations. Heagney (2016) suggested people skills (soft skills like trustworthiness and approachability) are on the top of list for project success, above technical skills, because failure to deal with people on a project will lead to an unsuccessful project. While relationships are important to project success, understanding the nature of projects is essential.

**Nature of projects.** Projects are iterative in nature and project managers must work through the project phases as many times as is necessary to refine the plan to ensure objectives are met (Cabanis-Brewin & Dinsmore, 2014). Projects are also temporary and unique by nature;

however, Cabanis-Brewin and Dinsmore (2014) determined some of the universal characteristics inherent to all projects:

- Projects are impermanent and inimitable. Projects have definitive beginning and ending, and no two projects are the same;
- Projects are made up of interdependent activities. In some cases, an activity cannot begin until other one ends. In other cases, the discretion of the project manager determines when and how activities will be completed. Finally, some activities are dependent upon an external event. A project can be composed of one or more of these interdependent relationships;
- Projects create a quality product or result. To be considered completed, a project must meet its set of project criteria;
- Projects involve various resources. Tangible and intangible resources must be procured for a project to meet objectives;
- Projects are not the same as the products or service created. Because projects are temporary, there needs to be a distinction between the work to create the product or service (project) and the final product (not a project); and
- Projects are driven by competing within boundaries. Some of the boundaries a project functions in is time, cost, quality, schedule, resources, and risk. Each project will have its own unique set of boundaries in which to be successful.

These characteristics are important to understand because the ability to be a successful project manager comes with the experience to use tacit knowledge on future projects by developing a skillset of best practices (Cole, 2017). Kerzner (2014) defined best practices as finding a repeatable technique or process to complete an activity in the most efficient way

possible. Project managers who find a technique, process, or framework that works well may lead to competitive advantage benefits for the organization.

**Project management frameworks.** Research has shown project management to be a growing field of study, but one that is still not well known. Every industry uses projects to help accomplish objectives that will fulfill the mission and vision of the organization. Upper level management strategize and plan activities that satisfy those objectives for the long-term success of the company. Patanakul and Shenhar (2012) and Srivastava (2017) believed many project teams recognize the importance of their projects to their organization's strategic success, but lack a formal framework, which hinders alignment and execution. Unfortunately, there is not a universal framework for aligning projects to strategy (Young et al., 2012). Because of the lack of a universal framework, most companies lack a systematic approach that aligns strategy and projects (Srivannaboon, 2006) which can affect successful completion of projects. Siriram (2018) felt this could be mitigated if industry-wide project management assessments were utilized to gather beneficial data on a per project basis.

In the research, there were very few studies where aligning projects to strategy to determine if the organizational goals and outcomes will be successful are the main theme, which, as suggested by Srivastava (2017) might be the reason for poor strategy and project alignment. Though, many looked at project strategy through different frameworks of project implementation to find ways to achieve successful projects. Hoeger (2013) conducted a study on the effect of pre-planning on project strategy and concluded, "pre-project planning sessions may be used as an effective process to improve project success by creating project strategic alignment in the form of an effective balance between deliberate planning and emergent strategy" (p. 149). Lippitt (as cited in Srivastava, 2017) proposed aligning projects with strategy should happen in the

execution planning phase, which can “improve coordination across functions, monitor people, and provide timely reviews to correct execution activities and reduce non-strategic activities” (p. 1046).

Instead of using one of the project management phases, Milosevic and Srivannaboon (2005, 2006) attempted to create a theoretical framework for organizations to determine if they are aligning projects to plans through Porter’s forces of selling strategy. Both studies conducted case studies and suggested more empirical studies to draw better real-world conclusions of the framework’s success. Ilin and Lyovina (2011) suggested using an alignment method based off a project management methodology, PRINCE2, which would allow managers to integrate principles and themes into the project management process through organizational structure and document flow. On the other hand, a framework by Shenhar (2004) outlined seven principles that, when followed, can lead to successful projects that are created from strategic planning. Similarly, a top-down strategic approach suggested by Pressly (2012) helps companies to detail a project that is consistent with the mission and strategic goals of the organization.

Patanakul and Shenhar (2012) furthered project and strategy alignment research by saying that successful projects are realized when the traditional approach to projects and project management are looked at through a strategic lens called project strategy. Project strategy has three distinct parts: perspective, position, and plans. Strategic lens helps to create guidelines through each part of the project strategy for project managers to achieve competitive advantage by fostering strategic behavior. Battistuzzo and Piscopo (2015) posited project strategy is a requirement if alignment between strategy and projects is going to be successful. Additionally, project managers must understand the organization’s strategy and ensure that the project strategy

is aligned to both the project objectives and the organizational goals (Cabanis-Brewin & Dinsmore, 2014)

Whether organizations implement projects as part of a consistent group or by integrating with and engaging in the global society, there are implications that can be taken from research completed in the field of project management. Purushottam and Rwelamila (2011) looked at how project management can help in a multi-polar world. When integrated into strategy, businesses can solve many problems of functioning in a diverse world, gaining competitive advantage, and learning how to work in dynamic environments. Nwagbogwu (2011) used a member-specific sample instead of an industry sample and determined that there was a positive correlation between being a member of Project Management Institute Consulting Community of Practice (PMI-CCoP) and project management effectiveness. He also found that project failure has social implications that could be avoided when the rational project decision model and goal clarity are used, in addition to being a PMI-CCoP member, to manage projects strategically.

An alternate model that was suggested by Stefanovic (2008) was the Project Management Maturity Model. The three-dimensional approach, using short-term view (time, scope, and cost), long-term view (strategic value), and a human resources view (management approaches and quality of leadership), gives a well-rounded view on the success of projects and all three dimensions were determined to be important to the success. Kostalova and Tetreanova (2018) found that project management maturity greatly influences project success; though, maturity models are time-consuming, expensive, and hard for organizations to implement. This may be because there is not one largely agreed upon definition of project management maturity (Siriram, 2018). While Stefanovic (2008) was able to distinguish between operational and strategic activities of projects, the model was only conceptual and not widely implemented. Cooke-Davis,

Crawford, and Lechler (2009) also used some of the dimensions suggested by Stefanovic but felt the right management approach to projects correlated more positively to project success than the short-term and long-term views.

**Leadership, traits, and culture in project management.** Along with strategy and project phases, project management research includes leadership styles, culture, and even certain traits that project managers must possess to be successful. Bond (2015) posited the style of leader and the traits a leader possess will maximize the likelihood of the success of a project. Parker et al. (2015) posited the role of the project manager is to manage the resources of each project: time, materials, and finances. However, the spirit of project management is for project managers to support the implementation of an organizations business strategy through successful completion of projects (Milosevic, 2003, as cited in Srivannaboon, 2006). No matter what leadership style a project manager uses, they must understand it and employ the competencies of that leadership style to run successful projects (Blaskovics, 2016). This is because project management often involves the use of structured and unstructured management approaches involving a mixture of internal policies and procedures, and industry best practices (Parker et al., 2015). Ahsan, Ho, and Khan (as cited in Alvarenga, Branco, do Valle, Soares, & Silva, 2018, p. 9) stated, “the role of the project manager evolves from being the administrator of the project toward a much more managerial and leadership position, to fulfilling an organizational strategic need.” Reporting lessons learned and benefits gained throughout the life cycle of each project is important because gaining and leveraging knowledge is strategically based (Drouin & Jugdev, 2014).

King (2012) helped to define what skills and competencies project managers might need in the future to ensure strategy support through projects. Theses competencies include multi-

disciplined technical skills and practical knowledge of technology, understanding project management and acute business acumen, emotional intelligence, effective decision making and communication skills, and leveraging diverse thinking and relationships through mentoring and trust. Besides looking at the success factors of linking project management to strategy, the skills and competencies of the leader may also impact success of a project and/or strategic plan. Bond (2015) posited the style of leader and the traits a leader possess will maximize the likelihood of the success of a project. Gray and Ulbrich (2017) posited one of the traits a great project manager must have is ambiguity tolerance. This allows flexibility, adaptability, and an openness to change. It has also been suggested that discipline is a key trait that is very much needed to deploy projects successfully (Confido, Wibisono, & Sunitiyoso, 2018). Nadal-Burges (2014) found creativity to be a successful trait and the lack of it in project management. The author feels there can be creativity in project management by using interpretations and judgement because using a strict scientific view diminishes the notion of the diversity and complexity of projects.

On the other hand, Kendra (2003) looked at project management through an organizational design lens while studying cultural implications. This author found leadership traits to be only moderately affective on project success. The cultural implications were power-oriented cultures had limited performance success, and achievement-oriented cultures performed better and had more successful project - no matter which management approaches were taken to implement projects (Kendra, 2003). Potter, Egbelakin, Phipps, and Balaei (2018) postulated that leadership styles are dependent upon the overarching national culture in which the project is taking place, though results showed that the transformational leadership style spanned cultures increasing the likelihood of successful projects.

**Project management body of knowledge.** The Project Management Body of Knowledge (PMBOK) is one of the ‘best practices’ methodologies that is universally recognized in the field of project management (Karaman & Murat, 2015). Like Nadal-Burges (2014), the PMBOK Guide (2017) stated the use of expert judgement in conjunction with project management skills allow project managers to perform well. This is important to the field because project management is becoming an integral part of business activities within many organizations (Aleksic, Puskaric, Tadic, & Stefanovic, 2017).

There are 10 specific knowledge areas projects managers need to be well versed in to help organizations achieve their goals and objectives through successful projects. To support the concepts and the research the two knowledge areas of focus are project resource management and project communications management. Most of the time, project tasks are related in ways people do not understand (Castejón-Limas, Ordieres-Meré, González-Marcos, & González-Castro, 2011). Consequently, to understand the project management processes fully, all knowledge areas are described, with focused attention on project resource management and project communications management.

***Project integration management.*** Project integration management involves all the processes that ensure a project stays on track from start to finish (PMBOK Guide, 2017). Integrating all of the business components for a unified and consolidated project helps to manage the interdependencies inherent to the PMBOK knowledge areas. Cooke Davis et al. (2009) found when there is a lack of integration between projects and management systems, support and governance are not in balance. This lack of balance increases the likelihood of misalignment between projects and strategy.

***Project scope management.*** Project scope management includes the processes to make certain the project contains all of the work required to complete the project – no more, no less (PMBOK Guide, 2017). Moran and Youngdahl (2008) stated scope drives schedule, budget, and resources. The scope of projects needs to be clear, concise, and communicated to ensure that the objectives are delivered without much change. Scope changes are detrimental to organizations when resources are limited and allocated to other priority projects (Kerzner, 2014).

***Project schedule management.*** Project schedule management includes defining project activities, documenting the relationships between activities, estimating time and resources needed to complete these activities, and developing a schedule for execution (PMBOK Guide, 2017). Hoeger (2013) posited a comprehensive project schedule could lead to a higher probability of meeting objectives and lowering scope changes. Kerzner (2014) found that having a schedule empowers project members to take ownership of scheduled tasks making them more successful.

***Project cost management.*** Project cost management includes all processes involved in ensuring projects are completed within the approved budget (PMBOK Guide, 2017). Turner (2018) posited megaproject cost and time to completion cannot be properly estimated at the beginning, so they should be judged on whether they provide strategic value to the organization. Turner went on to state all projects should be looked at on the basis of fulfilling organizational outcomes, not only cost, time, and quality.

***Project quality management.*** Project quality management includes all of the processes for integrating quality into planning, managing and controlling project requirements in order to meet stakeholder objectives (PMBOK Guide, 2017). Quality is not only concerned with the outcome of the project, but also how well the project is managed (Marnewick, 2018). Turner

(2018) suggested for a project to be successful stakeholder satisfaction must be the priority, and then quality will be a positive byproduct. PMBOK Guide (2017) cautions project managers to find the balance between meeting stakeholder needs and organizational needs or decreased quality and profit may occur.

***Project risk management.*** Project risk management includes the processes of planning for, identifying, analyzing, responding to, and monitoring risk (PMBOK Guide, 2017). Risk is a part of every activity; an organizations goal is to limit risks to controllable levels (Allen, Carpenter, Hutchins, & Jones, 2015). Because of this, managing risk helps managers make informed decisions when risk occurs and should be present throughout the entire project (Marnewick, 2018). Lack of proper management and communication can increase the effect of risk on a project (Cole, 2017).

***Project procurement management.*** Project procurement management includes the processes needed to acquire resources outside of the project (PMBOK Guide, 2017). Cole (2017) found it was important to define the procurement process in the beginning stages of a project to minimize cost and risk by establishing proper contracting and buying methods for individual projects. Project procurement management seeks to fulfill the acquisition of the materials identified in project resource management.

***Project stakeholder management.*** Project stakeholder management includes the processes that help to identify people or organizations that may affect or be impacted by the project, evaluate the expectations of the stakeholder, and management engagement between the organization and the stakeholders (PMBOK Guide, 2017). Turner (2018) stated one of the influencers of stakeholder engagement is the governance structure of the organization. A governance structure where shareholders are the focus, project managers may be less engaged

with and trusting of other stakeholders. Lyngso (2014) suggested in order for an organization to create a strategically aligned initiative a relationship must be established with all stakeholders involved in development, implementation, quality management, governance, and even some stakeholders not immediately visible in the day-to-day work. Kultys (2016) assumed most stakeholders are concerned with the success of the organization; therefore, if a project manager is pursuing projects with organizational goals in mind, they are also pursuing the interests of the stakeholders.

***Project resource management.*** Project resource management includes the processes to recognize, obtain, and manage the resources needed to complete a project successfully (PMBOK Guide, 2017). Resources are important to project management and strategy as they are a source of competitive advantage to a firm (Mathur, Jugdev, & Fung, 2014). Project managers who lack experience to utilize knowledge gained on projects can be detrimental to a project and mismanage human resources (Cole, 2017).

It is important to note, Project Resource Management was Project Human Resource Management until the sixth edition of the PMBOK Guide, published in 2017. This change was made to more accurately encompass all resources that a project must procure to be successful. Before this time, Oun, Blackburn, Olson, and Blessner (2016) suggested human dynamics was a project manager's role and resource allocation was a function of the strategic manager.

***Project communications management.*** Project communications management includes the processes to ensure that the information needs of the project and the stakeholders are met through effective communication (PMBOK Guide, 2017). Stefanovic (2008) found that many organizations may have aligned business strategy and projects; however, most do not monitor or control the project through effective communication after initial project selection meaning even a

small change in the strategy or the project could lead to misalignment. On the other hand, organizational goals may change, and project managers do not understand the changes or are completely unaware of them. Communication cultivates relationships for effective project and organizational results (PMBOK Guide, 2018). Effective communication helps to keep all participants on track to accomplishing project objectives (Muszyńska, 2018), and active communication planning can help project managers reduce uncertainty and clarify the information each stakeholder needs (Parker, Kunde, & Zeppetella, 2017). Cates (2004) suggested some communications should be private, especially in a situation where a strong contractual agreement [like under agency theory] exists.

### **Strategy**

van der Merwe and Nienaber (2015) and later, Costa, Costa, Angelo, and Moraes (2018) argued that strategy has no universal definition due to differing perceptions but always relates to competitiveness, customers, and products or services. Because of these differing perceptions, the success rates of strategy execution are between 10% and 30% (Chuah, Teoh, Ting, & Lau, 2016). To understand that strategic concepts in relation to this study such as governance strategy and organizational strategy, it is important to study the foundational ideas that support these strategies.

Effective strategic development entails a systematic process that contains information garnered from many stakeholders (Gamad, 2019). Larson and Gray (2014) stated strategic planning has four phases. The components of each phase include the following:

- Defining the mission of the organization. The mission defines the purpose of the organization to stakeholders;

- Analysis and formulate strategies. Understand the internal and external environment to determine which activities will help to support the mission;
- Setting objectives to achieve strategy. Objectives are measurable actions that are aligned with the mission to ensure the organization is moving forward; and
- Implementing strategies through projects. Allocating resources to complete projects aligned with strategy.

Shujahat et al. (2017) specified that information gained in the second phase of Larson and Gray's strategic planning process is extremely important to decision making. Through the analysis of the internal and external environment of any organization, knowledge and competitive intelligence increases and decision making becomes more efficient and effective.

Decisions made strategically can result in competitive advantage for organizations.

Oyewobi, Windapo, and James (2015) postulated the goal of implementing competitive strategies is to promote superior performance and sustained competitive advantage compared to competitors. Mathur et al. (2014) posited project management might be looked at as a strategic resource to gain competitive advantage, while some studies completed examined the characteristics of project management that might lead to competitive advantage, no research was found to address the link between strategy and project performance.

Project managers have many responsibilities and roles to satisfy and must be sound decision makers to enhance strategic capabilities (Munir, Furqan, Shahzad, & Basit, 2017). Mintzberg (2011) wrote that in the dynamics of managing strategically there are two realities: some things managers know consciously, and some things managers know based on experience. Managers function best when these two realities are used together to make decisions. In addition, when projects are aligned with strategy, Van der Hoorn and Whitty (2017) believed

using “project managing” is better when describing the actual practice of project managers using project management to make decisions. As this implies project managers are acting deliberately to achieve organizational goals.

**Strategy and projects.** The implementation of strategy is marked as the most challenging and laborious part of the strategy process (van der Merwe & Nienaber, 2015). Consequently, Filippov et al. (2012) found through researching many studies that only 63% of companies realize their strategies potential benefit from strategies implemented, and corporate strategy is only actually implemented 34% of the time. Mullaly (2014) found many researchers agreed the only way to improve the alignment between strategy and projects is through understanding how decisions are made about and inside project implementation. Using best practices can help this process, but many do not agree on what best practices are or the benefit and value they can provide for implementing and controlling projects (Kerzner, 2014).

One of the business areas where project management has not been truly accepted is strategic management (Kerzner, 2014). Integrating projects and strategy takes more than communicating plans to project managers, project managers need to be trained and treated more like business leaders to ensure they have the skills to be successful in implementing projects (Cooke-Davis et al., 2009; Kerzner, 2014). Moran and Youngdahl (2008) posited that if an organization cannot make sense of their projects, they have a problem with the chosen strategy or with the types of projects selected to fulfill strategic goals. Involving project managers in the strategic process will help to better align strategy and projects because a project manager understands if the activities needed to complete project objectives can be completed with the resources available.

There are many factors that have been researched in relation to project management and strategic planning. Experienced leaders recognize the importance of applying project management ideologies to the strategic planning process (Maddalena, 2012). One study showed that only one out of the four organizations surveyed actively incorporated project management into their strategy (Judgev, 2003). King (2012) was able to identify the top ten competencies that project managers will be required to possess in the near future. What is lacking, as of now, are the techniques and attributes managers can use to fully integrate strategy and projects to create cohesion (King, 2012).

Van der Hoorn and Whitty (2017) stated that alignment-seeking is the process of reaching agreement on objectives and on the process that should be followed to complete the activities needed to meet those objectives. Munir et al. (2017) found a large portion of projects do not state objectives and only 40% of those objectives are aligned with organizational strategy. Marnewick (2018) suggested many organizations are not able to derive projects from business objectives because they lack structured processes for this type of alignment and execution. In addition, project managers detailed the reasons why they feel strategic plans failed to be executed, a few of these include, poor governance during strategy implementation, improper resource commitment, poor project integration throughout the organization, and inadequate communication (Kerzner, 2014).

Projects are not exclusive actions of certain departments of an organization; they affect the entire organization as they rely on resources the entire organization shares (Maddalena, 2012). If projects are not managed properly, resources may be wasted, and strategic goals will not be realized (Van Der Waladt, 2016). Young and Grant (2105) suggested projects may actually have contributed to strategy but not be conveyed because the strategic goals had

changed. Marnewick (2018) went further to say that any framework utilized to align projects and strategy is useless if a change in strategy is not communicated to the people who are tasked with implementing the strategy through project activities. A few studies researched by Cooke-Davis et al. (2009) stated projects may not always link directly to organizational strategy but could heavily influence strategy, so the “right” strategies are important.

Research has also been done on the effect that one or another particular project management phase has on the success of integrating and initiating strategic plans. Restraints occur in all phases of a project and are comprised of time, cost, scope, quality, risks and resource availability (Parker et al., 2015). Hoeger (2013) explored pre-planning as method of ensuring a successful project, while Montes-Guerra et al. (2014) felt that it was important to study the monitoring and controlling aspect of project management. Using opposite spectrums of the planning process both studies failed to achieve the result hoped for. Neither research study was successful in determining whether one phase or another created integration and successful completion of strategy and projects.

**Governance strategies.** Governance is the policy environment within which an organization’s managers make strategic decisions (Cabanis-Brewin & Dinsmore, 2014). Governance strategies are used to ensure guarantees and compliance for the operations of business but may fail to deliver anticipated results because it does not provide tools to help the business succeed (Arunruangsirilert & Chonglertham, 2017). While the historical approach of governance aims for this compliance to ensure conformity, according to Arunruangsirilert and Chonglertham (2017) a modern approach to governance seeks to enhance value of business through strategy for performance. Addressing governance through projects recognizes the role those projects play in overall organizational performance (Bekker, 2014). Borlea and Achim

(2013) stated governance theories are most effective when applied in combination; however, to understand each theory in its entirety, it is important to review the literature separately.

*Agency theory.* In agency theory, the motivational need for high company performance is strictly financial (Glinkowska & Kaczmarek, 2015). Agency theory is based on McGregor's theory X where workers do not like to work and habitually try to avoid working (Glinkowska & Kaczmarek, 2015). Till and Yount (2018) posited agency theory as being a simplistic approach to governance that focuses mainly on a relationship of profit maximization. An agency relationship occurs when one person is dependent upon the action of another person (Abländer, Roloff, & Nayir, 2016). Hernandez and Ibarra (2016) stated successful implementation of strategy in agency theory is dependent upon organizational structure, performance evaluation, and organizational culture.

Agency theory research deals more with figuring out how to balance the principal-agent relationship because differing views can create problems, like the project manager having to fulfill organizational goals and the client has differing opinions on outcomes. Because of these differing views, goal conflict and decisions based on self-interest are mitigated through contracts between the agent and the principal that incentivize behaviors that align with the goals of the shareholders (Martin & Butler, 2017). The agency problem exists in large part due to the separation of shareholder ownership and board or directors and management control (Keay, 2017). Panda and Leepsa (2017) posited the decision makers and implementers are not the ones who benefit from successful outcomes; therefore, project performance may suffer due to agency problems. Based on the work of Max Weber in 1947, agency problems almost disappear when rules are clear, risk is balanced, and individuals are rational (Bendickson et al., 2016). Yet, when the perception of risk shifts, the agency problems reappear (Bendickson et al.). It has been cited

in Borlea and Alchim (2013) that Adam Smith's observation of the agency problem is that managers working for other people are prone to be negligent in decision making and wasteful with resources. Borlea and Alchim (2013) go on to state that managers may adopt opportunistic behavior which could lead to failure of an organization. Kultys (2016) suggested organizations might even be subject to legal obligations (i.e., lawsuits) depending on the relationship status between the principal and the agent. Nevertheless, Mullaly (2014) found that agency theory can be an exclusive factor in the effectiveness of project decisions and may even decrease organizational inadequacies while supporting organizational goals.

***Stewardship theory.*** In stewardship theory, the motivational need for high company performance is progress, achievement, and growth (Glinkowska & Kaczmarek, 2015). Stewardship theory is based on McGregor's Theory Y where employees like to work and excel when working (Glinkowska & Kaczmarek, 2015). Van Puyvelde et al. (2016) and Kaymaz et al. (2016) found that managers identify greatly with the mission of the organization and make decisions that are aligned to the objectives of the organization.

While managers put the organization's needs first in all decisions, they also tend to respect the interests of internal and external stakeholders (Abländer et al., 2016). It is assumed that managers are not only trustworthy, but also rational (Borlea & Achim, 2013). In addition, Kaymaz et al. (2016) went on to posit that because stewardship theory is based on trust there is no need for a control mechanism during decision-making. While there may be no need for control mechanisms, Keay (2017) posited there is still a need for accountability in stewardship theory. This accountability entails transparency and open communication. Martin and Butler (2017) suggested because monitoring costs are low, competitive advantage can be realized. However, this works best when the board of directors is made up of mostly internal employees

because they can react to strategic issues in a timely manner while maximizing long-term performance (Borlea & Achim, 2013).

***Agency and stewardship.*** Both of these theories describe manager's behaviors and how decisions are made (Glinkowska & Kaczmarek, 2015). In addition, Nuijten et al. (2016) found these strategy theories can affect project management because project managers are seen as enemies or allies. While agency theory and stewardship theory can be used individually, Borlea and Achim (2013) suggested using them in combination leads to more effective outcomes. Keay (2017) found through much research that using these theories in conjunction may be the best way for organizations to govern because no one person is an agent or a steward 100% of the time, circumstances play a large role in the motivation of behavior. However, Till and Yount (2018) stated that behavior motivation is lacking in both of these theories. Nonetheless, agency theory and stewardship theory are important to this study because they show how managers make decisions which can affect projects and their alignment to fulfill strategy for the benefit of the organization.

**Organizational and business strategies.** Filippov et al. (2012) posited "design of a business strategy, specification of the organization's mission, vision and objectives, and developing policies and plans are viewed by strategic management discipline as a necessary precondition for organizations to remain competitive and fit" (p. 1). Organizational strategies are plans established by top administration to realize outcomes that are consistent with the mission and goals of an organization (Patanakul & Shenhar, 2012). Business strategies are used for creating competitive advantage while attracting customers and dealing with competition (Srivannaboon, 2006). Jugdev (2003) and Fiala, Arlt, and Arltova (2014) both look at resources as a way to determine if project management is being used successfully to fulfill strategic plans.

Along with that, Judgev (2003) and Poli (2006) looked at how project management can be a part of an organizations competitive advantage because each project requires a unique mixture of resources. Access to plenty of resources do not make for successful projects but the ability to access, organize, exchange, and combine them (Jugdev, 2003). Aleksić and Jelavić (2017) theorized an important concept for strategy is fit between two or more organizational needs where harmonization between organizational elements reinforces each other to ensure effectiveness and quality performance. More importantly, internal fit allows for compliance between activities and strategy. Internal fit also improves procurement, distribution and use of resources, and earning capability because it provides a structure for cooperation throughout the organization.

***Resource-based view.*** The resource-based view (RBV) of an organization assumes that the interdependent resources and capabilities create the base for developing strategy and are the key for competitive success (Jelavic, 2017). Barney (2001) indicated there is no one critical factor list of resources a firm must possess to gain competitive advantage; however, there are certain attributes resources must contain to be sources of strategic advantage. The most widely accepted attributes of resources that help organizations gain competitive advantage are described as: valuable, rare, inimitable, and non-substitutable. Moreover, Prescott (2016) postulated intangible resources, used by themselves or in conjunction with tangible resources, provide more durability for competitive advantage than tangible resources alone.

Unlike many other types of strategies, RBV relies on internal resources and all but ignores the external environment as a means of gaining competitive advantage (Junior, Stefanelli, de Oliveira, de Freitas, & de Jesus Freitas, 2018). This downside to RBV is that it does not address the external environment when prioritizing resource allocation either

(Bogodistov & Wohlgemuth, 2017). Because of this organizations lack information regarding competitor activities and must make decisions under a certain degree of ambiguity (Bronnenmayer et al., 2016). Another flaw of RBV is there may be different resource configurations that presents the same value and cease to be a source of competitive advantage (Barney, 2001). On the other hand, Lacruz and Cunha (2018) saw the lack of external environment knowledge as an enhancement of RBV because industry conditions are not a factor of resource competitive advantage.

Qureshi and Ghani (2015) suggested organizations developing strategies using RBV should understand the mix, type, amount, and nature of all internal resources. Resources must be flexible enough to be used in many contexts and for many projects to be used as a competitive advantage (Penrose, as cited in Chapman, Sisk, Schatten, & Miles, 2018). Organizations also need to recognize when a resource needs to be de-emphasized (Cullen & Parker, 2015). Organizations can employ the resources-based view as a means to use intangible resources of the project management process as a strategic means of competitive advantage (Jugdev & Mathur, 2013).

Knowledge helps to leverage resources but is becoming a resource itself. Cullen and Parker (2015) stated knowledge based assets are sources of competitive advantage because they allow firms to integrate processes that are “valuable, rare, inimitable and organizational focused.” And, the more difficult it is for a product to be imitated, the more valuable the resource because of its sustainability (Schu, Morschett, & Swoboda, 2016). These knowledge-based assets can be applied to projects to achieve organizational goals (Mathur et al., 2014). Conversely, some researchers see knowledge as strictly strategic and separate from RBV (Drouin & Judgev, 2014).

***Project portfolio management.*** Munir et al. (2017) stated “a portfolio is a high-level view of entire projects which organization is running in order to meet the business’s main strategic objectives” (p. 66). The creation of project portfolio management (PPM) was to help fill the gap between strategy and project alignment (Filippov et al., 2012). Lehnert, Linhart, and Roeglinger (2017) further defined PPM as managing the set of projects selected by the organization, which are aligned with strategy and do not deplete organizational resources. PPM relies on value maximization, project type balance, strategic alignment, and the number of projects (Oosthuizen et al., 2016).

Clegg, Killen, Biesenthal, and Sankaran (2018) posited PPM and strategy are interdependent and function at a high level; unfortunately, this puts constraints on lower level, operational project management practices. During portfolio development, the value of individual projects must be taken into consideration to ensure resources are allocated optimally (Vacík et al., 2018). Maximizing value ensures that projects are allocated the correct resources and aligned with strategic objectives. As a part of strategy, a summative project plan needs to be established – from project screening through the allocation of resources needed for individual projects that are being implemented (Steyn & Schnetler, 2015). de Souza, Carneiro, and Bandeira-de-Mello (2015) stated looking at individual projects is one of the cornerstones of PPM; however, the second key to PPM is to align each individual project to strategy to ensure the portfolio of active projects accomplishes strategic objectives. Shojaei and Flood (2017) found that there are times when adding new projects to an established portfolio creates the need to re-optimize resource allocation and strategy alignment which may be time consuming and difficult to process. Steyn and Schnetler (2015) suggested the number of projects a person can handle concurrently is a relevant factor in strategic planning and PPM because executing too

many projects at one time affects resources and eventually successful completion. Balancing projects in a portfolio also guarantees a mix of short-term and long-term projects, low-risk and high-risk projects, and different types of projects (Oosthuizen et al., 2016). Tabrizi, Torabi, and Ghaderi (2016) found organizations that invest in continuous and concurrent projects realize beneficial growth through the achievement of organizational goals.

Baptestone and Rabechini (2018) suggested that using PPM aligned with strategy reduces risk and increases the chance of success. Some of the risks associated with implementing multiple projects are “unclear accountability, bad decision making, slow response times, control issues, and staff stress and turnover” (Steyn & Schnetler, 2015, p. 97). Ghasemi, Mohammad Hossein, Yousefi, Falsafi, and Tamošaitienė (2018) posited risk in projects cannot be eliminated completely; however, organizations can learn from project failures and turn negative consequences into positive strategic actions for future projects.

Strategy is a long-term effort that some organizations find hard to implement in the short-term; though, using project management methods can help organizations fulfill strategic objectives (Van Der Waldt, 2016). A manager’s capability to choose the best projects that align with strategy, and ensuring the proper allocation of resources, is critical to an organization’s success (Doorasamy, 2015). To confirm organizations are using resources efficiently and reduce the gap between strategy and project implementation, PPM is an essential tool (Munir et al., 2017).

Larson and Gray (2014) described the criteria to ensure an efficient and effective implementation of a project portfolio structure: alignment between project and strategy, prioritization of project selection according to chosen criteria, arrangement of resources in a strategic direction, balancing risk across all projects, and appropriate reasons for wanting to

discontinue unsuccessful projects. This criterion is complex because it spans from the strategic to operational level, requiring a high level of communication, interpersonal, and negotiation skills (Baptestone & Rabechini, 2018). Organizations are also looking at the quality of the portfolio to establish the degree of organizational objective fulfillment, not only the success of individual projects (de Souza et al., 2015). de Souza et al. found the degree of organizational fulfillment important in business world as well as the academic world.

### **Academia (Higher Education Institutions)**

Milkovich (2015) suggested people see higher education as an individual benefit, rather than a societal good. However, the higher education industry is considered to be the main supplier of skill development, labor productivity, and positive outcomes of employment rates; it also helps the economy by improving economic development (Elbasir & Siddiqui, 2018). Nisar (2015) speculated the higher education industry also leads to lowered healthcare costs and an increase in social benefits. The reason given was that people who have attained a higher education tend to live healthier lives, engage in civic and democratic activities, and volunteer more. Many researchers have determined that higher education is crucial for building viable civilizations (Berchin, Grando, Marcon, Corseuil, & Guerra, 2017). Higher education institutions help students, faculty, and staff become better stewards of resources if the organization is a sustainable environment (Berchin et al.). Austin et al. (2013) stated that considering the limited resources in higher education, it is important to utilize project management skills to plan and execute projects which will aid in reducing redundancy, opening communication lines with stakeholders, and prioritizing projects.

Pârvu and Ipate (2016) found engaged universities must have three characteristics. These characteristics include being responsive to students needs by keeping up with industry standards,

updating curriculum to include research and engagement, and finally, put knowledge and skills to work in the community to help solve practical problems. This is important because the changes in the environment of higher education are affecting educational practices, curriculum development, learning outcomes, and instructional methods (Baum & Sigala, as cited in Suherlan, 2017). These changes may be hard to manage without alignment because higher education institutions have differing strategic influencing factors than business (Parakhina, Godina, Boris, & Ushvitsky, 2017).

The rapid expansion of higher education has created a conflict between quantity and quality (Malechwanz, Shen, & Mbeke, 2016). Ortugus (2016) posited the survival of any higher education institution is the public's perception of its quality. This is more relevant now more than ever because globalization has led to an increase in competition and access (Davidovitch & Iram, 2014). Due to globalization, knowledge has become one of the most valuable assets an organization looks for (Oun et al., 2016). To continue to be competitive in the market, higher education institutions need to set a clear mission and strategic objectives, and then have a clear path to achieving those objectives (Parvu & Ipate, 2016). In these rapidly changing markets, project management is an essential tool to increase the chances of meeting objectives and therefore, increasing the likelihood of success (Alvarenga et al., 2018).

**Project management in academia.** The field of project management is researched extensively for many industries, such as construction, healthcare, and IT; however, research is lacking for higher education (Austin et al., 2013; Oliveira et al., 2017). Austin et al. (2013) conducted a case study to determine why project management was not implemented more often in higher education institutions. One interesting finding was that higher education institutions tend to change more often than other industries due to learning new techniques and approaches.

For that reason, monitoring continuous improvement is also necessary; a great benefit is also that managers begin to understand the usefulness of project management (Schelini et al., 2017).

Austin et al. found many people saw the importance of using project management, but managers did not use project management across the entire university, and the reasons for the lack of consistency varied from differences in governance views, resource constraints, cost effectiveness, and even creative differences. Oliveira et al. (2017) found that universities lacked the structure to support and/or top management backing to implement project management.

Oliveira et al. (2017) stated that project management is often used, when used at all, for technical or tactical projects, rather than strategic ones, in universities. One of the most poignant reason that project management is not used more frequently in academia was that higher-level managers in academia usually come from an academic background, not a business one, so they do not have an explicit understanding of the importance of project management (Austin et al., 2013). Zahar et al. (2014) posited the project management field is a flexible learning environment that allows for widespread learning and develops a learning atmosphere to synthesize theories and practices for building a strong knowledge base. This could mean more project management support in an academic setting because learning is revered and encouraged.

Milkovich (2015) posited larger, publically funded universities were more likely to implement project management into strategy because of the more rigorous legislation and accountability factors. This study also found that the larger the university's degree offerings were, the more important it was for them to implement project management to have a way to realign activities to strategy. In addition to using project management for operational functions in higher education institutions, Fowler, Lindahl, and Sköld (2015) found that in Sweden, project

management tools, techniques, and methods are used explicitly to guide, structure, and control research; they are also used to procure grants for further research funding.

**Strategy in academia.** Stensaker et al. (2014) argued that while academia is a distinct industry, there are several types of higher education constructs that all require its own type of strategy. Hladchenko (2014) posited higher education institutions usually use the SWOT (strengths, weaknesses, opportunities, and threats) analysis as the initial means of developing strategy. The changing requirements and regulations higher education is seeing on the horizon means an inevitable analysis and readaptation of current strategies (Babaiev, Kadykova, Husieva, & Chumachenko, 2017). Understanding the internal and external environment will ensure moving toward a future where priorities are developed and strategic outcomes are realized through projects.

Gaspar and Rezic (2014) conjectured traditional university decision-making is based on collegiality and consensus is being replaced with strategic management structures for planning in order to deal with an increasing complex external environment. However, Parakhina et al. (2017) posited executing strategic decisions in higher education is different from the strategies executed in business because there is a fragmented view of the external environment, technology uses, and decision procedures in higher education. Using projects to fulfill operational objectives that align with strategy can help higher education institutions create many unique products (Hladchenko, 2015). According to Stoenica (2014) the product in academia are the students. A significant characteristic of project work is the degree to which the people who use the product actually participated in the work (Suda, 2007). A few of the projects that universities can align with strategy are the admission/retention process (Ogude, Kilfoil, & Du Plessis, 2012),

the curriculum development process (Pinar, Yalabik, & Cagiltay, 2009), and the accreditation process (Paraska, 2013).

**Strategy and alignment in projects.** There is a definite need for more research in higher education regarding strategy and project management, particularly research that specifically outlines how strategy and project alignment can increase project success in higher education. There are some projects in academia that could be better aligned with strategy to fulfill organizational goals: the admissions/retention process (Ogude et al., 2012), curriculum development (Pinar et al., 2009), and accreditation (Paraska, 2013). These areas are critical because the assessments in higher education institutions are directly linked to the attainment of results due to the countless amount of regulations regarding financial aid, student-learning evaluation and performance, and accreditation (Hernández & Ibarra, 2016).

***Admissions/retention process.*** Most colleges in the United States use intellectual criterion as the primary measure (such as high school performance and standardized test scores) to determine student admission because they can assess all students using the same standards (Sedlacek, as cited in Kim, 2015). While this should make the admission process seamless and routine, the admissions process has evolved from just application processing to a more complex set of coordinating activities to emphasis efficiency and to include the diverse nature of admissions (Julien-Molineaux, 2015). Julien-Molineaux (2015) found many admission processes to be decentralized, this makes having a standardized procedure that aligns with strategy to be more difficult to manage and measure. In addition, the criteria many higher education institutions use for initial admission are not an automatic measure of student success and retention after the first year and subsequent years (Davidovitch & Soen, 2015).

The need to retain admitted students has increased the need for strategic analysis and projects aligned with that strategy to ensure students remain and graduate (Aljohani, 2016). Ogude et al. (2012) found student success initiatives should move from admission through graduation, with a focus on retention in year one, and, also align with the higher education institutions strategy. Furthermore, Sneyers and De Witte (2017) posited retention is one of the quality improvement measures for academic programs within an institution. Retention is a major concern for higher education institutions because the higher the completion rate the more positive image a school has in the academic world (Aljohani, 2016). With increased competition among higher education institutions, schools must remain focused on admission and retention processes as a major part of organizational strategy (Hashim, Abdullateef, & Sarkindaji, 2015).

***Curriculum development.*** Because higher education is a want and not a need, quality programs help one university stand out from others (Schuttig, 2016). Ideas are free flowing and academic freedom is paramount; however, the quality of the degree is dependent on consistent delivery of the courses (Schuttig, 2016). Hassan (as cited in Ciske, 2017) defined curriculum as a collection of the knowledge, content and subjects to be imparted on learners that “is planned, unplanned, guided or unguided, organized and *experiences* that the school, including the university, offers as part of its educational responsibility” (p. 74). Ensuring proper content is present in each subject, curriculum development should have four distinct parts: establishing learning objectives, creating beneficial learning experiences, unifying the learning experiences to have a sustained cumulative effect, and assessing the experiences so that the aspects that did not prove to be effective can be revised (Huang, 2017). Program and course features should be important to higher education faculty and students because choosing a university that does not fit

with intrinsic and extrinsic factors that are present in one's environment could be disastrous for admission and retention.

Higher education is being asked to more directly cater to the needs of the students through industry standards by reforming curriculum development (Christensen, 2014). However, there is not a clear distinction on who should lead curriculum development. One university stated that faculty should lead curriculum development because of the specialized knowledge inherent to each faculty member (Christensen, 2014). Unfortunately, faculty have little time for curriculum development because of teaching, service work, and research (Huang, 2017). Procedures that help guide curriculum development could assist in creating new programs or updating old programs, thereby, adding value and competitive advantage to universities. Pinar et al. (2009) found in some cases curriculum development may not follow a linear process; therefore, good project management is essential for guiding and participating in all parts of the project for better strategic decision making.

**Accreditation.** Alshehri (2016) found that higher education institutions are being held more accountable for the quality, effectiveness, and efficiency of educational performance and are using various initiatives to improve educational performance to realize organizational outcomes. One of these initiatives is that many higher education institutions are seeking external accreditation for the degrees that are offered. Paraska (2013) postulated the strategic plan and maintaining accreditation are both higher education projects that need to be aligned because success is dependent upon one another for achieving organizational goals. Accreditation is based on the concept of continuous improvement because it is used to regularly monitor improvement strategies. For that reason, accreditation is fast becoming the main driver of quality assurance in education (Jalal, Buzdar, & Mohsin, 2017). Plenert (2012) stated that a "business process

created around a continuous process (CPI) improvement methodology outline a specific direction incorporating relentless improvement with a focus on business strategy” (pp. 6-7). Organizations must incorporate continuous improvement processes which helps to support strategy while communicating the process and strategy to the right people in the organization (Plenert, 2012).

Higher education institutions are seeing accreditation regulations move from voluntary to mandatory (Sodhi, 2016). There is a push for academia to produce more evidence of student performance, institutional performance, and quality. This is because most universities must obtain some form of accreditation to qualify for using government financial aid (Anderson, Kassis, McIntyre, & Prince, 2017; Boozang, 2016). Some governments have also enacted performance-based funding programs to ensure higher education institutions are continuing to remain accountable (Nisar, 2015; Sneyers & De Witte, 2017).

Accreditation approval is temporarily granted when the university establishes that faculty, facilities, curriculum, student outcomes, and finances all support the organizational mission (Boozang, 2016). This provisional approval is based on transparency of information and quality assurance reports submitted yearly that includes solid evidence of improvements that are needed and plans of how these improvements are being implemented. In higher education transparency relates to the need of providing information through open communication, and transparency tools [like accreditation] contribute to building trust and provide performance data, which help stakeholders make informed decisions (Hladchenko, 2015).

One case focused on the positives and negatives of external evaluations. Seema, Udam, Mattisen, and Lauri (2017) reasoned that external evaluations were to increase transparency and trust, increase communication and implementation of strategy, and motivate employees. The study found that external evaluations allowed for faculty and staff to acknowledge weaknesses

and seek solutions; however, it also increased bureaucracy and brought to light lack of support through the evaluation process.

## **Conclusion**

This research review's purpose is to help the reader understand project management, strategy, and academia that supports the problem identified. This is significant because academia has a different approach to project management implementation than many other industries. Higher education institutions are rigorous environments and the knowledge created through research and scholarship is considered knowledge capital and must be managed as valuable assets to give the institutions a competitive advantage in the academic industry (van Wyk & du Toit, 2016). While there is some research on project strategy alignment in some industries, and abundant research on project management and strategy across many industries, academia is lacking research on project management, strategy, and the effects of project strategy alignment.

In academia, "performance is translated into results that are visible and create impact" and is directly related to the continuous projects which helps to define the condition and viability of the organization (Paraska, 2013). One thing O'Leary and Williams (2012) is confident about is that an ineffective strategy and project alignment process will hinder the harmonized action essential for progress of successful projects and is likely to lead to wasted effort. This is because alignment of strategy and projects leads to more accountability and less conflict, with a result of more success for projects and organizational outcomes. It is important to continue to research and conduct more studies of strategy and project alignment to lessen the gap in literature, in the field of project management, and in academia.

### **Transition and Summary of Section 1**

Section 1 detailed the problem statement and the purpose of the research. The background and literature review showed a critical gap of project management in academia. Although project management and strategy alignment has been widely researched in a few industries, there was little literature for project management and strategy alignment in academia.

Section 2 outlines the research method and design. The population and sampling will be discussed, along with data collection and data organization techniques, and data analysis. Finally, Section 2 ends with a discussion of reliability and validity in research.

## **Section 2: The Project**

This research study examined how projects are aligned to strategy in academia. A thorough literature review of project management, strategy, and higher education institutions within academia was conducted. The qualitative methodology and case study design was the best fit to present the data collected. The research focused on three questions that were important to understanding alignment (or misalignment) of projects and strategy in academia: (a) how are projects aligned to organizational strategies, (b) why is there misalignment between strategy and projects in academia, and (c) what does it mean to the overall success of projects when projects and organizational strategy are aligned? The role of the researcher was interactive but objective, as interviews and artifact examination were the main data collection activities. The case study design was chosen to aid in the understanding of how organizations align projects and strategy. The population was from universities in the state of Florida and the sampling was project managers or employees who worked on projects from these institutions. The data were collected from interviews and artifact examinations and explained in the methodology. Finally, Section 2 discussed data analysis, reliability, and validity of the research presented. All of the components reinforced the qualitative case study method as the best fit for answering the research questions.

### **Purpose Statement**

The purpose of this qualitative case study was to understand how projects are aligned to organizational strategy. This is important because research shows over 50% of projects do not finish successfully (Cullen & Parker, 2015), and projects aligned with strategy may result in more successful projects. There is little project management research in the field of academia.

This study helps to fill the literature gap of understanding project management and strategy alignment in academia.

### **Role of the Researcher**

The main driving force of qualitative research is humans: as the researchers, as the researched, and as the interpreters (Stake, 2010). The role of the researcher is a very detailed and in-depth role. The researcher role calls for asking good questions and interpreting the answers fairly, putting assumptions aside and being a good listener, staying adaptive and positive, understanding the issue being studied, and being ethical while conducting research (Yin, 2014).

The researcher designed the interview questions that were to be asked to help answer the research questions. Initially, the researcher gained access to participants through emails and phone calls. Interviews were scheduled and conducted during site visits and skype calls and recorded to ensure transcriptions were accurate. Then, the researcher analyzed the data collected to determine if any themes were present and developed “naturalistic generalizations so that people can learn from the case themselves, apply learnings to a population of cases, or transfer them to a similar context” (Creswell & Poth, 2018, p. 206). To ensure reliability and validity, the researcher remained transparent during the process, asked all participants the same questions, and kept a detailed audit trail of data collection and analysis.

Hetherington (2013) found there was some debate in the role of the researcher in a case study design, questioning whether the researcher can present the case genuinely and without being biased and potentially causing harm to the participants. Because this is a valid concern, the researcher completed the Collaborative Institutional Training Initiative (CITI) for performing research, using human participants, which is non-invasive. In addition, the Institutional Review Board (IRB) approved the application to conduct the research study.

## Participants

The participants selected were project managers or employees (e.g., faculty members, learning designers, accreditation specialists, coordinators, admission) who work on projects for private universities located in Florida. Creswell and Poth (2018) suggested finding a “gatekeeper” or insider to gain access to the group required to conduct the case study. This is important because many people who work on projects in higher education do not hold the title of project manager. The Private Colleges and Universities website provided a list of the top twenty private universities in Florida. “Qualitative researchers must be concerned about drawing study participants from large populations because it has time, cost and data quality implications” (Asiamah, Mensah, & Oteng-Abayie, 2017, p. 1609) and the website helped to narrow down the participant pool because the schools on the list share at least one common characteristic – being a private four-year university – and were aggregated on one website. Therefore, the email eliciting participation in the study was sent to managers or directors of academic affairs, admissions, and accreditation from the list provided by the website. The pool of participants were chosen by the title (Director or Manager) listed on the university’s website and were contacted through email regarding the intention of the researcher. The directors and managers identified the employees (e.g., faculty members, learning designers, accreditation specialists, coordinators, admission recruiters) who work on projects, if their title is not project manager, in admissions, curriculum design, and accreditation to be interviewed for this research study.

After identifying participants according to the projects they work on if they are not project managers, the study participants were chosen according to how well they fit within the criteria for the case study and interviews were scheduled. A narrative explaining the scope of research study and a consent form was emailed to potential participants. The researcher ensured

the rights and privacy of the participants were protected in compliance with the IRB and the consent form. Participants could withdraw from the study at any time. Details that might identify the participant were kept confidential. In addition, all transcripts, recordings, and artifacts collected were kept on a password-protected computer.

### **Research Method and Design**

The researcher used a qualitative method, case study design approach for this study. This approach helps to best answer the research questions presented. Following is a description of the research method and design and a detailed discussion on why this approach was the best fit.

**Method.** Stake (2010) found explanation and understanding are the main purpose of qualitative research. Qualitative research is employed when a problem or issue needs to be explored (Creswell & Poth, 2018). Therefore, the purpose of “qualitative research is to better understand the worldview of the people one is studying and then to translate that understanding to an academic audience” (Pratt & Bonaccio, 2016, pp. 694-695). This was important to this study because the researcher was looking to understand the process of project and strategy alignment in private four-year universities in Florida because 30% of projects fail due to misalignment of projects and strategy (Alsurdi et al., 2013).

To gain understanding, the researcher conducted in-person interviews, video call interviews, and artifact examination to obtain unique information and interpretations (Stake, 2010). Artifact examination, observation, and interviewing are the most common forms of data collection in qualitative research methods (Stake, 2010). Gathering data is an important part of qualitative research; however, interpreting data is also important. The goal is to make meaning of experiences through data collection and analysis using in-depth, open-ended questions meant to reveal participants deep and true feelings on the research topic (Cruz & Tantia, 2017).

Data interpretation in qualitative research gives weight to human values and experiences (Stake, 2010). To ensure interpretations reflect what is actually happening, the researcher needs to conduct triangulation. Information used for interpretation should be from multiple sources and to ensure the true situation is being reflected (Naumes & Naumes, 2012). Stake also stated data interpretation requires empathy in dealing with people and understanding how things work. Because project management and strategy alignment does not have a standard process used globally, a qualitative method to understand how a select higher education institution views this process will reduce the gap in literature. Merriam (cited in Snyder, 2012) found qualitative researchers “are interested in understanding the meaning people have constructed” (p. 3); therefore, a case study design was chosen because it allows for “examining in depth processes” (Basias & Pollalis, 2018, p. 100).

**Design.** The case study design can be used to describe a decision process and to understand a concern (Creswell & Poth, 2018). A case study design was chosen because this study seeks to understand the how and why of organizational strategy and project alignment (or not) in higher education institutions. Case study research studies real-life occurrences in-depth and within their environmental context (Ridder, 2017). This study sought to understand how and why projects are aligned or misaligned to organizational strategy.

Creswell and Poth (2018) posited no more than four or five cases when choosing multiple cases for research. Multiple case studies may be the best way in observing the effects of otherwise unobservable activities [such as alignment of projects] on business strategy (Dasgupta, 2015). The researcher looked at a single situation, in-depth, to understand the relationship of projects and strategy in two different cases. Two cases (two different higher education institutions) were chosen to provide a cross-case analysis of similarities and differences of the

themes identified and interpreted (Houghton, Murphy, Shaw, & Casey, 2015). Yin (2014) stated case studies are an “opportunity to shed empirical light on a theoretical concept or principle” (p. 40), and while generalizing findings may not be appropriate for case studies, there are important lessons that can be learned from case study research.

### **Population and Sampling**

**Population.** Asiamah et al. (2017) posited there are three distinct populations for qualitative research: general, target, and accessible. The general population is any participant that may fit into the research study objective. The target population are the participants that fit into the research study selection criterion, and the accessible population are the participants that are available and willing to participate. The population for this research study came from four-year private universities in the state of Florida. Project managers or employees acknowledged as working on projects in admissions, curriculum design, and accreditation were identified from the general population and moved to the target and finally the accessible population. The study sample were then accessed from the target population.

**Sampling.** “The primary purpose of sampling for a qualitative researcher is to collect specific cases, events, or actions that can clarify or deepen the researchers understanding about the phenomenon under study” (Baškarada, 2014, p. 25). Patton (cited in Gentles, Charles, Ploeg, & McKibbin, 2015) stated purposeful sampling allows for selecting information-rich cases for a detailed study which aids the researcher to more fully understand the topic being studied. For this reason, purposeful sampling was chosen for the sampling technique. For this study, purposeful sampling involved using criterion that will identify project managers and/or employees working on projects in admissions, curriculum design, and accreditation in four-year

private universities in the state of Florida in order to understand how projects are aligned to strategy.

For a case study design, selection of unusual cases and maximum variation in these cases should be used as a sampling strategy (Creswell & Poth, 2018; Saunders, 2012). Two four-year universities in the state of Florida was chosen for a multiple case study to gain cross case analysis.

Mason (2010) stated that saturation of data in a qualitative study is likely to be accomplished at any point and found case studies with participants ranging from 1 to 95. Baškarada (2014) posited cases or individuals are selected as participants because of their relevance to the topic being studied. Instead of looking at saturation point, Mason suggests stopping data collection when nothing new emerges from the data. Green and Thorogood (cited in Mason, 2010) suggested most qualitative researchers found no new data after around 20 interviews. The minimum sample size from each site interviewed was six employees to help ensure data saturation and maximum variation on the research topic.

There are some projects in academia that could be better aligned with strategy to fulfill organizational goals: the admissions/retention process (Ogude et al., 2012), curriculum development (Pinar et al., 2009), and accreditation (Paraska, 2013). The eligibility criteria were that participants must work on projects in admissions, curriculum design, and accreditation in four-year private universities in the state of Florida. This criterion is appropriate and the characteristics chosen are relevant because this case study was looking to understand the organizational process of how projects are (or are not) aligned to strategy.

## Data Collection

The case study is used to contribute to our understanding of “individual, group, organizational, social, political, and related phenomena” (Yin, 2014, p. 4). Qualitative data is personal happenings in context of a time and a place (Stake, 2010). Therefore, data collection for a case study research design generally comes from interviews, artifact documents, audiovisual materials, and observations (Creswell & Poth, 2018; Stake, 2010; Yin, 2014). For this study, the researcher utilized interviews and artifact documents as data collection instruments.

**Instrument.** The primary data collection and analysis instrument in qualitative research is the researcher (Stake, 2010). The researcher is an active participant in the research process (Pezalla, Pettigrew, & Miller-Day, 2012). A personal relationship is established between the researcher and the participant during data collection by observing behavior, examining artifact documents, and conducting open-ended interviews (Creswell & Poth, 2018; Pezalla et al.). Owens (cited in Pezalla et al.) posited that it is this relationship that allows participants to feel safe in sharing their experiences during the interview.

One of the most important and richest sources of data in a case study are interviews (Ardhendu, 2014; Yin, 2014). The problem the research is addressing is the misalignment of strategy and projects that leads to project failures in private higher education institutions in the state of Florida. The research concentrates on three questions that are important to understanding alignment (or misalignment) of projects and strategy in academia: (a) how are projects aligned to organizational strategies, (b) why is there misalignment between strategy and projects in academia, and (c) what does it mean to the overall success of projects when projects and organizational strategy are aligned? Based on the specific research problem and the three

research questions, the researcher created a semi-structured, 14-question, open-ended interview (Appendix A) for each participant. The semi-structured interview is a predetermined set of questions where the interviewer is free to ask clarifying questions (Doody & Noonan, 2013). An interview guide helps to achieve a comfortable interaction with the participant (Doody & Noonan). An interview guide (Appendix A) was established to aid in an easy interaction and collect similar data from all participants. The interview guide also aids in reliability and validity of the instrument (Pezalla et al., 2012).

The final instrument of data collection were artifact documents. While artifacts have less potential relevance in some case studies, when relevant, they can be an important component of the case (Yin, 2014). Collecting artifact documents were relevant to this case because an understanding of a process is part of the research questions. The artifact documents needed were related to the interview questions in relation to governance strategy, business strategy, and project strategy alignment processes.

**Data collection technique.** Data were collected using semi-structured interviews and reviewing artifact documents. The interviews were one-on-one with the participant in a private location, either on site at the university or over Skype web call. The interviews were audio recorded for later transcription, coding, and analysis. After the interviews were transcribed, participants contributed in member checking, or participant verification, by examining the accuracy of the interview text (Birt, Scott, & Cavers, 2016).

In addition to the interviews, artifact documents were collected based on questions 3, 4, and 9: (a) Describe the governance strategy of the university, (b) Describe the business strategy of the university, and (c) Describe how projects are aligned to organizational strategies at this

university, if a formal process was documented by the university. These artifact documents were used to supplement observations by the researcher and the interviews (Creswell & Poth, 2018).

**Data organization techniques.** The data were transcribed and coded by common themes in a Word file, which was password protected during the entire process. After reading and managing the transcribed data, descriptions and memos were added to the Word file to begin the coding process (Creswell & Poth, 2018; Yin, 2014). Tracking the development of ideas through the process aids in credibility and with data analysis, described below. The coded transcripts had identifying data removed and, if necessary, an alias was provided.

The data were stored on the researcher's personal computer which was also password protected. Any hard-copy files were secured in a locked file cabinet. At the end of the study, the data were stored on a flash drive in a secure location. The data have been deleted from the researcher's computer and only the researcher knows the location of the flash drive. These steps aided in protecting the confidentiality of the participants.

### **Data Analysis**

Once the interviewing began, so did the data analysis. Data collection and data analysis is a simultaneous process in qualitative research (Creswell & Poth, 2018; Gläser & Laudel, 2013; Saldana, 2016). The analysis was completed manually, with the help of Microsoft Word. Patton (as cited in Creswell & Poth) stated using analyzing software is not a requirement for qualitative data analysis because the real analytical work takes place in the researcher's head.

The data analysis technique used was detailed by Creswell and Poth (2018) as the data analysis spiral. The data analysis spiral consists of five steps. The first step is managing and organizing data (Creswell & Poth). The interviews were transcribed and labeled consistently to

ensure ease of location once multiple interviews were being analyzed at one time and to assist in the final step of the spiral.

The second step in the process is reading and memoing emergent ideas (Creswell & Poth, 2018). The researcher read through each transcript multiple times, and reflections and memos were kept, assisting with the coding process. “Analytic memo writing documents reflections on: your coding processes and code choices; how the process of inquiry is taking shape; and the emergent patterns, categories and subcategories, themes, and concepts in your data” (Saldona, 2016, p. 43). Creswell and Poth suggested memo writing should begin with the first review of the first transcript and move through to conclusion writing.

These reflections and memos then aid in the third step of the process: describing and classifying codes into themes (Creswell & Poth, 2018). Beletto (2018) posited the coding process is aimed at interpreting large portions of text and blocks of information in new ways. Saldona (2016) stated a provisional list of codes could help to harmonize the studies conceptual framework and research questions. Initial coding was based on the theories addressed in the conceptual framework, the literature review, and the three research questions that are important to the understanding of alignment (or misalignment) of projects and strategy in academia. Determining themes from the codes may be a challenge (Creswell & Poth); therefore, the researcher looked for patterns among the codes for identifying themes. Patterns are actions or data occurring more than twice and help to ensure credibility of the information because patterns establish habits, salience, and importance in people’s actions and interpretations (Gläser & Laudel, 2013; Saldona, 2016).

Developing and accessing interpretations is the fourth step in the data analysis spiral process (Creswell & Poth, 2018). Developing and accessing interpretations is finding

meaningfulness within the data through the codes and patterns involves creative and critical thinking (Creswell & Poth; Yin, 2014). The researcher then interpreted the codes and patterns to develop the broader themes of the interviews. These themes then assisted the researcher to develop a clear picture of “what was learned” from the case study (Creswell & Poth, p. 199).

The final step in the spiral is representing and visualizing the data (Creswell & Poth, 2018). This was done by creating a tabular database of the codes, patterns, and themes using the number system created during organizing and coding. This visualization of data is valuable to ensure interpretations are sufficient and will aid in presentation of findings, conclusions, and recommendations (Stake, 2010).

It is important to note this study was a multiple case study using two four-year universities in the state of Florida, to gain cross case analysis. The researcher completed the data analysis spiral on each case. The data were analyzed separately during this process and was numbered accordingly to ensure the cases did not overlap during analysis.

### **Reliability and Validity**

Reliability and validity of research are important elements to provide evidence of the quality of the research (Hayashi, Abib, & Hoppen, 2019). Kirk and Miller (cited in Hayashi et al.) stated reliability evaluates the consistency and stability of the research procedure and validity is the confidence with which conclusions are drawn from the analysis. Wolcott (cited in Hayashi et al.) expressed skepticism regarding the usefulness of reliability and validity in qualitative research; however, Ardhendu (2014) posited that while “case study research is less formalized than hypothesis testing research, some strategies have been proven to be beneficial for increasing the transparency, reliability and validity of a case study” (p. 82). The researcher used the strategies described below ensure reliability and validity.

**Reliability.** Yin (2014) defined reliability as the consistency and repeatability of research procedures. Reliability most often comes from the data collection phase of a research study (Yin). Three strategies that help ensure reliability of the research study are data collection procedure, case study database, and chain of evidence. In case study research, data collection procedures are not routinized. The researcher created an interview guide to ensure all participants were being asked the same questions. A case study database was started after the first interview. It is essential that case study notes, transcripts, and artifact documents are organized, categorized, complete, and readily available for later access (Yin). Finally, reliability can be achieved through chain of evidence by ensuring analysis and conclusions can be traced back to the research questions and vice versa (Ardhendu, 2014; Yin). The researcher ensured all interviews and artifact documents were adequately cited throughout the analysis process through the findings and conclusion sections of the case study.

**Validity.** One problem with qualitative research is that many researchers work alone in the field (Ardhendu, 2014). Three strategies that to help confirm the research is valid are triangulation, data saturation, and member checking. Triangulation is using multiple data sources to aid in understanding from multiple points of view (Stake, 2010). The researcher used interviews and artifact documents from the university's written processes on how projects and strategy are determined and aligned. Finding the same code or theme from multiple sources data corroborates evidence and enhances validity (Creswell & Poth, 2018). Data saturation is the point where enough information has been gathered to fully develop an analysis (Creswell & Poth). Mason (2010) stated that saturation of data in a qualitative study can be accomplished at any point and there have been fully saturated case studies with participants ranging from 1 to 95. Creswell and Poth stated saturation happens from between 20 and 60 interviews. Green and

Thorogood (cited in Mason, 2010) suggested most qualitative researchers found no new data after around 20 interviews. To ensure saturation, the researcher completed a minimum of six interviews at each four-year university. Another strategy to guarantee validity is through member checking (Birt et al., 2016; Creswell & Poth, 2018). Member checking is key because the participants are the ones best qualified to determine correct understanding and interpretation by the researcher (Ardhendu, 2014). After the interviews were transcribed and interpreted, the researcher sent the transcripts back to the participants for confirmation and validation of accuracy.

### **Transition and Summary of Section 2**

This section detailed the components of research design for this study. Section 2 thoroughly examined the researcher's role, participants, research method and design, population and sampling, data collection and organization techniques, data analysis procedures, and finally, reliability and validity. Section 3 will discuss the analysis and findings of the study, and how the findings will be applied to professional practice. The implications of the findings in relation to the biblical framework from section one is also discussed. The researcher provides recommendations for action and further study to enhance knowledge in project management. Finally, insight into the research process from the researcher's viewpoint and a summary completes the study.

### **Section 3: Application to Professional Practice and Implications for Change**

This section begins with an overview of the study. The researcher then presents the findings and discusses the applications to professional practices. Recommendations for action and opportunities for future research follows the application. The researcher reflects on the experience, including personal biases, changes in thinking, and the study results from a biblical worldview. Lastly, this section ends with a summary and study conclusion.

#### **Overview of the Study**

This qualitative multiple case study explored project management and strategy alignment/misalignment in private higher education institutions in the state of Florida. Studies have revealed up to 50% of projects fail in many industries (Cullen & Parker, 2015) and the misalignment of projects and strategy lead to 30% of those failures (Alsudiri et al., 2013). This topic is important to higher education institutions because the use of project management is not prevalent in higher education (Atkinson & Hartshorne, 2013); however, researchers have communicated the need of aligning projects to strategy to ensure more successful projects (Alsudiri et al., 2013; Baptestone & Rabechini, 2018; Srivannaboon, 2006).

The purpose of this study was to gain understanding of how private higher education institutions align projects to strategy. This researcher used interviews to help with the understanding of the central research questions: (a) how are projects aligned to organizational strategies, (b) how does academia view aligning strategy and projects, and (c) What does it mean to the overall success of the organization when projects and organizational strategy are aligned? These questions guided the researcher to create fourteen open ended interview questions (Appendix A) for participants to answer.

This multiple case study method looked at two private universities in the state of Florida – School A and School B. The study participants at each site were faculty, managers, or employees who have worked on projects within admissions, curriculum development, and/or accreditation. In determining how many interviews to conduct at each site, the researcher followed Mason's (2010) recommendation to stop when nothing new emerges from the interviews, and the saturation point was seven interviews at School A and seven interviews at School B. Artifacts were also looked at based on interview questions 3, 4, and 9 (Appendix A).

Data collection and data analysis happens concurrently in qualitative research (Creswell & Poth, 2018; Gläser & Laudel, 2013; Saldana, 2016). The analysis was completed manually, with the help of Microsoft Word. After the interviews were transcribed, participants contributed in member checking, or participant verification, by examining the accuracy of the interview text (Birt et al., 2016). Creswell and Poth's data analysis technique, the data analysis spiral, was utilized. After the researcher performed memo writing, coding, and theme classification, the data were interpreted within the themes. Each case was analyzed separately to ensure cross case analysis and then the findings were presented together under each theme. Yin (2014) postulated each individual case does not need to be presented separately but can be presented as a synthesis of the data by themes and then drawing appropriate examples from each of the cases.

After analyzing and interpreting the data, the three themes that emerged were alignment, leadership and culture, and communication. The first theme was alignment. This is effective use of resources to undertake and complete projects that fulfill organizational strategy. The second theme was leadership and culture. The capability of leaders to promote a culture of using resources to complete projects that are aligned with strategy. The last theme was communication. An organization's ability to communicate strategy and how projects align to the

strategy throughout the organization. These themes answered the research questions by providing an understanding, and in some cases a lack of understanding, of employee perceptions related to the processes and successes of project alignment to strategy.

### **Anticipated Themes/Perceptions**

Based on the literature review conducted in section one, the researcher anticipated a basic understanding of strategy and projects used in higher education institutions. Given the lack of project management being a standard operating procedure that aligns strategy and projects in academia, the understanding of project and strategy alignment was projected to be minimal. However, the researcher anticipated the participant responses would be familiarity of the organizational strategies and the overall success of projects undertaken.

The researcher perceived that the participants would confirm communication and leadership are a few of the drivers for strategy and project alignment or misalignment. This perception was based partially on anecdotal information from the researcher working on projects in higher education for over ten years. The perception was also partially based on the literature review conducted for this study. Consequently, the findings of this research are expected to help project managers in academia to better align projects into the organizations strategy and they could realize more successful projects

### **Presentation of the Findings**

The presentation of findings of this qualitative case study included interpretations that address the research questions and the accompanying literature in section one. Having projects become part of an organization's strategy and forming a stronger understanding of how projects contribute to strategy could make projects in academia more successful and help to increase the bottom line for an organization. This requires understanding of the alignment between the

project work being done and the reason why the work is being done. The data were collected and triangulated from the cases, two four-year private universities, by interviewing faculty, managers, or employees who have worked on projects within admissions, curriculum development, and/or accreditation, site visits, and reviewing relevant documents related to the processes of strategy and project selection. The saturation point was seven interviews at School A and seven interviews at School B, where it was obvious no new information would emerge (Mason, 2010). From these interviews, three emergent themes were discovered.

**Emergent themes.** The themes that emerged for this qualitative multiple case study were alignment, leadership and culture, and communication. The themes are relevant to the problem of understanding project and strategy alignment. They were also related to the research questions and information gathered in the literature review. In addition, there was an in depth exploration of the themes and relationships within the context of the conceptual framework. Agency theory and stewardship theory are linked to how strategic decisions are made in organizations (Cabanis-Brewin & Dinsmore, 2014). Resource-based view and project portfolio management are strategies established by top administration to realize outcomes that are consistent with the mission and goals of an organization (Patanakul & Shenhar, 2012).

One theme emerged from each research question. The alignment theme relates to the first research question: How are projects aligned to organizational strategies? The leadership and culture theme relates to the second research question: How does academia view aligning strategy and projects? The communication theme relates to the third research question: What does it mean to the overall success of the organization when projects and organizational strategy are aligned? The relation of the themes to the concepts, literature review, and the research questions were expected. However, a surprising finding was that the participants could explain the

concepts through their actions or the organizations actions, but the concepts were not part of their vocabulary or explicit understanding.

**Alignment.** Understanding the alignment between projects and strategy is a complex part of project management. Interview questions 3, 4, 5, and 6 of the participant interview focused on project and strategy alignment at the strategic and business levels. The participants provided responses that detailed their understanding, or lack thereof, of the strategic planning process and how projects are aligned or misaligned to strategy. School A and School B had very different experiences with project and strategy alignment. School A had a good understanding of the university's strategic planning process and how projects aided in achieving organizational goals. School B did not have a clear understanding but revealed they thought aligning projects to strategy would be helpful. Understanding the project and strategy alignment process is a very important for the organization (study participants, June 25-26, 2019; July 8-9, 2019).

The implementation of strategy is marked as the most challenging and laborious part of the strategy process (van der Merwe & Nienaber, 2015). School A seemed to have a clear picture of how strategy was implemented from the top-down and five participants stated they had worked on a committee for strategic planning in previous years. Participant 6 (personal communication, June 26, 2019) explained the process of how projects are aligned to strategy:

My understanding historically has been, the strategic plan approved by the board of trustees, the strategies are given to vice presidents, who then work with their higher level subordinates, who work with the members of their sub organizations, craft plans, projects, if you will, in order to accomplish strategies at level one, which will be at the departmental level, and these are all then purposefully coordinated to align, to achieve the objectives and the strategies at the university level.

All participants (School A, personal communication, June 25-26, 2019) had a generally positive view of the project and strategy alignment process. They felt they understood the alignment process and how their project helped to fulfill the objectives and goals of their department, and so on up. School A's top-down planning goes from mission to strategy to operational levels and gives guidelines and criteria for departments to make decisions regarding projects that will fulfill organizational goals. This type of intentional strategic planning is best understood through the stewardship theory where identifying with the mission has a higher chance of making decisions that are aligned to the objectives of the organization (Kaymaz et al., 2016; Van Puyvelde et al., 2016). In addition, these are a few of the processes that ensure an effective and efficient project portfolio structure could be achieved (Baptestone & Rabechini, 2018; Larson & Gray, 2014). One of the key objectives of project portfolio management is to choose projects that are aligned with strategy; it is also one of its main challenges in that many projects are not seen as strategic in nature (Oosthuizen et al., 2016). One of the artifact documents shared from School A was titled Vision 2023. This document is a five-year strategic plan used to steer the vice presidents to create goals and objectives and filter them down through the departments to help ensure projects fulfill the strategic organizational goals.

Research showed that higher education institutions are being held more accountable for the quality, effectiveness, and efficiency of educational performance (Alshehri, 2016).

Participant 3 supported this by remarking,

I think it's incredibly important to have strategy's set in place that coincide with one another to achieve a common goal, like assessments and curriculum development, we have to meet industry standards and SACS [Southern Association of Colleges and

Schools Commission on Colleges] approval to continue to succeed. (School A, personal communication, June 25, 2019)

Because of this accountability, success is dependent upon aligning projects, in accordance with accreditation regulations, with strategy (Paraska, 2013).

Marnewick (2018) suggested many organizations are not able to derive projects from business objectives because they lack structured processes for this type of alignment and execution. This is true in industries that embrace project management as an important business function to further strategy. However, and specifically in universities, project management is often used, when used at all, for technical or tactical projects, rather than strategic ones (Oliveira et al., 2017). The participants from School B revealed this; none of the seven participants (personal communication, July 8-9, 2019) had a clear idea on the process of how projects were aligned to organizational strategy. Participant 5 from School B stated, "I think that if we did a better job of aligning projects to strategies beyond each department, we may find that our processes are a little more efficient, and turnaround times would be reduced." In addition, participants 1, 2, 4, and 6 specifically stated they wished there was a formal process for how projects are aligned with strategy (personal communication, July 8-9, 2019). This problem is best looked at through the resource-based view where properly using, maintaining, and leveraging their resources would gain them more of a competitive advantage (Qureshi & Ghani, 2015). Participant 7 (personal communication, July 9, 2019) gave a specific example of a project in which the understanding of how the project aligned with strategy was unclear:

We had these gaming camps or two camps this summer, Harry Potter and a gaming camp for kids, and I think that could help with a lot. I think that could align with the

recruitment strategy. Right? Show them college early on, introduce them to School B, et cetera.

Participants 1, 2, 4, 5, and 6 (School B, personal communication, July 8-9, 2019) stated there should be a written down process for how projects are implemented and how they fulfill organizational goals that is used by the entire university, not from department to department. Many employees recognize the importance of their projects to their organization's strategic success, but lack a formal framework, which hinders alignment and execution (Patanakul & Shenhar, 2012; Srivastava, 2017). While there is not one universal framework organizations use, the research revealed many different frameworks that were successful in helping organizations better aligning projects and strategy to increase the number of successfully completed projects.

Understanding the alignment process of projects and strategy was shown to be important in the research and from the interviews. The clearer and more structured the process, the better the understanding of project and strategy alignment. Another important theme, as revealed by the findings, to understanding project and strategy alignment was leadership and culture of an organization.

**Leadership and culture.** Van Der Merwe (2002) postulated too much emphasis was placed on the research of projects and not on the behavior of managers as a reason why project and strategy alignment was not a thoroughly explored research area (as cited in Purushottam & Rwelamila, 2011). Interview questions 7, 8, 9, 10, and 11 of the participant interview focused on projects and participant roles, along with their perspective on alignment of their projects to strategy in action. The participants provided responses that detailed their perception of leadership and culture and how those affect working on projects that may or may not align to strategy. School A and School B had very similar experiences with leadership and culture of the

organization as it related to project and strategy alignment. Doorasamy (2015) conducted a study for new product development and found leadership choosing projects that align to strategy to be a critical factor in creating successful new products. This may also be true for projects in academia, where their services in the areas of admission (Ogude et al., 2012), curriculum (Pinar et al., 2009), and accreditation (Paraska, 2013) are unique and cater to the end product – the students (Hladchenko, 2015; Stoenica, 2014). The findings revealed the importance of stable and involved leadership for the understanding of project and strategy alignment.

Bond (2015) posited the style of leader and the traits a leader possess will maximize the likelihood of the success of a project. No matter what leadership style a project manager uses, they must understand it and employ the competencies of that leadership style to run successful projects (Blaskovics, 2016). Both School A and School B participants (personal communication, June 25-26 and July 8-9, 2019) found leadership and culture lacking for aligning projects to strategy when projects were in the execution phase. School A participants recognized the top-down approach taken by leaders may make it hard for employees to understand the role their project plays in the university's strategy (Participant 1, 4, and 5, personal communication, June 25-26, 2019), specifically, Participant 4 stated, "The president's like, "Here's our new vision. It's not like we got a survey about what our vision should be" (personal communication, June 26, 2019). Participant 5 remarked

I'm not involved in the top meetings, so I don't know too much about it [the alignment of projects to strategy] but that is some factor that I do remember hearing about, even though I think I should be when I am going out there to recruit. (personal communication, June 26, 2019)

While this participant statement alludes to lack of communication which is also a factor in the understanding of project and strategy alignment, this frustration stems from the employees performing the work having to wait until the information about the projects trickles down from the top, hindering understanding.

Participants from School B found the leadership takes a different approach to leading and managing projects, “There is a check and balance system in place, but it's more decentralized given the increasing complexity of both the academic architecture and the university” (Participant 6, personal communication, July 9, 2019). Projects are not exclusive actions of certain departments of an organization; they affect the entire organization as they rely on resources the entire organization shares (Maddalena, 2012). Participants 1, 2, 4, 5, and 6 (School B, personal communication, July 8-9, 2019) implied a more stewardship organizational strategy by creating project and strategy alignment processes to fulfill organizational goals that is used by the entire university.

School B has also seen much change in leadership over the years, “I've been with the university for roughly five years. It'll be five years in August, and I've seen a lot of different leaders come through” (Participant 3, personal communication, July 8, 2019). Participant 3 further commented that relationships and trust with leaders are hard to cultivate with frequent changes. All participants commented on being affected by leadership change in one way or another (School B, personal communication, July 8-9, 2019). King (2012) postulated project managers needed to leverage diverse thinking and relationships through mentoring and trust to ensure strategy support through projects. Building relationships and trust is hard to achieve when leaders are always changing.

Higher education institutions tend to change more often than other industries (Austin et. al., 2013). Participant 4 stated the reason misalignment of projects and strategy exists in academia is that the “frequent change in leadership can oftentimes disrupt what goals have been in place in by past leaders” (School B, personal communication, July 9, 2019). This view coincides with agency theory view in that managers may adopt opportunistic behavior that could lead to failure of an organization (Borlea & Alchim, 2013). Changing goals, just because previous leaders put them into place, can create problems between project and strategy alignment.

The cultures of both schools seemed to be similar. Many of the participants from both schools stated most of the departments do not work together to achieve goals.

It seems a little disjointed because it seems a bit more siloed. There isn't this branching, I don't think. It seems a bit more siloed. This department does things this way, and this department does things this way. Overall, neither of them should be doing it on their own. They should be following a somewhat more holistic approach for whatever they're doing, but it does seem just a bit disjointed. (School A, Participant 1, personal communication, June 25, 2019)

And, School B participants offered similar sentiments, like this remark from Participant 2 (personal communication, July 8, 2019),

We are kind of all in a separate organization. Academia does their own thing, and we make sure we supplement them with students. Then, for the admissions side, our aspect, we just hope to get the students. We don't care what kind of students they are. We just want to bring them in and then let them decide later what program they want to get into.

The role of the project manager is to manage the resources of each project: time, materials, and finances (Parker et al., 2015); however, researchers posited that the spirit of project management is for project managers to support the implementation of an organizations business strategy through successful completion of projects (Milosevic, 2003, as cited in Srivannaboon, 2006). In both cases, there were no participants with the title of project manager. However, School A has a more structured project and strategy alignment process and better communication, making understanding and perceived success higher. Nevertheless, as Participant 6 (School A, personal communication, June 26, 2019) remarked, still lack a supported project management system,

Now our ability, our knowledge of project management, frankly was scant, but the necessary projects were self-evident, because of a thing called Florida Statutes. Folks were assigned to orchestrate these changes, and the changes got done on time.

Oftentimes, literally half hour before the class session started, but it got done. In retrospect, we followed reasonably good project management protocols, but that was more luck than design, to be blunt.

As supported by research, Oliveira et al. (2017) found that universities were deficient in the structure to support and/or lack top management backing to implement project management. “It's extremely difficult to determine needs assessment [for projects] if everything is hidden or siloed, because you don't have all the facts that you're working with” (School A, Participant 1, personal communication, June 25, 2019).

The researcher found some of the research indicated leadership and culture is important to understanding project and strategy alignment; however, much of the research on leadership and culture relates to leadership styles and traits that makes projects more successful, in general;

it is not an extensive focus area of research related specifically to project and strategy alignment. Leadership and culture seemed to be a very important area of discussion in the understanding of project and strategy alignment for the participants. Even with more structured project and strategy alignment process and better communication, all participants from School A, felt the lack of leadership and culture of working together as one university hinders some of the understanding of project and strategy alignment (personal communication, June 25-26, 2019).

As indicated by the results, leadership and culture of an organization can determine the importance in the understanding of project and strategy alignment. Lack of leadership support and a culture of decentralization can hamper the understanding of project and strategy alignment. In addition, how the alignment of projects to organizational strategy is communicated aides in the understanding of the project strategy alignment process.

**Communication.** According to Paraska (2013), projects have a greater chance of supporting strategy with a good communication plan in place. Interview questions 12 and 13 of the participant interview focused on their understanding of successful projects that are aligned to strategy and their perspective of successful projects they have worked on for the university, individually and overall. The participants provided responses that detailed their perception of success through communication. School A and School B had very different experiences with project success as it relates to communication.

Many times, project tasks are related in ways people do not understand (Castejón-Limas et al., 2011). Effective communication helps to keep all employees on track for accomplishing project objectives (Muszyńska, 2018), and active communication planning can help project managers reduce uncertainty and clarify the information each stakeholder needs (Parker, Kunde,

& Zeppetella, 2017). Participant 2 (personal communication, June 25, 2019) from School A specifically addressed communication as it related to research question three:

You're going to be successful, as long as there's clear communication as to that alignment. If there is communication, then you understand the requirements needed... you understand the scope, you understand the vision, you understand all aspects; therefore, it's easier for me to make sure that my curriculum, the course that I'm creating, aligns with that scope all the way up to the macro perspective, inclusive of how School A finds or defines success.

Effective communication helps to keep all participants on track to accomplishing project objectives (Muszyńska, 2018), and promotes relationships for effective project and organizational results (PMBOK Guide, 2018). “Our direct managers do a really good job of communicating with us about our achievements and success on the projects we work on” (Participant 7, School A, personal communication, June 26, 2019). More than half of the participants from School A commented that university update emails are sent from the President’s office about once a month; though, not many employees actively read these correspondences because they tend to be long (Participant 2, 3, 4, and 6, personal communication, June 25, 2019). So, there is transparency and open communication, as seen in the stewardship theory (Keay, 2017); however, the employees do not seem to be taking full advantage of the communication. Borlea and Achim (2013) posited stewardship theory works best when the board of directors is made up of mostly internal employees; while School A only has one internal person on the board (the President of the University), 23 out of the 35 members are graduates from the school (Vision 2023, artifact document). These leaders tend to identify

seriously with the mission of the organization and make decisions that are aligned to the objectives of the organization (Kaymaz et al., 2016; Van Puyvelde et al., 2016).

School B did not have the same experiences or comments as School A. None of the seven participants mentioned formal communication channels, such as email, for project status updates. In a study of the telecommunications industry, participants stated that effective communication is one of the top attributes of project and strategy alignment (Alsudiri et al., 2013). However, lack of proper communication can increase the effect of risk on a project (Cole, 2017). For example, Participant 1 and 3 from School B both stated that the lack of communication between departments has halted new programs from being developed after months of research and work because no one was on the same page and they were fighting for resources (personal communication, July 8, 2019). Resources were not shared, and lessons learned were not used for future knowledge. The researcher was surprised that it was more the lack of communication and not so much the lack of resources that hindered understanding. Hernández and Ibarra (2016) stated higher education institutions have issues putting their resources to good use. This puts limitations on the resource-based view, where resources are used to create value (Bronnenmayer et al., 2016).

A study conducted in infrastructure megaproject industry found sharing information and lessons learned to be a huge indicator of project success because it improves project implementation (Cole, 2017). Because communication of the strategy and project alignment process is perceived to be more robust, participants from School A (personal communication, June 25-26, 2019) perceived the projects they had worked on were 100% successful and the overall project success for the university was averaged at 87%. Participants from School B (personal communication, July 8-9, 2019) had a lower perceived success rate of individual

projects, but the average of almost 68% was higher than the perceived university's success rate at about 54%.

Table 1

*Perceived Success of Projects by %*

Perceived Success of Projects by %	School A		School B	
	Individual Success	University Success	Individual Success	University Success
Participant 1	100	90	68	50
Participant 2	100	85	60	40
Participant 3	100	92	75	70
Participant 4	100	90	45	65
Participant 5	100	80	90	50
Participant 6	100	85	86	75
Participant 7	100	90	50	50

In King's (2012) research, the topped ranked project management skill to possess to ensure strategy support through projects is effective communication. The findings support this research because all of the participants from School A (personal communication, June 25-26, 2019) commented on open communication, and all of the participants perceived successful projects 100% of the time. Even without a perceived understanding of how projects and strategy are aligned at School B, most participants (personal communication, July 8-9, 2019) were confident a good number of the projects they worked on were successfully completed. The research showed projects can be completed successfully even without the understanding of alignment (Milosevic, 2005; Srivannaboon, 2006).

**Relationship of themes/patterns to research questions.** The three themes (alignment, leadership and culture, and communication) all play an important role in the perspective of employees on how projects are aligned with strategy and the success of those projects. The

alignment theme relates to the first research question: How are projects aligned to organizational strategies? The participants expressed their understanding of how the university aligns projects to strategy, if at all. The leadership and culture theme relates to the second research question: How does academia view aligning strategy and projects? The participants described their understanding of the leadership and culture at the university and how project management and/or strategy is viewed. The communication theme relates to the third research question: What does it mean to the overall success of the organization when projects and organizational strategy are aligned? The participants detailed the communication practices at the university and how this communication helped in their perceived success of completed projects. In addition to the relationships of the themes to the research questions, they were also covered in the conceptual framework and the literature review.

**Relationship of themes/patterns to conceptual framework and literature review.** The three themes (alignment, leadership and culture, and communication) can be found consistently throughout the conceptual framework and literature review in Section 1. The conceptual framework focused on two major areas – strategy chosen by leaders (agency theory and stewardship theory) and choosing projects (resource-based view and portfolio project management), with the literature review expanding on those areas by adding project frameworks, leadership for aligning projects, the world’s leading best practices institute for managing projects – PMBOK, and projects and strategy in academia.

A few reasons strategic plans fail to be executed through projects are poor governance during strategy implementation, improper resource commitment, poor project integration throughout the organization, and inadequate communication (Kerzner, 2014). While the participants may not have explicitly stated terms from literature, their experiences and comments

were generally consistent with the conceptual framework and literature through the three themes – alignment, leadership and culture, and communication.

**Analysis of findings based on the themes.** In the research, there were very few studies where aligning projects to strategy to determine if the organizational goals and outcomes will be successful are the main theme, which, as suggested by Srivastava (2017) might be the reason for poor strategy and project alignment. The findings suggested that a written down and communicated process for aligning projects to strategy led the participants to perceive successfully completed projects both individually and at the organizational level. While the actual success of the participant's projects could not be confirmed, this confirms the literature in an alignment process is necessary for the understanding of project and strategy alignment.

According to the literature, leadership and culture was important for linking project and strategy. The emergence of the leadership and culture theme confirms this. Many of the participants from School B implicitly stated their leaders lacked the stewardship theory view of leading and trust was hard to come by because of the frequent leadership changes which seemed to add to the hindrance of understanding project and strategy alignment. This was expected and supported by Borlea and Alchim (2013) who stated that managers who seemed to be devious could lead to failure of the organization. While this was expected, the literature stated that leader personality, traits and leadership style affected project and strategy alignment. A new finding under the leadership and culture theme was that the participants felt they would better understand project and strategy alignment if the leadership was more open to working with other departments and there was a more team oriented culture. School A also lacked good leadership but had a better understanding of project and strategy alignment because there was an alignment process and better communication practices. This finding was expected because many

researchers find that communication is a major driver in understanding project and strategy alignment (Cole, 2017; King, 2012; Muszyńska, 2018; PMBOK Guide, 2017; Parker et al., 2017; Stefanovic, 2008). The emergence of the communication theme confirms this.

Oliveira et al. (2017) found that universities either lacked the structure to support and/or top management backing to implement project management. One of the most poignant reason that project management is not used more frequently in academia was that higher-level managers in academia usually come from an academic background, not a business one, so they do not have an explicit understanding of the importance of project management (Austin et al., 2013). The findings were consistent with literature because most of the participants did not understand the basic project management principles or terms even though they have all worked on numerous projects. However, these findings were a bit unexpected as one of the researcher's assumptions was that even with a lack of project management usage in higher education institutions; the people who work on projects would have a better understanding of basic project management terminology.

It was also unexpected that only two participants from one school mentioned explicitly that limited resources was an issue in completing their projects. These findings were inconsistent with the conceptual framework and the literature, because much of the literature stated understanding and using resources wisely is a major emphasis in project and strategy alignment (Bogodistov & Wohlgemuth, 2017; Jugdev & Mathur, 2013; Lacruz & Cunha, 2018; Mainga, 2017; Mathur et al., 2014; Schelini et al., 2017).

**Triangulation and saturation.** Triangulation is using multiple data sources to aid in understanding from multiple points of view (Stake, 2010). The researcher used literature, interviews, artifact documents, and the steps in the data analysis spiral of memoing, analyzing

and visualizing the data described in Section 2 (Creswell & Poth, 2018). Member checking was also utilized to ensure the validity of the transcribed interviews. The analyzing and presenting of participant experiences allows readers of the study to envision whether the findings can be applied to other situations completes triangulation for research (Creswell & Poth, 2018). Therefore, triangulation has been addressed in this study by using different data sources, ensuring the accuracy of the data collected through the data analysis spiral, and presenting the data from the perspective of the researcher and the participants.

Data saturation is the point where enough information has been gathered to fully develop an analysis (Creswell & Poth, 2018). Mason (2010) stated that saturation of data in a qualitative study can be accomplished at any point and there have been fully saturated case studies with participants ranging from 1 to 95. For the purpose of this research study, data saturation occurred at seven interviews with seven different participants from two different private four-year universities. The researcher determined this when no new information was shared by the participants.

### **Summary of the Findings**

The themes were derived by analysis of the findings from interviews in a qualitative, multiple research case study. The findings revealed multiple viewpoints. School A participants had a good understanding of the process for aligning projects to strategy. Many of the participants perceived that while each department worked on their own projects without much communication with other departments, they were successful in completing projects that helped to fulfill organizational goals. School B participants were less successful in explaining the understanding of the strategy and project alignment process. While each participant continues to work on projects, they are unclear of how their project contributes to fulfilling organizational

goals, and perceive their success on projects to be lower School A. Communication was more often and more transparent in School A than in School B.

All four concepts (agency theory, stewardship theory, resource based view, and portfolio project management) in the conceptual framework are significant to the study because it is important for organizations to understand resources and relationships while keeping profit maximization as one of the goals for aligning strategy and projects. In addition, these theories and concepts are important to this study because they clarify how organizations choose and align projects within strategic boundaries, as shown in Figure 1. The literature generally supported the findings and the conceptual theories were inductively incorporated to clarify several parts of the findings relative to the themes.

The findings answered the three research questions in depth from the perception and understanding of the study participants. How are projects aligned to organizational strategies was the first research question. The participants revealed that project and strategy alignment was realized more when a process was in place for planning. This is in direct contrast to the IT industry, where research showed that an overemphasis on planning and lack of resources leads to failure of realizing strategies because the project failed (Cullen & Parker, 2015).

The second research question was: How does academia view aligning strategy and projects? The participants expressed the view of aligning projects to strategy in academia came directly from the leadership and culture of their university. This can be compared to research done by Cooke-Davis et al. (2009), where they posited that undertaking projects that align with strategy to fulfill organizational objectives helps to establish a project culture and fitting governance and leadership.

The third research question was: What does it mean to the overall success of the organization when projects and organizational strategy are aligned? The participants also conveyed that the perception of successful projects was dependent upon communication from leadership. Similarly, Hasan and Alhashimi (2019) conducted research in the oil and gas industry and found similar results from a multi-case study, using four companies, in that a key success factor is proper communication channels, especially with top management. Research in the pharmaceutical industry garnered similar results, the quality of communication is important to the organizations capabilities (Reddy & Rao, 2014).

The findings did have a few surprises. One was the unexpected discoveries from the perception of success was the lack of data to back up the participants' actual success of the projects. The correlation between School A having a better understanding of project and strategy alignment and better communication to more successful projects cannot be substantiated from the interviews or artifacts. Another was the lack of knowledge of project management, in general. Each participant had worked on at least one project identified in the literature as needing to be aligned with strategy to fulfill organizational goals: the admissions/retention process (Ogude et al., 2012), curriculum development (Pinar et al., 2009), and accreditation (Paraska, 2013), and lacked basic project and strategy vocabulary. Finally, it was surprising that only two participants from one school mentioned explicitly that limited resources was an issue in completing their projects. These findings were inconsistent with the literature, because much of the literature stated understanding and using resources wisely is a major emphasis in project and strategy alignment (Bogodistov & Wohlgemuth, 2017; Jugdev & Mathur, 2013; Lacruz & Cunha, 2018; Mainga, 2017; Mathur et al., 2014; Schelini et al., 2017).

There is much to be learned about project management in academia. The findings revealed that the participants understood each concept individually; however, the understanding of alignment of projects to strategy to accomplish organizational goals was not a high priority to accomplish individual goals. This was supported through literature in that project management is not used more frequently in academia because academicians tend to lack a business background and do not have an explicit understanding of the importance of project management (Austin et al., 2013). The honesty of the participants provided a rich and in-depth look at the understanding of project and strategy alignment in higher education. The various opinions of the participants provided some different thinking and some comparable thinking; it also provided so surprising findings that will lead the researcher to continue to study this virtually untapped topic for the field of project management.

### **Applications to Professional Practice**

This section establishes the applicability of this study's findings to the professional practice of project management and to the field of academia. This section also discusses the biblical implications of the study's findings.

**Project management.** The literature stated a large percentage of projects fail and a large portion of those failures are due to a misalignment between projects and strategy (Alsudiri et al., 2013; Cullen & Parker, 2015). The study revealed when understanding of project and strategy alignment is clearer, the perception of project success is higher. In addition, a large portion of managers do not give acknowledgement to the context projects have within organizational strategy (Naaranoja et al., 2007). Within the field of project management this study provided insight to the overall success of projects when there is understanding of the project and strategy alignment process, even when project management concepts were not explicitly understood.

This knowledge is important to the professional practice of project management because the field is a flexible learning environment that allows for widespread learning and develops a learning atmosphere to synthesize theories and practices for building a strong knowledge base (Zahar et al., 2014). This study revealed the lack of use of project management techniques and tools in the higher education industry. Further research and practical application could mean more project management support in an academic setting because learning is revered and encouraged in higher education. This learning and application of project management aligning to strategy could help organizations have more successful projects.

**Academia.** Understanding alignment may be one of the key challenges to effective project management (Alsudiri et al., 2013). Eriksson (as cited in Alsudiri et al., 2013) posited communication, leadership, and involving project managers are also factors that are important to aligning projects to strategy. This study revealed understanding project and strategy alignment was a challenge in academia, and confirmed the need for more understanding through communication and leadership support.

While projects are an integral part of academia, such as curriculum development, research, and teaching, the work performed in higher education is not seen as project driven (Atkinson & Hartshorne, 2013). The findings revealed project management techniques and tools are not prevalent in academia. To continue to be competitive, higher education institutions need to set a clear mission and strategic objectives, and then have a clear path to achieving those objectives (Parvu & Ipate, 2016). Because there is not a universal framework for project management implementation, most companies lack a systematic approach that aligns strategy and projects (Srivannaboon, 2006). The study revealed this lack of a consistent framework could deter higher education institutions from creating a process that employees understand and can

implement into project work. This revelation is important to the field of academia and employees who work on projects because in higher education institutions “performance is translated into results that are visible and create impact” and is directly related to the continuous projects which helps to define the condition and viability of the organization (Paraska, 2013).

**Biblical implications.** The Bible has many instances where God uses projects to fulfill a strategic goal and objectives: Moses and the Ten Commandments, Nehemiah and Jerusalem’s wall, stopping the Tower of Babel, the building and rebuilding of the tabernacle, and Noah and the ark, to name a few. The projects in Biblical times were unique projects that had a beginning and an end, and each one contributed to the future success of humankind. All of these projects, and many more, were part of a bigger plan, God’s strategy to ensure the people of the world would have salvation, ‘For God so loved the world that he gave his one and only Son, that whoever believes in him shall not perish but have eternal life. For God did not send his Son into the world to condemn the world, but to save the world through him’ (John 3:16-17, New International Version, NIV).

The Tower of Babel, in the book of Genesis, reveals project failure when a project is not aligned with strategy. The people of Babel wanted to build a tower straight to heaven, “Then they said, “Come, let us build ourselves a city, with a tower that reaches to the heavens, so that we may make a name for ourselves; otherwise we will be scattered over the face of the whole earth” (Genesis 11:4). By building the tower according to human strategy and not aligning to God’s strategy, the people were either disregarding or not understanding God's instructions. The project was halted, ‘So the Lord scattered them from there over all the earth, and they stopped building the city’ (Genesis 11:8). The tower project was not aligned to God’s strategy and the tower would not have fulfilled the outcome of God’s strategy.

Like in the Biblical example, the study revealed, in both cases, that employees worked to complete projects for their individual departments, but these departments did not work together on projects to fulfill organizational goals. They worked on projects without input for other areas and created a culture of working in silos. God calls leaders to know their employees and work together to accomplish goals, “Be sure you know the condition of your flocks, give careful attention to your herds; for riches do not endure forever, and a crown is not secure for all generations” (Proverbs 27:23-24).

There is a biblical application for communication. The story of Gideon is an example where clear and constant communication regarding a project garnered a successful outcome. Gideon was chosen by God to save the Israelites from the Midianites, Amalekites, and other foreigner people. Gideon lacked understanding and called for communication with God three times to more be clear in the plan. This led to Gideon successfully fulfilling God’s plan, “Thus Midian was subdued before the Israelites and did not raise its head again. During Gideon’s lifetime, the land had peace forty years” (Judges 8:28).

### **Recommendations for Action**

This study focused on understanding project and strategy alignment in academia. The results of this study have the potential to impact how managers and employees use the theories and tools of project management to ensure projects are aligned with strategy to fulfill organizational goals. The study established that the understanding of the process for project and strategy alignment led to more perceived success in projects that help to accomplish organizational goals. The results of the study have led to two recommendations for action: (a) universities creating processes for project and strategy alignment through strategic planning,

leadership development, and communication planning; and (b) universities providing learning and development of project management skills to employees.

The first recommendation for action would be for university leaders to create processes for project and strategy alignment through strategic planning, leadership development, and communication planning with and for the entire organization. Creating standardized process could enhance employees understanding of why projects are implemented and how they affect the university's goals and objectives. Enhancing understanding and leadership development to create a more integrated work environment may create a more unified culture, as well.

The second recommendation would be for universities to provide learning and development of project management skills to employees, while higher education is a business, many academicians do not possess business skills (Austin et al., 2013). Universities could offer trainings as an all-day event or just training one project management method, technique, or tool at a time. One example of project management key resource is *The Project Management Body of Knowledge* (PMBOK), published by The Project Management Institute. This is one of the 'best practices' methodologies that is universally recognized in the field of project management (Karaman & Murat, 2015). In addition, the Project Management Institute publishes articles related to all aspects of project management which can be used as training materials. They can also be utilized for industry needs in project management as the PMI is made up of practitioners working in all industries. This can be used to help create course offerings, and enhance project management in higher education, in general. This part of the recommendation is based off of a unique insight offered by Participant 3 (School A, personal communication, June 25, 2019),

One project I worked on was our Doctor of Business program that we have, we saw that there was a need for having a doctorate program. We went to companies before it started

to see what courses are needed. I helped to develop the doctorate courses based on what the companies needed to make sure that managers are learning the right things.

Even if the university does not fully embrace project management as a standard practice, learning project management methods, techniques, and tools, along with understanding how projects enhance business when aligned with strategy could be beneficial to the organization.

Project management professionals and employees of higher education institutions may be impacted by the results of this study. The literature revealed the need for project and strategy aligned to increase the successful completion of projects and the study revealed the lack of understanding of project and strategy alignment in academia. Although School A had a better understanding on the process used by the school, the culture still created a divide between departments where resources and lessons learned were not shared.

The results of this study will be published as part of the dissertation process to the library academic journal database ProQuest Dissertations and Theses @ Liberty University. The results will also be disseminated to project management professionals and employees of higher education institutions through publications in academic journals, conferences, and public speaking events.

### **Recommendations for Further Study**

There were a few limitations, given the timeline and nature of the study. The proprietary and competitive environment of private universities, anonymity was crucial. The literature is sparse for project management in the field of academia. This was revealed through the participants' lack of knowledge of specific project management and strategic language. The following list is the recommendations for further study:

- Expand the sample size. While this particular study reached saturation, only two four-year universities in Florida were selected for this study. Choosing more cases, public universities, or different locations.
- Separate specific projects. This study looked at employees working on projects in admissions, curriculum development, and accreditation. Looking at each of these projects separately might identify a different recommendation for action.
- Separate the themes for better understanding. For example, the participants found leadership and culture to be a large part of understanding project and strategy alignment, especially when alignment and communication were lacking.
- Multiple research methods. The qualitative research method in this study asked for employee perceptions. Using mixed methods to add hard data on project success would expand legitimacy and could add more insight to the problem of project and strategy misalignment.

## **Reflections**

The dissertation process was frustrating and rewarding. The author has worked in the higher education field for about a decade and the project management field for about five years. The research topic was of interest to the author as she had worked on many projects in higher education that either did not contribute to the overall organization or failed completely. Having the chance to study this problem in depth allowed the researcher to gain knowledge on the topic and the interviews allowed for a deeper understanding of the problem.

The researcher was somewhat concerned about personal bias in the process because she has worked in the field for quite some time; however, these fears were unfounded. The participants felt relaxed with the researcher. The participants were comfortable in the interview

and were candid with their answers. The preconceived ideas the researcher may have regarding the topic and research problem were mitigated by asking only the interview questions. Follow-up questions were asked only if necessary. The researcher does not believe any biases or preconceived ideas steered conversations or influence participant results.

The researcher has had a change of thinking as a result of this study. The researcher has only touched the surface of this problem and will continue to research areas of project management in academia. This is a field of study that has limited research. The researcher is motivated to continue working and researching project management in academia.

The biblical principles relating to project management and strategy came from many instances in the Bible where God had a clear plan and aligned the projects to that plan to fulfill His ultimate strategy of salvation for His people. The researcher not only gained knowledge from the literature and from the participants, but also the Biblical worldview as it relates to project management.

### **Summary and Study Conclusions**

This dissertation research study looked to address the problem of the misalignment of strategy and projects that leads to project failures in higher education institutions in the state of Florida. The purpose of this qualitative case study is to understand how projects are aligned to organizational strategy. In response to this problem and the purpose, three research questions were formulated: (a) how are projects aligned to organizational strategies, (b) why is there misalignment between strategy and projects in academia, and (c) what does it mean to the overall success of projects when projects and organizational strategy are aligned? The researcher conducted a qualitative multiple case study through reviewing literature and participant

interviews. The data were analyzed, and the findings presented. Recommendations for application and further research were also suggested.

Three themes were identified from the data analysis: alignment, leadership and culture, and communication. The findings revealed multiple viewpoints. One case revealed a semi-structured process to aligning projects to strategy and participants perceived successfully completed projects. The second case revealed no know process to aligning projects to strategy and participants perceived less successfully completed projects.

The literature generally supported the findings; however, there is much to be learned about project management in academia. The study revealed that the higher education industry could benefit from more successful projects if projects and strategy were better aligned, organizational culture and leadership supported project management concepts, and communication was open and clear. This research helps to fill the gap because little to no research has been completed on strategy and project alignment in the field of academia.

## References

- Abländer, M. S., Roloff, J., & Nayir, D. Z. (2016). Suppliers as stewards? Managing social standards in first- and second-tier suppliers. *Journal of Business Ethics, 139*(4), 661-683. doi:10.1007/s10551-016-3148-0
- Albert, M., Balve, P., & Spang, K. (2017). Evaluation of project success: A structured literature review. *International Journal of Managing Projects in Business, 10*(4), 796-821. doi:10.1108/IJMPB-01-2017-0004
- Aleksić, A., & Jelavić, S. R. (2017). Testing for strategy-structure fit and its importance for performance. *Management: Journal of Contemporary Management Issues, 22*(1), 85-102. Retrieved from <http://ezproxy.liberty.edu/login?url=https://search-proquest-com.ezproxy.liberty.edu/docview/1923659258?accountid=12085>
- Aleksic, A., Puskaric, H., Tadic, D., & Stefanovic, M. (2017). Project management issues: Vulnerability management assessment. *Kybernetes, 46*(7), 1171-1188. doi:10.1108/K-08-2016-0218
- Aljohani, O. (2016). A review of the contemporary international literature on student retention in higher education. *International Journal of Education & Literacy Studies, 4*(1), 40-52. Retrieved from <http://ezproxy.liberty.edu/login?url=https://search-proquest-com.ezproxy.liberty.edu/docview/1878219015?accountid=12085>
- Allen, M., Carpenter, C., Hutchins, M., & Jones, G. (2015). Impact of risk management on project cost: An industry comparison. *Journal of Information Technology and Economic Development, 6*(2), 1-19. doi:10.1108/13664380780001092
- Allen, M., McLees, J., Richardson, C., & Waterford, D. (2015). Project planning and best practices. *Journal of Information Technology and Economic Development, 6*(1), 1-15.

Retrieved from <http://ezproxy.liberty.edu/login?url=https://search-proquest-com.ezproxy.liberty.edu/docview/1714458375?accountid=12085>

Alshehri, Y. M. (2016). Performance-based funding: History, origins, outcomes, and obstacles.

*Journal of Higher Education Theory and Practice*, 16(4), 33-42. Retrieved from <http://ezproxy.liberty.edu/login?url=https://search-proquest-com.ezproxy.liberty.edu/docview/1860981967?accountid=12085>

Alsudiri, T., Al-Karaghoul, W., & Eldabi, T. (2013). Alignment of large project management process to business strategy. *Journal of Enterprise Information Management*, 26(5), 596-615. doi:10.1108/JEIM-07-2013-0050

Alvarenga, J. C., Branco, R. R., do Valle, A. B., Soares, C. A. P., & Silva, W. D. S. (2018). A reevaluation of the criticality of the project manager to the project's success. *Business Management Dynamics*, 8(2), 1-18. Retrieved from <http://ezproxy.liberty.edu/login?url=https://search-proquest-com.ezproxy.liberty.edu/docview/2156629400?accountid=12085>

Anderson, J. R., Kassis, M., McIntyre, F. S., & Prince, B. (2017). University and business accreditation processes: Building on commonalities. *Journal of Higher Education Theory and Practice*, 17(1), 10-20. Retrieved from <http://ezproxy.liberty.edu/login?url=https://search-proquest-com.ezproxy.liberty.edu/docview/1926896974?accountid=12085>

Ardhendu, S. S. (2014). Conducting case study research in non-profit organizations. *Qualitative Market Research*, 17(1), 77-84. doi:10.1108/QMR-04-2013-0024

Arunruangsirilert, T., & Chonglertham, S. (2017). Effect of corporate governance characteristics on strategic management accounting in Thailand. *Asian Review of Accounting*, 25(1), 85-105. doi:10.1108/ARA-11-2015-0107

- Asiamah, N., Mensah, H. K., & Oteng-Abayie, E. (2017). General, target, and accessible population: Demystifying the concepts for effective sampling. *The Qualitative Report*, 22(6), 1607-1621. Retrieved from <http://ezproxy.liberty.edu/login?url=https://search-proquest-com.ezproxy.liberty.edu/docview/1922376954?accountid=12085>
- Atkinson, A. S., & Hartshorne, R. (2013). An examination of assistant professors' project management practices. *The International Journal of Educational Management*, 27(5), 541-554. doi:10.1108/IJEM-1-2012-0023
- Austin, C., Browne, W., Haas, B., Kenyatta, E., & Zulueta, S. (2013). Application of project management in higher education. *Journal of Economic Development, Management, IT, Finance, and Marketing*, 5(2), 75-99. Retrieved from <http://ezproxy.liberty.edu/login?url=https://search-proquest-com.ezproxy.liberty.edu/docview/1506448591?accountid=12085>
- Babaiev, V. M., Kadykova, I. M., Husieva, Y., & Chumachenko, I. V. (2017). The method of adaptation of a project-oriented organization's strategy to exogenous changes. *Natsional'nyi Hirnychiy Universytet.Naukovyi Visnyk*, 2(158), 134-140. Retrieved from <http://ezproxy.liberty.edu/login?url=https://search-proquest-com.ezproxy.liberty.edu/docview/1901683396?accountid=12085>
- Baptestone, R., & Rabechini Jr, R. (2018). Influence of portfolio management in decision-making. *Journal of Industrial Engineering and Management*, 11(3), 406-428. doi:10.3926/jiem.2464
- Barney, J. B. (2001). Is resource-based "view" a useful perspective for strategic management research? Yes. *Academy of Management Review*, 26(1), 41-56.

- Basias, N., & Pollalis, Y. (2018). Quantitative and qualitative research in business & technology: Justifying a suitable research methodology. *Review of Integrative Business and Economics Research*, 7, 91-105. Retrieved from <http://ezproxy.liberty.edu/login?url=https://search-proquest-com.ezproxy.liberty.edu/docview/1969776018?accountid=12085>
- Baškarada, S. (2014). Qualitative case study guidelines. *The Qualitative Report*, 19(40), 1-25. Retrieved from <http://nsuworks.nova.edu/tqr/vol19/iss40/3>
- Battistuzzo, F. J. F. D. A., & Piscopo, M. R. (2015). Managing complex projects in multinational enterprises. *JOSCM: Journal of Operations and Supply Chain Management*, 8(1), 57-71. doi:10.12660/joscmv8n1p57-71
- Bekker, M. C. (2014). Project governance: "schools of thought". *South African Journal of Economic and Management Sciences*, 17(1), 22-32. Retrieved from <http://ezproxy.liberty.edu/login?url=https://search-proquest-com.ezproxy.liberty.edu/docview/1519633827?accountid=12085>
- Belotto, M. J. (2018). Data analysis methods for qualitative research: Managing the challenges of coding, interrater reliability, and thematic analysis. *The Qualitative Report*, 23(11), 2622-2633. Retrieved from <http://ezproxy.liberty.edu/login?url=https://search-proquest-com.ezproxy.liberty.edu/docview/2133763005?accountid=12085>
- Bendickson, J., Muldoon, J., Liguori, E., & Davis, P. E. (2016). Agency theory: The times, they are a-changin'. *Management Decision*, 54(1), 174-193. doi:10.1108/MD-02-2015-0058
- Bentahar, O., & Cameron, R. (2015). Design and implementation of a mixed method research study in project management. *Electronic Journal of Business Research Methods*, 13(1),

- 3-15. Retrieved from <http://ezproxy.liberty.edu/login?url=https://search-proquest-com.ezproxy.liberty.edu/docview/1759174670?accountid=12085>
- Berchin, I. I., Grando, V. D. S., Marcon, G. A., Corseuil, L., & Guerra, J. B. S. O. D. A. (2017). Strategies to promote sustainability in higher education institutions. *International Journal of Sustainability in Higher Education*, 18(7), 1018-1038. Retrieved from <http://ezproxy.liberty.edu/login?url=https://search-proquest-com.ezproxy.liberty.edu/docview/1960519352?accountid=12085>
- Birt, L., Scott, S., & Cavers, D. (2016). Member checking: A tool to enhance trustworthiness or merely a nod to validation? *Qualitative Health Research*, 26(13), 1802-1811. doi: 10.1177/1049732316654870
- Blaskovics, B. (2016). The impact of project manager on project success -- the case of ICT sector. *Society and Economy*, 38(2), 261-281. doi:10.1556/204.2016.38.2.7
- Bogodistov, Y., & Wohlgemuth, V. (2017). Enterprise risk management: A capability-based perspective. *The Journal of Risk Finance*, 18(3), 234-251. doi:10.1108/JRF-10-2016-0131
- Bond, U. E. (2015). *Project management, leadership, and performance: A quantitative study of the relationship between project managers' leadership styles, years of experience and critical success factors (CSFs) to project success* (Doctoral dissertation, Capella University). Retrieved from [www.search.proquest.com](http://www.search.proquest.com) (Order No. 3682570).
- Boozang, W. (2016). *Regional accreditation's impact on institutional change* (Doctoral dissertation, Northeastern University). Retrieved from [www.search.proquest.com](http://www.search.proquest.com) (Order No. 1780296475).

- Borlea, S. N., & Achim, M. (2013). Theories of corporate governance. *Studia Universitatis "Vasile Goldis" Arad.Seria Stiinte Economice*, 23(1), 117-128.
- Bronnenmayer, M., Wirtz, B. W., & Göttel, V. (2016). Determinants of perceived success in management consulting. *Management Research Review*, 39(6), 706-738.  
doi:10.1108/MRR-06-2014-0145
- Cabanis-Brewin, J., & Dinsmore, P. C. (2014). *The AMA Handbook of Project Management* (4<sup>th</sup> ed.). New York, NY: AMACOM.
- Cameron, R., & Molina-Azorin, J. (2014). The acceptance of mixed methods in business and management. *International Journal of Organizational Analysis*, 22(1), 14-29.  
doi:10.1108/IJOA-08-2010-0446
- Castejón-Limas, M., Ordieres-Meré, J., González-Marcos, A., & González-Castro, V. (2011). Effort estimates through project complexity. *Annals of Operations Research*, 186(1), 395-406. doi:10.1007/s10479-010-0776-0
- Cates, G. R. (2004). *Improving project management with simulation and completion distribution functions* (Doctoral dissertation, University of Florida). Retrieved from [www.search.proquest.com](http://www.search.proquest.com) (Order No. 3163592). Available from ProQuest Central; ProQuest Dissertations & Theses Global. (305082349).
- Chapman, E. F., Sisk, F. A., Schatten, J., & Miles, E. W. (2018). Human resource development and human resource management levers for sustained competitive advantage: Combining isomorphism and differentiation. *Journal of Management and Organization*, 24(4), 533-550. doi:10.1017/jmo.2016.37

- Christensen, T. L. (2014). *Individual, institutional and leadership facets influencing faculty curricular leadership: A mixed methods sequential, exploratory study* (Doctoral dissertation, Kent State University). Retrieved from [www.search.proquest.com](http://www.search.proquest.com) (Order No. 3671305). Available from Education Database; ProQuest Central. (1646470189).
- Chuah, F., Teoh, K., Ting, H., & Lau, E. (2016). A behavioral approach to modelling strategy execution: The role of organizational support and the moderated mediation effect of engagement and communication. *International Review of Management and Marketing*, 6(8S), 217-225. Retrieved from <http://ezproxy.liberty.edu/login?url=https://search-proquest-com.ezproxy.liberty.edu/docview/1855292524?accountid=12085>
- Cishe, E. N. (2017). Teachers' perspectives on transforming teacher education curriculum for relevance to basic education for sustainable development. *Perspectives in Education*, 35(2), 73-84. doi:10.18820/2519593X/pie.v35i2.6
- Clegg, S., Killen, C. P., Biesenthal, C., & Sankaran, S. (2018). Practices, projects and portfolios: Current research trends and new directions. *International Journal of Project Management*, 36(5), 762-772. doi:10.1016/j.ijproman.2018.03.008
- Cole, C. (2017). Project management evolution to improve success in infrastructure projects. *Management Dynamics in the Knowledge Economy*, 5(4), 619-640. doi:10.25019/mdke/5.4.09
- Confido, J. V., Wibisono, D., & Sunitiyoso, Y. (2018). A proposed selection process in over-the-top project portfolio management. *Journal of Industrial Engineering and Management*, 11(3), 371-389. doi:10.3926/jiem.2448

- Cooke-Davies, T. J., Crawford, L. H., & Lechler, T. G. (2009). Project management systems: Moving project management from an operational to a strategic discipline. *Project Management Journal*, 40(1), 110-123. doi:10.1002/pmj.20106
- Costa, M. F., Costa, C. E., Angelo, C. F., & de Moraes, W. F. D. (2018). Perceived competitive advantage of soccer clubs: A study based on the resource-based view. *Revista De Administração*, 53(1), 23-34. doi:10.1016/j.rauspm.2016.08.001
- Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry & research design: Choosing among five approaches* (4<sup>th</sup> ed.). Thousand Oaks, CA: Sage.
- Cruz, R. F., & Tantia, J. F. (2017). Reading and understanding qualitative research. *American Journal of Dance Therapy*, 39(1), 79-92. doi:10.1007/s10465-016-9219-z
- Cullen, K., & Parker, D. W. (2015). Improving performance in project-based management: Synthesizing strategic theories. *International Journal of Productivity and Performance Management*, 64(5), 608-624. doi:10.1108/IJPPM-02-2014-0031
- Dasgupta, M. (2015). Exploring the relevance of case study research. *Vision*, 19(2), 147-160. doi:10.1177/0972262915575661
- Davidovitch, N., & Iram, Y. (2014). Regulation, globalization, and privatization of higher education: The struggle to establish a university in Israel. *Journal of International Education Research*, 10(3), 201. Retrieved from <http://ezproxy.liberty.edu/login?url=https://search-proquest-com.ezproxy.liberty.edu/docview/1551371136?accountid=12085>
- Davidovitch, N., & Soen, D. (2015). Predicting academic success using admission profiles. *Journal of International Education Research*, 11(3), 125. Retrieved from <http://>

<http://ezproxy.liberty.edu/login?url=https://search-proquest-com.ezproxy.liberty.edu/docview/1704360308?accountid=12085>

- de Souza, P. B., Carneiro, J., & Bandeira-de-Mello, R. (2015). Inquiry into the conceptual dimensions of project portfolio management. *Brazilian Business Review*, 118-148. Retrieved from <http://ezproxy.liberty.edu/login?url=https://search-proquest-com.ezproxy.liberty.edu/docview/1721583194?accountid=12085>
- Doody, O., & Bailey, M. E. (2016). Setting a research question, aim and objective. *Nurse Researcher (2014+)*, 23(4), 19. doi:10.7748/nr.23.4.19.s5
- Doody, O., & Noonan, M. (2013). Preparing and conducting interviews to collect data. *Nurse Researcher (through 2013)*, 20(5), 28-32. Retrieved from <http://ezproxy.liberty.edu/login?url=https://search-proquest-com.ezproxy.liberty.edu/docview/1443469489?accountid=12085>
- Doorasamy, M. (2015). Product portfolio management: An important business strategy. *Foundations of Management*, 7(1), 29-36. doi:10.1515/fman-2015-0023
- Drouin, N., & Jugdev, K. (2014). Standing on the shoulders of strategic management giants to advance organizational project management. *International Journal of Managing Projects in Business*, 7(1), 61-77. Retrieved from <http://ezproxy.liberty.edu/login?url=https://search-proquest-com.ezproxy.liberty.edu/docview/1467825128?accountid=12085>
- Elbasir, A., & Siddiqui, K. (2018). Higher education, funding, polices and politics: A critical review. *Journal of Social and Administrative Sciences*, 5(2), 152-167. doi:10.1453/jsas.v5i2.1703

- Fiala, P., Arlt, J., & Arltova, M. (2014). Management of dynamic project portfolio. *International Journal of Innovation, Management and Technology*, 5(6), 455-459.  
doi:10.7763/IJIMT.2014.V5.558
- Filippov, S., Mooi, H. G., Weg, R., & Westen, L. J. (2012). Strategic alignment of the project portfolio: an empirical investigation. *Paper presented at PMI® Research and Education Conference, Limerick, Munster, Ireland. Newtown Square, PA: Project Management Institute.*
- Fowler, N., Lindahl, M., & Sköld, D. (2015). The projectification of university research: A study of resistance and accommodation of project management tools & techniques. *International Journal of Managing Projects in Business*, 8(1), 9-32.  
doi:10.1108/IJMPB-10-2013-0059
- Gamad, L. C. (2019). Governing company performance agility through strategic quality management principles and lean business practices: Evidences and challenges for the business industry in the Philippines. *Review of Integrative Business and Economics Research*, 8(4), 17. Retrieved from <http://ezproxy.liberty.edu/login?url=https://search-proquest-com.ezproxy.liberty.edu/docview/2159641123?accountid=12085>
- Gaspar, D., & Rezic, S. (2014). Information technology and strategic management of universities. *Paper presented at the 645-658*. Retrieved from <http://ezproxy.liberty.edu/login?url=https://search-proquest-com.ezproxy.liberty.edu/docview/1635277059?accountid=12085>
- Gentles, S. J., Charles, C., Ploeg, J., & McKibbon, K. A. (2015). Sampling in qualitative research: Insights from an overview of the methods literature. *The Qualitative Report*,

- 20(11), 1772-1789. Retrieved from <http://ezproxy.liberty.edu/login?url=https://search-proquest-com.ezproxy.liberty.edu/docview/1750038029?accountid=12085>
- Ghasemi, F., Mohammad Hossein, M. S., Yousefi, V., Falsafi, R., & Tamošaitienė, J. (2018). Project portfolio risk identification and analysis, considering project risk interactions and using bayesian networks. *Sustainability*, *10*(5), 1609. doi:10.3390/su10051609
- Gläser, J., & Laudel, G. (2013). Life with and without coding: Two methods for early-stage data analysis in qualitative research aiming at causal explanations. *Forum: Qualitative Social Research*, *14*(2). Retrieved from <http://ezproxy.liberty.edu/login?url=https://search-proquest-com.ezproxy.liberty.edu/docview/1356976111?accountid=12085>
- Glinkowska, B., & Kaczmarek, B. (2015). Classical and modern concepts of corporate governance (stewardship theory and agency theory). *Management*, *19*(2), 84-92. doi:10.1515/manment-2015-0015
- Goals and Objectives. (n.d.). Retrieved July 02, 2017, from <http://www.ncjp.org/strategic-planning/overview/where-do-we-want-be/goals-objectives>
- Gray, K., & Ulbrich, F. (2017). Ambiguity acceptance and translation skills in the project management literature. *International Journal of Managing Projects in Business*, *10*(2), 423-450. doi:10.1108/IJMPB-05-2016-0044
- Halcomb, E., & Hickman, L. (2015). Mixed methods research. *Nursing Standard (2014+)*, *29*(32), 41. doi:10.7748/ns.29.32.41.e8858
- Hasan, H., & Alhashimi, M. (2019). The impact of project management methodologies on project success: A case study of the oil and gas industry. *Journal of Engineering, Project, and Production Management*, *9*(2), 115-125. doi:10.2478/jeppm-2019-0013

- Hashim, N. A., Abdullateef, A. O., & Sarkindaji, B. D. (2015). The moderating influence of trust on the relationship between institutional Image/Reputation, perceived value on student loyalty in higher education institution. *International Review of Management and Marketing*, 5(3), 122-128. Retrieved from <http://ezproxy.liberty.edu/login?url=https://search-proquest-com.ezproxy.liberty.edu/docview/1701252624?accountid=12085>
- Hayashi Jr, P., Abib, G., & Hoppen, N. (2019). Validity in qualitative research: A processual approach. *The Qualitative Report*, 24(1), 98-112. Retrieved from <http://ezproxy.liberty.edu/login?url=https://search-proquest-com.ezproxy.liberty.edu/docview/2171118565?accountid=12085>
- Heagney, J. (2016). *Fundamentals of project management*. New York, NY: American Management Association.
- Hernández, J. G. V., & Ibarra, S. T. C. (2016). Evaluating higher education institutions through agency and resources-capabilities theories. A model for measuring the perceived quality of service. *Independent Journal of Management & Production*, 7(4), 1126-1153. doi:10.14807/ijmp.v7i4.465
- Hetherington, L. (2013). Complexity thinking and methodology: The potential of 'complex case study' for educational research. *Complicity*, 10(1), 71-85. Retrieved from <http://ezproxy.liberty.edu/login?url=https://search-proquest-com.ezproxy.liberty.edu/docview/1436077854?accountid=12085>
- Hladchenko, M. (2014). SWOT analysis as the first stage of the process of the strategic management of the European higher education institutions. *Euromentor Journal*, 5(1), 47-65. Retrieved from <http://ezproxy.liberty.edu/login?url=https://search-proquest-com.ezproxy.liberty.edu/docview/1527297361?accountid=12085>

- Hladchenko, M. (2015). Transparency of the management of higher education institutions in the Netherlands. *Euromentor Journal*, 6(4), 30-40. Retrieved from <http://ezproxy.liberty.edu/login?url=https://search-proquest-com.ezproxy.liberty.edu/docview/1761694191?accountid=12085>
- Hoeger, J. A. (2013). *Assessing the role of pre-project planning sessions in developing a successful project strategy* (Doctoral dissertation, Capella University). Retrieved from [www.search.proquest.com](http://www.search.proquest.com) (Order No. 3594680). Available from ProQuest Dissertations & Theses Global. (1442774317).
- Houghton, C., Murphy, K., Shaw, D., & Casey, D. (2015). Qualitative case study data analysis: An example from practice. *Nurse Researcher (2014+)*, 22(5), 8. doi:10.7748/nr.22.5.8.e1307
- Huang, F. (2017). The impact of mass and universal higher education on curriculum and instruction: Case studies of China and Japan. *Higher Education*, 74(3), 507-525. doi:10.1007/s10734-016-0061-5
- Ilin, I. V., & Lyovina, A. I. (2014). Integration of Process and Project Management as a Key Aspect of Enterprise Architecture Development. *Social Sciences (1392-0758)*, 83(1), 37-44. doi:10.5755/j01.ss.83.1.6862
- Jalal, H., Buzdar, M. A., & Mohsin, M. N. (2017). Accreditation and quality enhancement dynamics in higher education. *Journal of Educational Research*, 20(2), 127-145. Retrieved from <http://ezproxy.liberty.edu/login?url=https://search-proquest-com.ezproxy.liberty.edu/docview/2036983348?accountid=12085>

- Jelavic, S. R. (2017). *A natural resource-based view of the firm: Resource-based analysis*. Paper presented at the 588-597. Retrieved from <http://ezproxy.liberty.edu/login?url=https://search-proquest-com.ezproxy.liberty.edu/docview/2070396241?accountid=12085>
- Jugdev, K. (2003). *Developing and sustaining project management as a strategic asset: A multiple case study using the resource-based view* (Unpublished doctoral dissertation, Univeristy of Calgary, Alberta, Canada. Retrieved from [www.search.proquest.com](http://www.search.proquest.com) (Order No. NQ87043). Available from ProQuest Dissertations & Theses Global. (305348527).
- Jugdev, K., & Mathur, G. (2013). Bridging situated learning theory to the resource-based view of project management. *International Journal of Managing Projects in Business*, 6(4), 633-653. doi:10.1108/IJMPB-04-2012-0012
- Julien-Molineaux, G. (2015). *Enrollment management structures, processes, and strategies for academic programs in complementary and integrative health* (Doctoral dissertation). Retrieved from [www.search.proquest.com](http://www.search.proquest.com) (Order No. 3726466). Available from ProQuest Central. (1723994687).
- Junior, R. B., Stefanelli, N. O., de Oliveira, B. G., de Freitas, R. R., & de Jesus Freitas, P. (2018). Rethinking the resource based view: a theoretical essay on resources sharing for obtaining competitive advantage. *REBRAE*, 11(3), 356-367. doi:10.7213/rebrae.v11i3.24205
- Karaman, E., & Murat, K. (2015). How PMBOK addresses critical success factors for it projects? *Gazi Universitesi Iktisadi Ve Idari Bilimler Fakultesi Dergisi*, 17(3), 186-195. Retrieved from <http://ezproxy.liberty.edu/login?url=https://search-proquest-com.ezproxy.liberty.edu/docview/2038841335?accountid=12085>

- Kaymaz, K., Demircan, H., & Eroğlu, U. (2016). The reasons and effects of perceived conflict on the performance of professional managers in Turkish family businesses. *Is, Güc: Endüstri İlişkileri Ve İnsan Kaynakları Dergisi*, 18(4), 167-186. doi:10.4026/2148-9874.2016.0336.X
- Keay, A. (2017). Stewardship theory: Is board accountability necessary? *International Journal of Law and Management*, 59(6), 1292-1314. doi:10.1108/IJLMA-11-2016-0118
- Kendra, K. A. (2003). *An organization design approach to project management* (Doctoral dissertation, Benedictine University). Retrieved from [www.search.proquest.com](http://www.search.proquest.com) (Order No. 3092851). Available from ProQuest Dissertations & Theses Global. (305239311).
- Kerzner, H. R. (2014). *Project management - best practices: Achieving global excellence* (3<sup>rd</sup> ed.). New York, NY: John Wiley & Sons.
- Kim, J. (2015). Predictors of college retention and performance between regular and special admissions. *Journal of Student Affairs Research and Practice*, 52(1), 50-63. doi:10.1080/19496591.2015.995575
- King, C. J. (2012). *Project management skills of the future* (Doctoral dissertation, Arizona State University). Retrieved from [www.service.proquest.com](http://www.service.proquest.com) (Order No. 3546426). Available from ProQuest Dissertations & Theses Global. (1266430179).
- Kostalova, J., & Tetreva, L. (2018). Proposal of project management methods and tools oriented maturity model. *Revista De Gestão e Projetos*, 9(1), 1-23. Retrieved from <http://ezproxy.liberty.edu/login?url=https://search-proquest-com.ezproxy.liberty.edu/docview/2040602176?accountid=12085>

- Kultys, J. (2016). Controversies about agency theory as theoretical basis for corporate governance. *Oeconomia Copernicana*, 7(4), 613-634. doi:10.12775/OeC.2016.034
- Lacruz, A., & Cunha, E. (2018). Project management office in non-governmental organizations: An ex post facto study. *REGE.Revista De Gestão*, 25(2), 212-227. doi:10.1108/REGE-03-2018-033
- Larson, E. W., & Gray, C. F. (2014). *Project management: The managerial process* (6<sup>th</sup> ed.). New York, NY: McGraw Hill Education.
- Lehnert, M., Linhart, A., & Roeglinger, M. (2017). Exploring the intersection of business process improvement and BPM capability development. *Business Process Management Journal*, 23(2), 275-292. doi:10.1108/BPMJ-05-2016-0095
- Longman, A., & Mullins, J. (2004). Project management: Key tool for implementing strategy. *Journal of Business Strategy*, 25(5), 54-60. doi:10.1108/02756660410558942
- Lyngso, S. (2014). *Agile strategy management: Techniques for continuous alignment and improvement*. Boca Raton, FL: CRC Press, Taylor & Francis Group.
- Maddalena, V. (2012). A primer on project management. *Leadership in Health Services*, 25(2), 80-89. doi:10.1108/17511871211221019
- Mainga, W. (2017). Examining project learning, project management competencies, and project efficiency in project-based firms (PBFs). *International Journal of Managing Projects in Business*, 10(3), 454-504. doi:10.1108/IJMPB-04-2016-0035
- Malechwani, J. M., Shen, H., & Mbeke, C. (2016). Policies of access and quality of higher education in China and Kenya: A comparative study. *Cogent Education*, 3(1), 1201990. doi:10.1080/2331186X.2016.1201990

- Marnewick, C. (2018). *Realizing strategy through projects: The executives guide*. Boca Raton, FL: CRC Press.
- Martin, J. A., & Butler, F. C. (2017). Agent and stewardship behavior: How do they differ? *Journal of Management and Organization*, 23(5), 633-646. doi:10.1017/jmo.2016.72
- Mason, M. (2010). Sample size and saturation in PhD studies using qualitative interviews. *Forum: Qualitative Social Research*, 11(3). Retrieved from <http://ezproxy.liberty.edu/login?url=https://search-proquest-com.ezproxy.liberty.edu/docview/869912466?accountid=12085>
- Mathur, G., Jugdev, K., & Fung, T. S. (2014). The relationship between project management process characteristics and performance outcomes. *Management Research Review*, 37(11), 990-1015. Retrieved from <http://ezproxy.liberty.edu/login?url=https://search-proquest-com.ezproxy.liberty.edu/docview/1633967921?accountid=12085>
- McClory, S., Read, M., & Labib, A. (2017). Conceptualizing the lessons-learned process in project management: Towards a triple-loop learning framework. *International Journal of Project Management*, 35(7), 1322-1335. doi:10.1016/j.ijproman.2017.05.006
- Milkovich, A. (2015). Organizational portfolio management and institutions of higher education. *Planning for Higher Education*, 43(2), 24-32. Retrieved from <http://ezproxy.liberty.edu/login?url=https://search-proquest-com.ezproxy.liberty.edu/docview/1677223940?accountid=12085>
- Milosevic, D. Z., & Srivannaboon, S. (2006). A theoretical framework for aligning project management with business strategy. *Project Management Journal*, 37(3), 98-110. doi:10.1177/875697280603700310
- Mintzberg, H. (2011). *Managing*. San Francisco, CA: Berrett-Koehler.

- Montes-Guerra, M., Gimena, F. N., Pérez-Ezcurdia, M. A., & Díez-Silva, H. M. (2014). The influence of monitoring and control on project management success. *International Journal of Construction Project Management*, 6(2), 163-184. Retrieved from <http://ezproxy.liberty.edu:2048/login?url=http://search.proquest.com/docview/1625563034?accountid=12085>
- Moran, R. T., & Youngdahl, W. E. (2008). *Leading global projects: For professional and accidental project leaders*. New York, NY: Routledge.
- Mullaly, M. (2014). The role of agency in project initiation decisions. *International Journal of Managing Projects in Business*, 7(3), 518-535. Retrieved from <http://ezproxy.liberty.edu/login?url=https://search-proquest-com.ezproxy.liberty.edu/docview/1536528113?accountid=12085>
- Munir, M. O., Furqan, R., Shahzad, S., & Basit, A. (2017). Examining the role of leadership of portfolio managers in project performance. *Journal of Strategy and Performance Management*, 5(2), 65-82. Retrieved from <http://ezproxy.liberty.edu/login?url=https://search-proquest-com.ezproxy.liberty.edu/docview/1908298632?accountid=12085>
- Muszyńska, K. (2018). A concept for measuring effectiveness of communication in project teams. *Journal of Economics & Management*, 33, 63-79. doi:10.22367/jem.2018.33.04
- Naaranoja, M., Haapalainen, P., & Lonka, H. (2008). Strategic management tools in projects case construction project. *Strategic Direction*, 24(4), 659-665. doi:10.1108/sd.2008.05624dad.008
- Nadal-Burgues, N. (2014). Project specification: Creativity and rhetoric in scientific research. *Journal of Organizational Change Management*, 27(5), 807. Retrieved from

<http://ezproxy.liberty.edu:2048/login?url=http://search.proquest.com/docview/1634006708?accountid=12085>

- Naumes, W., & Naumes, M. (2012). *The art and craft of case writing* (3<sup>rd</sup> ed.). Armonk, NY: M. E. Sharpe, Inc.
- Nisar, M. A. (2015). Higher education governance and performance based funding as an ecology of games. *Higher Education*, 69(2), 289-302. doi:10.1007/s10734-014-9775-4
- Nuijten, A., Keil, M., & Commandeur, H. (2016). Collaborative partner or opponent: How the messenger influences the deaf effect in IT projects. *European Journal of Information Systems*, 25(6), 534-552. doi:10.1057/ejis.2016.6
- Nwagbogwu, D. C. (2011). *The correlation between project management effectiveness and project success* (Doctoral dissertation, Walden University). Retrieved from [www.search.proquest.com](http://www.search.proquest.com) (Order No. 3434599). Available from ProQuest Dissertations & Theses Global. (855823333).
- Ogude, N. A., Kilfoil, W. R., & Du Plessis, G. (2012). An institutional model for improving student retention and success at the University of Pretoria. *The International Journal of the First Year in Higher Education*, 3(1), 21. doi:10.5204/intjfyhe.v3i1.97
- O'Leary, T., & Williams, T. (2012). Managing the social trajectory: A practice perspective on project management. *IEEE Transactions on Engineering Management*, 60(3), 566-580. doi:10.1109/TEM.2012.2228206
- Oliveira, J., Jurach, G., Pinto, R., & Kerchirne, L. (2017). Project offices and the federal universities: A study on project management in the context of higher education institutions. *Revista De Gestão e Projetos*, 8(3), 18-28. doi:10.5585/gep.v8i3.582

- Oosthuizen, C., Grobbelaar, S. S., & Bam, W. (2016). Exploring the link between ppm implementation and company success in achieving strategic goals: An empirical framework. *South African Journal of Industrial Engineering*, 27(3), 238-250. doi:10.7166/27-3-1635
- Ortagus, J. C. (2016). Pursuing prestige in higher education: Stratification, status, and the influence of college rankings. *College and University*, 91(2), 10-19. Retrieved from <http://ezproxy.liberty.edu/login?url=https://search-proquest-com.ezproxy.liberty.edu/docview/1806232416?accountid=12085>
- Oun, T. A., Blackburn, T. D., Olson, B. A., & Blessner, P. (2016). An enterprise-wide knowledge management approach to project management. *Engineering Management Journal*, 28(3), 179-192. Retrieved from <http://ezproxy.liberty.edu/login?url=https://search-proquest-com.ezproxy.liberty.edu/docview/1822034004?accountid=12085>
- Oyewobi, L. O., Windapo, A. O., & James, R. O. B. (2015). An empirical analysis of construction organizations' competitive strategies and performance. *Built Environment Project and Asset Management*, 5(4), 417-431. doi:10.1108/BEPAM-10-2013-0045
- Panda, B., & Leepsa, N. M. (2017). Agency theory: Review of theory and evidence on problems and perspectives. *Indian Journal of Corporate Governance*, 10(1), 74-95. doi:10.1177/0974686217701467
- Parakhina, V., Godina, O., Boris, O., & Ushvitsky, L. (2017). Strategic management in universities as a factor of their global competitiveness. *The International Journal of Educational Management*, 31(1), 62-75. Retrieved from <http://ezproxy.liberty>

.edu/login?url=https://search-proquest-com.ezproxy.liberty.edu/docview  
/1855018806?accountid=12085

Paraska, S. E. (2013). Connecting your institution's achievements to demonstrate a culture of compliance. *Planning for Higher Education*, 41(3), 1-10. Retrieved from <http://ezproxy.liberty.edu/login?url=https://search-proquest-com.ezproxy.liberty.edu/docview/1519963814?accountid=12085>

<http://ezproxy.liberty.edu/login?url=https://search-proquest-com.ezproxy.liberty.edu/docview/1519963814?accountid=12085>

Parker, D. W., Kunde, R., & Zeppetella, L. (2017). Exploring communication in project-based interventions. *International Journal of Productivity and Performance Management*, 66(2), 146-179. doi:10.1108/IJPPM-07-2015-0099

Parker, D. W., Parsons, N., & Isharyanto, F. (2015). Inclusion of strategic management theories to project management. *International Journal of Managing Projects in Business*, 8(3), 552-573. doi:10.1108/IJMPB-11-2014-0079

Pârvu, I., & Ipate, D. M. (2016). A managerial approach to the higher education-business environment partnerships. *Economics, Management and Financial Markets*, 11(1), 118-125. Retrieved from <http://ezproxy.liberty.edu/login?url=https://search-proquest-com.ezproxy.liberty.edu/docview/1782995246?accountid=12085>

Patanakul, P., & Shenhar, A. J. (2012). What project strategy really is: The fundamental building block in strategic project management. *Project Management Journal*, 43(1), 4-20. doi:10.1002/pmj.2

Pezalla, A. E., Pettigrew, J., & Miller-Day, M. (2012). Researching the researcher-as-instrument: An exercise in interviewer self-reflectivity. *Qualitative Research*, 12(2), 165-185. doi:10.1177/18791111422107

- Pinar, O. D., Yalabik, N., & Cagiltay, K. (2009). A distributed online curriculum and courseware development model. *Journal of Educational Technology & Society*, 12(1), 230-248.  
Retrieved from [http://ezproxy.liberty.edu/login?url=https://search-proquest-com.ezproxy.liberty.edu/docview/1287038880?accountid=12085 0282](http://ezproxy.liberty.edu/login?url=https://search-proquest-com.ezproxy.liberty.edu/docview/1287038880?accountid=12085%20282)
- Plenert, G. (2012). *Strategic continuous process improvement: Which quality tools to use, and when to use them*. New York, NY: McGraw-Hill.
- Poli, M. (2006). *Project strategy: The path to achieving competitive advantage/value* (Doctoral dissertation, University of Michigan). Retrieved from [www.search.proquest.com](http://www.search.proquest.com) (Order No. 3223515). Available from ProQuest Central; ProQuest Dissertations & Theses Global. (304948202). Ann Arbor, MI.
- Potter, E. M., Egbelakin, T., Phipps, R., & Balaei, B. (2018). Emotional intelligence and transformational leadership behaviours of construction project managers. *Journal of Financial Management of Property and Construction*, 23(1), 73-89. doi:10.1108/JFMPC-01-2017-0004
- Pratt, M. G., & Bonaccio, S. (2016). Qualitative research in I-O psychology: Maps, myths, and moving forward. *Industrial and Organizational Psychology*, 9(4), 693-715.  
doi:10.1017/iop.2016.92
- Prescott, M. E. (2016). Big data: Innovation and competitive advantage in an information media analytics company. *Journal of Innovation Management*, 4(1), 92-113. Retrieved from <http://ezproxy.liberty.edu/login?url=https://search-proquest-com.ezproxy.liberty.edu/docview/1957802016?accountid=12085>
- Pressly, T. R. (2012). Linking Strategic and Project Concepts to Enhance Management Advisory Services. *CPA Journal*, 82(7), 62.

- Project Management Institute. (2017). *Guide to the project management body of knowledge (PMBOK Guide)*. Newtown Square, PA.
- Project Management Institute. (2019). *What is project management?* Retrieved from <https://www.pmi.org/about/learn-about-pmi/what-is-project-management>
- Purushottam, N., & Rwelamila, P. D. (2011). Strategies in a multi-polar world: opportunity for application of project management approaches. *Business Studies Journal*, 3, 109-117.
- Qureshi, N. A., & Ghani, U. (2015). Knowledge management: The way to organizational competitive advantage. *Oeconomics of Knowledge*, 7(1), 25-35. Retrieved from <http://ezproxy.liberty.edu/login?url=https://search-proquest-com.ezproxy.liberty.edu/docview/1679435122?accountid=12085>
- Reddy, M. R., & Rao, V. G. (2014). Application of the resource-based view: A case of an Indian pharma multinational. *IUP Journal of Business Strategy*, 11(1), 54-67. Retrieved from <http://ezproxy.liberty.edu/login?url=https://search-proquest-com.ezproxy.liberty.edu/docview/1540424957?accountid=12085>
- Ridder, H. (2017). The theory contribution of case study research designs. *Business Research*, 10(2), 281-305. doi:10.1007/s40685-017-0045-z
- Saldaña, J. (2016). *The coding manual for qualitative researchers* (3<sup>rd</sup> ed.). Thousand Oaks, CA: Sage.
- Sareminia, S., Shamizanjani, M., Mousakhani, M., & Manian, A. (2016). Project knowledge management: An ontological view. *Knowledge Management & E-Learning*, 8(2), 292. Retrieved from <http://ezproxy.liberty.edu/login?url=https://search-proquest-com.ezproxy.liberty.edu/docview/1955093015?accountid=12085>
- Saunders, M. N. K. (2012). Choosing research participants. In G. Symon and C. Cassell (Eds.),

*Qualitative organizational research: Core methods and current challenges* (pp. 35-52).

London, UK: Sage.

- Schelini, A. L. S., Martens, C. D. P., Piscopo, M. R., & Garcez, M. P. (2017). Project management as a competitive advantage for the internationalization of Brazilian companies. *Internext*, 12(3), 1.
- Schu, M., Morschett, D., & Swoboda, B. (2016). Internationalization speed of online retailers: A resource-based perspective on the influence factors. *Management International Review*, 56(5), 733-757. doi:10.1007/s11575-016-0279-6
- Schuttig, K. (2016). *Strategic quality management implementation plan for Saint Leo University*. Unpublished manuscript, Department of Business, Liberty University.
- Seema, R., Udam, M., Mattisen, H., & Lauri, L. (2017). The perceived impact of external evaluation: The system, organization and individual levels--Estonian case. *Higher Education*, 73(1), 79-95. doi:10.1007/s10734-016-0001-4
- Shenhar, A. J. (2004). Strategic Project Leadership® Toward a strategic approach to project management. *R&D Management*, 34(5), 569-578. doi:10.1111/j.1467-9310.2004.00363.x
- Shojaei, A., & Flood, I. (2017). Stochastic forecasting of project streams for construction project portfolio management. *Visualization in Engineering*, 5(1), 1-13. doi:10.1186/s40327-017-0049-y
- Shujahat, M., Hussain, S., Javed, S., Malik, M. I., Thurasamy, R., & Ali, J. (2017). Strategic management model with lens of knowledge management and competitive intelligence. *VINE Journal of Information and Knowledge Management Systems*, 47(1), 55-93. doi:10.1108/VJIKMS-06-2016-0035

- Siriram, R. (2018). Project management assessments (PMAS): An empirical study. *South African Journal of Industrial Engineering*, 29(1), 108-127. doi:10.7166/29-1-1675
- Sneyers, E., & De Witte, K. (2017). The interaction between dropout, graduation rates and quality ratings in universities. *The Journal of the Operational Research Society*, 68(4), 416-430. doi:10.1057/jors.2016.15
- Sodhi, R. (2016). *Accrediting processes and institutional effectiveness at a California community college* (Order No. 10128470). Available from Education Database; ProQuest Central. (1799599800). Retrieved from <http://ezproxy.liberty.edu/login?url=https://search-proquest-com.ezproxy.liberty.edu/docview/1799599800?accountid=12085>
- Srivannaboon, S. (2006). Linking Project Management with Business Strategy. *Project Management Journal*, 37(5), 88-96.
- Srivastava, A. K. (2017). Alignment: The foundation of effective strategy execution. *International Journal of Productivity and Performance Management*, 66(8), 1043-1063. doi:10.1108/IJPPM-11-2015-0172
- Stake, R. (2010). *Qualitative research: studying how things work*. New York, NY: The Guilford Press.
- Stefanovic, J. V. (2008). *An integrative strategic approach to project management and a new maturity model* (Order No. 3317889). Available from ProQuest Dissertations & Theses Global. (304353361). Retrieved from <http://ezproxy.liberty.edu:2048/login?url=http://search.proquest.com/docview/304353361?accountid=12085>
- Stensaker, B., Frølich, N., Huisman, J., Waagene, E., Scordato, L., & Paulo, P. B. (2014). Factors affecting strategic change in higher education. *Journal of Strategy and Management*, 7(2), 193-207. doi:10.1108/JSMA-12-2012-0066

- Steyn, H., & Schnetler, R. (2015). Concurrent projects: How many can you handle? *South African Journal of Industrial Engineering*, 26(3), 96-109. doi:10.7166/26-3-1104
- Stoenica, L. (2014). Strategic issues regarding the product policy of the Romanian military higher education institutions. *Annales Universitatis Apulensis: Series Oeconomica*, 16(2), 308-317. Retrieved from <http://ezproxy.liberty.edu/login?url=https://search-proquest-com.ezproxy.liberty.edu/docview/1642615996?accountid=12085>
- Suda, L. (2007). Linking Strategy, Leadership and Organization Culture. *PM World Today*, IX(IX).
- Suherlan, H. (2017). Strategic alliances in institutions of higher education: A case study of Bandung and Bali institutes of tourism in Indonesia. *International Journal of Tourism Cities*, 3(2), 158-183. Retrieved from <http://ezproxy.liberty.edu/login?url=https://search-proquest-com.ezproxy.liberty.edu/docview/1917823857?accountid=12085>
- Tabrizi, B. H., Torabi, S. A., & Ghaderi, S. F. (2016). A novel project portfolio selection framework: An application of fuzzy DEMATEL and multi-choice goal programming. *Scientia Iranica.Transaction E, Industrial Engineering*, 23(6), 2945-2958. Retrieved from <http://ezproxy.liberty.edu/login?url=https://search-proquest-com.ezproxy.liberty.edu/docview/1876470504?accountid=12085>
- Thamhain, H. J. (2014). Assessing the effectiveness of quantitative and qualitative methods for R&D project proposal evaluations. *Engineering Management Journal*, 26(3), 3-12. doi:10.1080/10429247.2014.11432015
- Till, R. E., & Yount, M. B. (2018). Governance and incentives: Is it really all about the money? *Journal of Business Ethics*, 159(3), 1-14. doi:10.1007/s10551-018-3778-5

- Turner, J. R. (2018). The management of the project-based organization: A personal reflection. *International Journal of Project Management*, 36(1), 231-240.  
doi:10.1016/j.ijproman.2017.08.002
- Vacík, E., Špaček, M., Fotr, J., & Kracík, L. (2018). Project portfolio optimization as a part of strategy implementation process in small and medium-sized enterprises: a methodology of the selection of projects with the aim to balance strategy, risk and performance. *E+M Ekonomie a Management*, 21(3), 107-123. doi:10.15240/tul/001/2018-3-007
- Van der Hoorn, B., & Whitty, S. (2017). The praxis of ‘alignment seeking’ in project work. *International Journal of Project Management*, 35, 978-993.  
doi:10.1016/j.ijproman.2017.04.0114
- van der Merwe M. M., & Nienaber, H. (2015). Factors hindering strategy implementation as perceived by top, middle and frontline managers in a South African electronics organization. *Journal of Global Business and Technology*, 11(2), 45-57.
- Van der Walddt, G. (2016). Probing strategy-project alignment: The case of the South African Social Security Agency. *The Journal for Transdisciplinary Research in Southern Africa*, 12(1), 1-12. doi:10.4102/td.v12i1.358
- Van Puyvelde, S., Caers, R., Du Bois, C., & Jegers, M. (2016). Managerial objectives and the governance of public and non-profit organizations. *Public Management Review*, 18(2), 221-237. doi:10.1080/14719037.2014.969760
- van Wyk, B., & du Toit, A. S. A. (2016). A survey of sustainable curation in research repositories of higher education institutions in Southern Africa. *African Journal of Library, Archives & Information Science*, 26(2), 107-117. Retrieved from

<http://ezproxy.liberty.edu/login?url=https://search-proquest-com.ezproxy.liberty.edu/docview/1861782165?accountid=12085>

Yin, R. K. (2014). *Case study research: Design and methods* (5<sup>th</sup> ed.). London, UK: Sage.

Young, R., & Grant, J. (2015). Is strategy implemented by projects? Disturbing evidence in the State of NSW. *International Journal of Project Management*, 33(1), 15-28.  
doi:10.1016/j.ijproman.2014.03.010

Young, R., Young, M., Jordan, E., & O'Conner, P. (2012). Is strategy being implemented through projects? Contrary evidence from a leader in New Public Management. *International Journal of Project Management*, 30, 887-900.  
doi:10.1016/j.ijproman.2012.03.003

Zahra, S., Nazir, A., Khalid, A., Raana, A., & Majeed, M. N. (2014). Performing inquisitive study of PM traits desirable for project progress. *International Journal of Modern Education and Computer Science*, 6(2), 41-47. doi:10.5815/ijmecs.2014.02.06

## Appendix A. Open Interview Questions

These interview questions are asked in a conversational tone. They flow in a logical format that helps the researcher to understand the process of project and strategy alignment.

### Open Interview Questions

1. What is your position in the organization?
2. Which area do you work in?
3. Describe the governance strategy of the university?
4. Describe the business strategy of the university?
5. Do you feel that the governance strategy and business strategy are appropriate to aligning projects and strategy?
6. Have you ever been a part of the governance strategy and business strategy planning?
7. From your perspective, do you feel is there misalignment/alignment between strategy and projects in academia?
8. Why do you feel this misalignment/alignment exists?
9. Describe how projects are aligned to organizational strategies at this university?
10. Describe the projects you have worked on? What was your role?
11. What was your experience working on these projects?
12. What does it mean to the overall success of projects when projects and organizational strategy are aligned?
13. Describe the success rate of the projects at the university? The projects you have worked on?
14. Is there anything else you would like to add?