

A PHENOMENOLOGICAL STUDY ON THE LIVED EXPERIENCE AND LEADERSHIP
OF PROJECT MANAGERS IN AN AGILE TRANSFORMATION

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A DISSERTATION

Presented to the Affiliated Faculty of
The College of Graduate and Professional Studies
at the University of New England

Submitted in Partial Fulfillment of Requirements
For the Degree of Doctor of Education

It was presented on
6/10/2023
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ABSTRACT

This study employed a phenomenological methodology to investigate the shared experiences of project managers of corporations in the United States during a transition to agile project management methodologies. The project managers' transformation was noteworthy because agile introduces a change in work structures, processes, and leadership. This study sought to understand how eight project managers described their lived experience and leadership during the transition to agile methodologies. Interviews with project managers uncovered identity facets that evolved with their understanding of leadership. The traditional project managers' common-sense approach to work served as both a barrier and enabler of a change. Project managers who naturally led through control tactics such as documenting and adhering to a detailed plan found agile counterintuitive and challenging. In contrast, project managers who were motivated by serving in the development of others found the transition to agile enlightening and rewarding. The agile transformation afforded project managers the opportunity to serve in a broader leadership capacity. Participants emphasized their role in connecting people and knowledge through a shared understanding of vision and goals. Also noteworthy was the critical role of organizational culture and learning through experimentation and a safe-to-fail environment. Project managers considering a transition to agile would benefit from training to assess the behavioral changes required to adopt an agile mindset. Project managers can use this knowledge to advance their leadership skills and remain relevant in a transformation to agile methodologies.

Keywords: adaptive capabilities, agile, agile software development, organizational change, project management

ACKNOWLEDGEMENTS

Thank you to my study's participants for your consideration in sharing your experience transitioning to agile methodologies. I hope that I described your experiences accurately.

Thank you to my UNE dissertation advisors, Dr. Benson and Dr. Henke, and faculty for your direction and encouragement along my journey. Thank you as well to Greg Andrews at UNE, who fielded my questions expeditiously and alleviated my anxiety during the entirety of the program.

Thank you to my colleagues Dr. Anthony D'Onofrio and Dr. Ian Menchini for your support. I am grateful for your advice throughout my tenure in the program. You served as a role model and confidant over the past three years. I truly appreciate your friendship.

Finally, I would like to thank my wife Regina, daughters Mia and Caleigh, and mother and father for their support to complete this milestone. You are my inspiration and purpose. I could not have accomplished this goal without your love and support.

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CHAPTER 1: INTRODUCTION

By the year 2027, project-oriented economic activity worldwide is estimated to increase to \$20 trillion, which would employ approximately 88 million people in the field of project management; however, only 35% of the projects initiated are successful (Nieto-Rodriguez, 2021). Project success factors include whether the project is delivered within budget, by the due date, and to the agreed upon requirements (Pollack et al., 2018). In the global economy, projects are used to drive both short-term performance and long-term value creation (Nieto-Rodriguez, 2021). Global trends that challenge project management competencies may be related to global acceleration and the digitalization of society (Bushuyev et al., 2021). The rate of change in global markets has reached a point where traditional new-product development methods are unable to keep pace (Cooper & Sommer, 2018). Projects are increasingly used by organizations to drive value creation through faster development of new products (Nieto-Rodriguez, 2021). The speed of technological advancements has created both challenges and opportunities to improve project management methodologies (Denning, 2018).

Research and practice have demonstrated the significant role complexity, uncertainty, and chaos serve in our projects and project environments (Thomas & Mengel, 2008). As organizations seek opportunities to bring products to market faster and improve productivity, projects provide an opportunity to influence change in organizations (Nieto-Rodriguez, 2021). Gandomani and Nafchi (2015) stated that project organizations require effective methods to streamline the delivery of new products and services. Improving project management methodologies and enhancing business agility have assisted organizations in responding to

changing customer expectations and market conditions (Cegarra- Navarro et al., 2016; Gurd & Ifandoudas, 2014; Ravichandran, 2017).

By the turn of the century, flexibility emerged as a key competitive quality (Byrd & Turner, 2000). Two decades later, in a fast-changing and highly complex environment, agile learning strategies were critical to survival (Armanious & Padgett, 2021). Improving organizational agility in complex systems extended beyond project management practices; developing agility also required changes in management, leadership, and governance practices (Dikert et al., 2016; Gandomani et al., 2013; Gandomani & Nafchi, 2015; 2016; Gurd & Ifandoudas, 2014; Hoda & Noble, 2017; Moe & Dingsoyr, 2017). The empirical research within this study expand upon concepts related to complex systems theory (Devereux et al., 2020). With the expansion of the global economy, speed of technological changes and increasing system complexity, organizations require new work structures and leadership approaches to support learning and decision-making (Palaima & Skarzauskiene, 2010). According to Palaima and Skarzauskiene (2010) leaders in complex systems require systems-thinking as a core competence. This study views project management through the lens of complexity theory to gain insight into the scope and depth of change faced by project managers in an agile transformation.

This research study focused on the role of the project manager serving as a leader and change agent in an agile transformation. A project has a beginning and end date, a clear end state, an overarching goal, and multiple people or groups (Nicholls, 2020). The project manager serves as a change agent who aligns the project team with project goals and inspires the project team with a shared sense of purpose (Project Management Institute, 2021). Project managers require sound people skills to develop trust with team members and project stakeholders (Project Management Institute, 2021). Core responsibilities of a project manager include defining project

scope; aligning project scope with project objectives; planning and overseeing timely task completion; resource management; communicating status; removing barriers to success; and ensuring overall quality and success (Project Management Institute, 2021).

The goal of this study was to gain an understanding of the project managers' lived experience and leadership approach in their transformation from traditional project management to agile project management. To achieve this goal, the study viewed the project managers' transformation through the lens of complex systems theory (Devereux et al., 2020), the identity control model (Luhmann & Eberl, 2007), and Uhl-Bien and Marion's complexity leadership model (Uhl-Bien & Marion, 2007). Complex systems theory (Devereux et al., 2020) was used to establish the setting and environmental considerations associated with the project managers' agile transformation. The identity control model (Luhmann & Eberl, 2007) and the complexity leadership model (Uhl-Bien & Marion, 2007) was used to evaluate the lived experience and leadership approach of project managers transitioning to an agile methodology. The literature reviewed introduced several themes connected to complex systems and agile methodologies, including change management, leadership, complex adaptive systems, and identity control.

This study's research methods included qualitative analyses of data from project managers from four industries: air-conditioning and warm air heating manufacturing, commercial banking, electronic shopping and mail-order houses, and miscellaneous financial investment activities. Journal articles on agile transformations and the complex nature of projects were researched for the literature review. The study's research methods were designed to gain knowledge of the project managers' lived experience in an agile transformation and connected these experiences to behaviors and leadership practice. This study provided a lens into how project management organizations use agile methodologies to drive transformational change. A

review of the literature yielded a limited number of studies concerning project managers in an agile transformation. Studies were accessed through online library research databases available through two academic institutions. Having experienced agile transformations as both a trainer and agile task force leader, I had a practical understanding of the challenges and uncertainty project managers experienced when transforming to agile methodologies. Researchers have viewed projects as complex systems where a command-and-control leadership approach associated with traditional project management methods served to limit organizational learning, creativity, and responsiveness (Maqsoom et al., 2020; Uhl-Bien et al., 2007).

Definitions of Key Terms

Key terms are referenced throughout this study in accordance with the following definitions:

Project. A temporary endeavor pursued to create a unique product, service, or result (Project Management Institute, 2021). A project has a beginning and end date, a clear end state, an overarching goal, and involves multiple people or groups (Nicholls, 2020). Projects can stand alone or be part of a program or portfolio (Project Management Institute, 2021).

Project Management. The process of applying knowledge, skills, tools, and techniques to project activities to satisfy project requirements and intended outcomes using a broad range of approaches (Project Management Institute, 2021).

Agility. Refers to an organization's responsiveness to changes in the environment (Cheng et al., 2020). Agility enables flexibility, speed, quality, and efficiency in an organization's efforts to integrate resources and technology to meet changes in customer needs (Cheng et al., 2020).

Goldman et al. (1995) defined agility as a complete response to the business challenges of competing in the rapidly changing global markets and is not restricted to improving efficiency or

reducing costs. Agility is concerned with succeeding in emerging competitive arenas, and places customers at the center of an organization's approach to competing in global markets (Goldman et al., 1995).

Agile. A mindset that supports a people-centric approach to working and building products and services more suited to customer needs (Flewelling, 2018). The "Agile Manifesto" (Beck et al., 2001) is considered the definitive work on agile (Laanti et al., 2013).

Agile software development. An iterative approach to developing high quality software based on principles of continuous and rapid design and testing cycles to satisfy evolving requirements (Nerur et al., 2005). Agile software development is not limited to one specific methodology or technical practice.

Organizational change. An alteration in the existing organizational arrangements or processes (Grant & Marshak, 2011). Arrangements can refer to organizational strategies, systems, structures, and culture pertaining to planning and decision making (Grant & Marshak, 2011).

Emergent outcomes. Learning, adaptability, innovation, and new organizational forms generated in complex systems (Uhl-Bien & Marion, 2009). Lichtenstein and Plowman (2009) described emergence as a qualitative novelty within a system that evolves from the system's components and produces unexpected outcomes.

Adaptive capabilities. An organization's strategic plan to respond to changing business requirements by developing its resources, organizational processes, and critical capabilities (Teece et al., 1997). Ali et al. (2017) stated that an organization's adaptive capability is conceptualized as involving three dimensions: change management, resilience, and horizon scanning. Paliokaite (2012) stated that organizations that learn how to adapt to changing

customer needs and business conditions leverage their adaptive capabilities as a competitive advantage.

Privately held corporation. A stage in the development of an entity towards a professionally managed public firm (Trostel & Nichols, 1982). Private companies rely on private capital, however as the firm matures it raises capital in the public financial markets where ownership is dispersed across many investors through the sale of stock (Trostel & Nichols, 1982).

Public company. An intangible association of individuals with the sole purpose of maximizing profits for its shareholders (Trostel & Nichols, 1982).

Statement of the Problem

Rising complexity in work structures and systems has driven project organizations to replace traditional project management methods with agile project management methodologies, however project managers find the transition problematic because they are unable to adopt the agile mindset to lead in complex systems (Rozak et al., 2021). Dikert et al. (2016) described coordination and leadership skills as critical to transforming work structures. An understanding of organizational change and leadership in complex systems can assist project managers in learning the skills required to succeed in a transformation from traditional project management methods to an agile project management methodology (Rozak et al., 2021). In addition, agile leadership studies typically have not been based on any leadership theory lens, and the extent to which leadership theories were relevant to the experience of project managers transitioning to agile methodologies has not been thoroughly investigated (Seidel et al., 2019).

The agile methodology may be challenging for project managers who relied on a highly structured, plan-driven process (Mayfield, 2010). Traditional project managers may need to learn to relinquish centralized control and decision-making and support a decentralized work structure

that thrives on shared decision-making and the autonomy of self-organized teams (Taylor, 2016). Shastri et al. (2021) emphasized that the role of the traditional project manager changed from managing and controlling to serving the team as a facilitator, mentor, negotiator, and protector. Rather than utilizing an autocratic leadership approach, effective agile project managers may exhibit servant leadership skills in order to build trust with team members and project stakeholders (Holtzhausen & de Klerk, 2018). Learning how to lead in complex systems is critical to nurturing the relationships and interactions that drive emergent outcomes (Uhl-Bien & Marion, 2007). Continuous learning and development of leadership skills may provide project managers with the competencies to remain relevant and adept at coordinating complex projects (Thomas & Mengel, 2008).

Kinnamon and Carasco (2019) claimed that managing and leading are not synonymous. Managing involves directing others to accomplish a task or objective, while leading focuses on influencing the direction, action, and opinion of others (Kinnamon & Carasco, 2019). Project managers may face change in their transformation to agile and may no longer model strategy and project execution as linear outcomes of their detailed planning activities (Thomas & Mengel, 2008). As a change agent, project managers may model the behavior they sought in others (Pádár et al., 2017). When transforming to agile project management, traditional project managers may find it difficult learning how to decrease the value placed on formal project controls and increase focus on the dynamic and informal influences in project planning and execution (Singh & Singh, 2002).

Statement of Purpose of the Study

The purpose of this qualitative phenomenological study was to understand the lived experience and leadership approach of project managers who have transitioned from a traditional

project management methodology to an agile project management methodology. An agile project management methodology is an iterative approach to planning and development that requires rapid and continuous delivery of product features, and frequent communication among stakeholders and team members (Fagarasan et al., 2021). Understanding the responsibility of an agile project manager, and how this responsibility differs from the role of a traditional project manager, can assist project managers in their transition to agile project management (Shastri et al., 2021).

Research Questions/Design

This study included two research questions pertaining to the lived experience and leadership approach of project managers transitioning to agile project management methodologies. The research questions were derived from the Luhrmann and Eberl (2007) identity control model and Uhl-Bien and Marion's (2007) complexity leadership model. Luhrmann and Eberl's (2007) identity control model emphasized that the development of a leader's identity is not a singular process, but an iterative process that required the development of multiple identity facets that evolve with an understanding of leadership. The study's questions sought to understand the project managers' lived experience in forming a new identity in their transformation to agile project management. Central to Uhl-Bien and Marion's (2007) complexity leadership model were three leadership functions and five leadership behaviors in complex systems. The study's questions sought to understand the project managers' practical application of the three leadership functions and five leadership behaviors prior, during and post transformation from traditional project management methods to agile project management.

The first question in this study viewed through the lens of Luhrmann and Eberl's (2007) identity control model was:

Research Question 1: How do project managers who have transitioned from a traditional project management methodology to an agile project management methodology describe their lived experience?

The second question in this study viewed through the lens of Uhl-Bien and Marion's (2007) complexity leadership model was:

Research Question 2: How do project managers who have transitioned from a traditional project management methodology to an agile project management methodology describe their leadership approach before, during, and after the transition?

In identifying project managers for participation in this study, it was important to limit the sample set to only project managers who used traditional project management methods before adopting an agile project management methodology. Project managers whose agile experience preceded their use of traditional project management methods, or had no experience in traditional project management, were excluded from participating in the study. The results of this study were intended to assist traditional project management organizations in their transition to agile project management.

Conceptual/Theoretical Framework

The conceptual framework that guided this study was derived from Uhl-Bien and Marion's (2007) complexity leadership model. The complexity leadership model originated from the study of complex systems and emphasizes using the dynamic capabilities of complex systems to enable the conditions that foster creative problem solving, adaptability, and learning in organizations (Uhl-Bien et al., 2007). The complexity leadership model (Uhl-Bien & Marion, 2007) was significant for this study because it assisted in understanding how leaders in complex systems affect change by enabling interactions that generate emergent outcomes.

The theoretical framework that guided this study was based on complex systems theory (Devereux et al., 2020) and the identity control model (Luhrmann & Eberl, 2007). Complex systems theory is defined as the study of complex interacting systems (Devereux et al., 2020). This study used complex systems theory (Devereux et al., 2020) to frame and interpret the project managers' agile transformation. Complex systems theory (Devereux et al., 2020) was a logical theoretical framework to view the lived experience of project managers in an agile transformation. Organizational theorists often used the study of complex systems as the theoretical perspective to view behaviors of interacting agents in dynamic environments (Stacey et al., 2000). The identity control model (Luhrmann & Eberl, 2007) was significant for this study because project managers formed a new identity when transitioning to the role of agile project manager. The project managers' identity transformation during a transition to agile project management provided insight into their lived experience.

The study of complex systems provided a view into how interaction dynamics between network agents drive learning, innovation, and adaptability (Marion, 2008). Thomas and Mengel (2008) described complexity theory as the study of behaviors of specific types of complex systems. Complex systems theory (Devereux et al., 2020), the identity control model (Luhrmann & Eberl, 2007), and the complexity leadership model (Uhl-Bien & Marion, 2007) were significant for this study because they provided a lens into the project managers' behaviors and lived experience in a transformation to agile project management. The related literature acknowledged several themes that included change management, leading change, identity control, and complex adaptive systems.

Assumptions, Limitations, and Scope

Three assumptions guided this study. The first assumption was that organizations make a conscious decision in initiating an agile transformation. Organizational leaders have used agile readiness assessments to establish the necessary environment that enables an agile business systems transformation (Barthelmess et al., 2021). An agile readiness assessment ensured that a project delivered the business transformation benefits that they promised (Barthelmess et al., 2021). The second assumption was that project managers experience change and uncertainty in an agile transformation. This assumption was linked to my personal experience as both a project manager and leader of project management organizations that transitioned to an agile methodology. The third assumption that guides this study was that traditional project managers can become effective agile project managers. Although project managers had varying degrees of success when transitioning to agile methodologies, this study assumed that project managers could succeed in an agile transformation if given adequate training and preparation (Yang, 2019). Although project managers have made effective agile project managers, the study acknowledged that not all will succeed in a transformation to agile project management.

A limitation of the study was the relatively niche nature of the research topic. Although there are a variety of studies regarding organizational agile transformations, there existed a limited number of studies concerning the experience of project managers in an agile transformation. Research was conducted using several online library research databases available through two accredited academic institutions, both of which offer undergraduate, graduate, and doctoral programs. Although the available literature extended to a variety of topical domains, the literature leaned towards the business and technology domains, which was a potential limiting factor.

The scope of this study focused on the lived experience of project managers in an agile transformation. The project managers' satisfaction with their experience, and feelings concerning agile as a project management framework replacing traditional project management methods, were also within the scope of this study. The broader organizational experience and satisfaction with agile methodologies, and organizational readiness to initiate an agile transformation, were outside the scope of this study.

Rationale and Significance

Gaining a deeper understanding of organizational change and leadership in complex systems assisted project managers in leading teams through an agile transformation (Rozak et al., 2021). Project managers were required to have an agile leadership mindset to influence project teams in solving problems and achieving objectives (Rozak et al., 2021). Examining this target population was a significant step in understanding the project managers' experience when transforming from traditional project management to agile project management. Insight into the project managers' lived experience in an agile transformation will serve as a tool for continuous improvement for project managers considering a change to agile project management.

As the global economy and speed of technological advancements increased complexity in work structures and systems, leaders sought to improve the adaptive capabilities of organizations by using projects to drive transformational change (Nieto-Rodriguez, 2021). This study is significant for organizations considering a transformation to agile methodologies because the findings can assist project managers seeking to develop effective leadership approaches and maintain relevance in their transformation to agile methodologies (Hartman, 2008). Given the financial and human capital organizations allocate to their project management departments, much is at risk in an organization's transformation to agile methodologies. Project managers and

organizations can benefit from an understanding of how leadership style and human emotions that accompany transformational change facilitate the project managers' success in adopting agile methodologies. This study's findings can help improve the success rate of organizations' adopting agile project management.

Summary

This research was a phenomenological study of the lived experience of project managers in a transformation to agile project management. The study viewed project managers as change agents who served as conduits to drive transformational change in complex systems. Project managers participating in this study focused on software development projects and came from several organizations domiciled in the Northeast United States. Qualitative analyses of semistructured interviews with project managers were applied as research methods.

Uhl-Bien and Marion's (2007) complexity leadership model, coupled with complex systems theory (Devereux et al., 2020) and the identity control model (Luhmann & Eberl, 2007) provide the conceptual and theoretical framework for this study and serves as the basis for its research questions. The complexity leadership model (Uhl-Bien & Marion, 2007) evolved from complex systems theory (Devereux et al., 2020), which emphasized the significance of dynamic interactions to foster learning and creativity needed to prosper in the global economy (Koch & Leitner, 2008; Uhl-Bien et al., 2007). Identity control was significant for this study because project managers formed a new identity when transitioning to the role of an agile project manager (Luhmann & Eberl, 2007). The terms project, project management, agile and agility, agile software development, organizational change, emergent outcomes, and adaptive capabilities were used throughout this study. These terms viewed through the lens of complex systems theory (Devereaux et al., 2020), the identity control model (Luhmann & Eberl, 2007),

and the complexity leadership model (Uhl-Bien & Marion, 2007) provide an understanding of the project managers' lived experience when transforming from traditional project management to an agile project management methodology.

The structure of the study includes five chapters. Chapter 2 presents the theoretical and conceptual frameworks used to view the phenomena, and synthesizes existing literature associated with project managers in an agile transformation. Chapter 3 presents the methodology used to collect and analyze the data, while chapter 4 provides the qualitative results of the semistructured participant interviews. Lastly, chapter 5 discusses the study's results and conclusions.

CHAPTER 2: LITERATURE REVIEW

Since the start of the 21st century, agile project management methods have generated three times as many successful outcomes and were three times more prevalent as compared to traditional project management methods (Fagarasan et al., 2021). Agile project management provides an opportunity to evolve practices to meet the needs of the time, however the methodology may be challenging for project managers who rely on a highly structured, plan-driven process (Mayfield, 2010). Agile and traditional project management have unique organizational work structures. Studies have found that transforming work structures require coordination and leadership (Dikert et al., 2016). As an organizational leader in an agile transformation, project managers may face increased systems complexity driven by technological advancements (Denning, 2018; Ramamani, 2010). To advance the project management profession, project managers require effective leadership skills to drive learning and adaptability (Bushuyev et al., 2021; Hartman, 2008).

This literature review was designed to synthesize existing research on the project managers' lived experience and leadership approach in a transformational change to agile project management (agile). Fagarasan et al. (2021) described agile as an iterative approach to planning and development that requires rapid and continuous delivery of product features and frequent communication among stakeholders and team members. Three ideas served as the foundation for this review. The first idea was the notion that leaders use projects to drive change in organizations. The second idea identified projects as complex systems. The third idea sought to understand the role of the project manager as a change agent.

Over the last century, traditional leadership models have centered around an autocratic top-down approach, which worked well for economies focused on the physical production of goods but fell short in meeting the needs of today's knowledge economy (Uhl-Bien & Marion, 2007). With a world trending towards increased complexity, leaders have found it difficult to control and predict the future (Plowman et al., 2007). Backlander (2019) stated that leaders leverage dynamics in complex systems to foster innovation, learning, and adaptive capabilities of organizations. A review of the literature confirmed differences in the project managers' leadership approach when operating in traditional versus agile project management work structures. The major themes in this study included change, leadership, complex adaptive systems, and identity control. Subthemes in this review included innovation, learning, and adaptability. As a change agent leading in a complex system, project managers pursued opportunities to enable emergent outcomes through learning, adaptability, and innovation (Uhl-Bien & Marion, 2007). The analysis of these themes provided insight into the project managers' lived experience in an agile transformation.

This review began with a description of the study's conceptual and theoretical frameworks, followed by an understanding of agile project management and traditional project management methodologies. Insight into the challenges project managers faced when transitioning to an agile methodology was provided. Themes in the literature were explored to describe the project managers' experience in adopting agile methodologies. The theme of change was presented to gain insight into potential emotional effects resulting from an identity shift that accompanied the project managers' change in role within the project team when transitioning to agile. An additional challenge for project managers in an agile transformation is the need to evolve leadership skills and behaviors. This study described the project managers' leadership

approach through the lens of both traditional and complex leadership theories. The concepts of change and leadership were synthesized in a detailed analysis of the complexity leadership model to provide insight into effective leadership behaviors in complex systems (Uhl-Bien & Marion, 2007). How the project managers identified with the change to leading autonomous teams and sharing control was viewed through the lens of the identity control model (Luhmann & Eberl, 2007).

Conceptual Framework: Leading in Complex Systems

Because leadership is harmoniously connected with organizational development, the connection between organizational change and leadership justified selecting a conceptual framework focused on understanding leadership behaviors that drive change in complex systems (Gilstrap, 2009; 2008;). Uhl-Bien and Marion's (2007) complexity leadership model was such a model. The leadership behaviors as depicted in the model provided an appropriate conceptual framework in which to research the project managers' experience and leadership approach in an agile transformation. The literature connected the complexity leadership model with agile project management's values and principles (Uhl-Bien & Marion, 2007).

Defining Complexity Leadership Model

The complexity leadership model is a change model of leadership that allows leaders to leverage informal dynamic interactions within the organization to develop adaptive capabilities (Uhl-Bien & Marion, 2007). Uhl-Bien and Marion described complex leadership as enabling the capacity to learn, innovate, and adapt to complex systems in knowledge-producing organizations. Three primary functions of leadership comprise the complexity leadership model: adaptive leadership, administrative leadership, and enabling leadership. Adaptive leadership refers to the emergence of creativity and learning resulting from dynamic interactions in complex systems.

Administrative leadership refers to the actions of those in formal managerial roles who focus on structure, control, efficiency, and productivity. Enabling leadership supports the conditions that drive adaptive leadership and works to manage tension in the system (Uhl-Bien & Marion, 2007).

This study used the complexity leadership model to view the dynamic relationship between project managers, management, stakeholders, and the autonomous agile teams (Uhl-Bien & Marion, 2007). Project managers face the challenge of learning to balance the formal administration function of leadership with the informal, emergent dynamics of complex adaptive systems. Uhl-Bien and Marion's (2007) complexity leadership model-encompasses five leadership behaviors that foster adaptive outcomes in complex systems: fostering network connections; accelerating bottoms-up network construction; becoming leadership tags; dropping seeds of emergence; and thinking systemically.

Studies have shown that fostering network connections forms the structures that allow innovation to emerge (Uhl-Bien & Marion, 2007). Accelerating bottom-up networks required leaders to encourage shared decision-making, promote autonomy, and refrain from solving problems for individuals (Uhl-Bien & Marion, 2007). Plowman et al. (2007) emphasized that effective leaders in complex systems help followers understand the situation rather than control followers' behaviors to achieve specific outcomes. Leadership tags represent a symbol to bind followers around shared organizational values (Uhl-Bien et al., 2007). Dropping seeds of emergence requires leaders to develop connections between knowledge centers within the organization to foster learning and creativity (McKelvey et al., 1999). Instead of controlling individuals' actions to follow a rigid plan, effective leaders in complex system structures encouraged experimentation (Brown, 2011). Thinking systemically required leaders to focus on

the broader patterns of network events (Senge, 1990). Effective leaders in complex systems have adopted a holistic, system-level view, which reinforced the notion that complex systems are nonlinear (Marle, 2020).

The Significance of the Complexity Leadership Model

The fundamental concept supporting the complexity leadership model is that an organization's internal network dynamics should be enabled, not suppressed, or force-aligned (Uhl-Bien et al., 2007). This philosophy differed from traditional leadership models that focus on influencing individuals towards desired goals (Bass & Riggio, 2006; Zaccaro & Klimoski, 2001). This study sought to view and explain the project managers' behaviors through the lens of the complexity leadership model (Uhl-Bien & Marion, 2007). The concept of complex adaptive systems is significant in the complexity leadership model. Thomas and Mengel (2008) described complex adaptive systems as a system that includes many independent agents whose behavior reflects unique principles of interaction and relation. This study viewed the complex nature of project management through the lens of complex adaptive systems as defined in the complexity leadership model (Uhl-Bien & Marion, 2007). Lewin and Regine (2003) emphasized that sustainable strategies emerge from complex interactions between individuals in complex adaptive systems. The complexity leadership model's focus on leading to increase an organization's adaptive capabilities served as a lens through which to understand the project managers' lived experience in a transformational change to agile project management methodologies (Uhl-Bien & Marion, 2007).

The complexity leadership model is one of the complexity leadership frameworks (Uhl-Bien & Marion, 2007). Researchers have distinguished this model from other complexity leadership models by its bottom-up approach in adapting to change, and its emphasis on leaders

empowering individuals through the interaction of network agents (Uhl-Bien & Marion, 2007). Much can be learned about the leadership and lived experience of agile project managers through the lens of Uhl-Bien and Marion's complexity leadership model.

Theoretical Framework: Complex Systems Theory and Identity Control Theory

This study used complex systems theory to highlight a connection between change, leadership, and agile project management (Devereux et al., 2020). Projects represented dynamic environments that required the rapid production of knowledge and innovation to survive (Koch & Leitner, 2008; Uhl-Bien et al., 2007). This study also used complex systems theory to understand the complex nature of projects and project environments (Devereux et al., 2020). Through an understanding of complex systems theory, this study introduced conceptual improvements that project managers can use to lead and coordinate projects in complex systems (Marle, 2020). However, evolving practices required change on the part of project managers. In adopting agile methodologies, project managers altered their identity based upon an understanding of leadership, which involved multiple identity facets (Luhmann & Eberl, 2007). In a transition to agile methodologies, project managers experienced an identity transformation as described in Luhmann and Eberl's (2007) identity control model, which provided a second theoretical perspective for this study.

Defining Complex Systems Theory

The complexity leadership model evolved from complex systems theory (Devereux et al., 2020; Uhl-Bien & Marion, 2007); the study of complex interacting systems. Devereux et al. (2020) stated that the study of complex systems focuses on the interaction dynamics between individuals in a network. Brown (2011) identified three common characteristics of complex systems: they have multiple interacting units; they are dynamic; and they are adaptive. Complex

systems theory is interested in understanding how network agents interact, adapt and influence emergence, innovation, and fitness (Devereux et al., 2020; Marion & Uhl-Bien, 2001). This study supported the use of complex systems theory as an appropriate theoretical foundation to understand the lived experience of traditional project managers transitioning to agile methodologies.

The Significance of Complex Systems Theory

Complex systems theory was significant for this study because it provided insight into the challenges project managers experience in managing risk and uncertainty resulting from interdependencies in complex systems (Devereux et al., 2020; Marle, 2020). Marle (2020) emphasized that agile risk management techniques allow leaders to manage uncertainty by enabling more frequent, shared, decentralized decision-making based upon anticipated events and consequences of actions.

Nieto-Rodriguez (2021) described projects as complex systems. This point was pertinent to the study because extreme levels of managerial control associated with traditional project leadership fail in a highly complex environment (Maqsoom et al., 2020). McPherson (2016) stated that the appeal of agile project management is its ability to respond to change and uncertainty. Complex systems theory was significant for this study because it challenged the traditional project managers' top-down, controlling style of leadership (Devereux et al., 2020). Theorists argued that effective leaders influence change through the management of networks and interactions (Uhl-Bien et al., 2007). The study used these ideas to reflect on the project managers' lived experience and leadership in an agile transformation.

Change was also a significant theme in this study. Wheatley (1992) described complex systems theory as the emergence of order in dynamic systems functioning on the boundary of

chaos, where change is constant (Devereux et al., 2020). Kurt Lewin was one of the original pioneers of research complex systems and the importance of group dynamics in shaping the behavior of its members (Burnes, 2004). Lewin's change model was a simple one, with organizational change involving a three-stage linear process comprised of freezing, changing, and refreezing stages. Management and change took on a new dimension when considering organizations as complex systems. Beeson and Davis (2000) argued that viewing organizations as complex systems requires a fundamental change in the role of management. A change in how project managers define their leadership role in agile work structures was viewed through the lens of the identity control model (Luhmann & Eberl, 2007).

Defining Identity Control Model

Luhmann and Eberl (2007) stated that the development of a leader's identity is a multi-step process. Research has shown that individuals use identity standards as a reference when giving meaning in social interactions (Burke, 2006). According to Luhmann and Eberl (2007), identity development required four phases: identity negotiation; identity balance; task interaction; and identity conflict. Identity negotiation occurs when leaders form an identity proposal when interacting with followers (Luhmann & Eberl, 2007). Identity balance is the point when leader and follower identities are validated. Task interaction occurs when both leader and followers focus on task completion and identities remain unchanged. The fourth and final phase of Luhmann and Eberl's (2007) identity control model is the challenging reconstruction of the leaders' identities.

The Significance of Identity Control Model

Identity control was significant for this study because project managers formed a new identity when transforming to agile project management methodologies (Zheng & Muir, 2015).

Burke (2006) stated that identity standards provide a reference for individuals to compare their perceptions of ongoing self-relevant meanings in social interactions. The transition to agile project management involved change, which required those affected to develop a new sense of self (Pawar, 2017). Zheng and Muir (2015) stated that project managers hold an identity standard that defines what it means to be a leader. The process by which project managers recognize their new role was not instantaneous. Identity development was not a singular process, but an iterative process that required the development of multiple identity facets (Luhmann & Eberl, 2007).

The conceptual and theoretical framework for this study explored several themes. Project managers experienced change when learning to adapt to agile work structures. As change agents in an agile transformation, project managers facilitated change (Sutherland & Schwaber, 2017). Change necessitated the need to adapt, which introduced the concept of identity control (Zheng & Muir, 2015). The themes of change, leadership, complex adaptive systems, and identity control were explored in further detail in the review of the relevant literature.

Review of the Relevant Literature

This literature review was designed to synthesize existing research on the experience of project managers in their adoption of agile methodologies (agile). Agile is an iterative approach to planning and development that requires rapid and continuous delivery of product features and frequent communication among stakeholders and team members (Fagarasan et al., 2021). Cooper and Sommer (2018) described agile as a system that is adaptive and thrives on change. Three concepts served as the foundation for this literature review. The first concept introduced the notion that leaders used projects to drive change in organizations. The second concept identified projects as complex systems. The third concept investigated the role of the project manager as a change agent operating in a complex system. A consistent theme in the literature was the project

managers' leadership style and behavior in effecting change in complex systems. The review considered the idea that project managers can influence team learning, creativity, and adaptability through effective leadership. The literature also focused on the significance of the leader-member exchange between project managers, team members, and stakeholders, and how this exchange relates to the project managers' sense of self. While literature was available on the organizational benefits of agile, this review provided a thematic framework to understand the lived experience of project managers in an agile transformation, a topic that was not extensively addressed in the literature.

Agile Project Management

Agile project management originated in the software development industry as an approach for engineers to respond rapidly to changes in their ecosystem (Cockburn, 2001). Although agile project management got its start in software development, its use today extends to any type of project and industry (Cobb, 2015). Cooper and Sommer (2018) stated that agile methods include short planning cycles, daily stand-up meetings, early product demos, and team retrospectives, and provide organizations the flexibility, speed, and productivity to respond to change. Ilyes (2019) emphasized that roles, events, and products are the basic building blocks at the core of an agile methodology, however, applying them to a situation beyond software development requires assessing the features of the specific environment.

Huemann (2022) stated, "The power of projects derives from their future-orientation, solution focus, teamwork and their urgency that comes with their temporary character" (p. 1). Projects were appealing to employees because they give work meaning and can be inspiring and motivating for team members (Nieto-Rodriguez, 2021). One advantage of agile project management was the ability to manage complex projects characterized by uncertainty

(Macheridis, 2018). McPherson (2016) claimed that agile project management was appealing to leaders because it increased an organization's adaptive capabilities. With project complexity on the rise, organizations found it difficult to reduce project risks by responding to events that could influence a project's success (Marle, 2020).

Agile Values and Principles

Agile project management was first documented in the Agile Manifesto in 2001 (Beck et al., 2022). The Agile Manifesto aligned core values with a set of agile principles and practices (Marlowe et al., 2020). According to Hazzan and Dubinsky (2014), agile project management relied on four primary values: individuals and interactions over processes and tools; working features over comprehensive documentation; customer collaboration over contract negotiation; and responding to change over following a plan. Cooke (2010) conveyed ten principles that distinguish agile project management from traditional project management: embracing change; responsive planning; frequent and continuous business value; direct stakeholder engagement; regular face-to-face communication; minimizing waste; tangible outputs; empowering the team; quality by design; and continuous improvement.

Sutherland and Schwaber (2017) noted that agile project management avoids excessive up-front planning and favors embracing change through responsive planning. Cooke (2010) stated that agile teams focus on delivering frequent and continuous business value in short increments to reap the benefits of resources invested in a project more quickly. Agile project teams engaged stakeholders regularly through face-to-face communication to ensure deliverables continuously met the needs of the business. Tangible outputs of work within a predefined time provided the primary measure of progress for teams leveraging an agile methodology (Sutherland & Schwaber, 2017). This approach differed from traditional project management

where project managers focused considerable time on project documentation and status reporting as a primary means to measure and communicate progress (Chin, 2004).

Team empowerment in agile project management provided autonomous, self-organized teams the control to decide on the volume of work that can be achieved within a given time, as opposed to stakeholders owning these decisions (Sutherland & Schwaber, 2017). Agile project management used an ‘apply, inspect, adapt’ philosophy, where continuous improvement occurred at the conclusion of each iteration of the project plan, rather than limiting this activity to an annual employee performance review or at the end of a project (Sutherland & Schwaber, 2017). In addition, quality control was essential in agile project management, since low quality outputs served as an impediment to maintaining flexibility and responding to change (Cooke, 2010).

Agile values and principles guided the behaviors of participants to improve their adaptive capabilities in response to change (Cooke, 2010). Leybourne (2009) stated that agile project management rests on the philosophy of creating adaptive products that are easy to change and adaptive teams that can respond quickly to change. Sutherland and Schwaber (2017) noted that responsive planning was embedded in agile project management’s use of short planning cycles, which enabled adaptability in requirements and scheduling. However, adapting a project plan became challenging when project teams were not empowered (Sutherland & Schwaber, 2017). Agile project managers encouraged teams to use their autonomy to inspect tangible work outputs in regular intervals and used newly acquired knowledge to adjust the plan (Sutherland & Schwaber, 2017). The adaptive capabilities of agile project management depended on the balance of autonomy and authority in the system (Macheridis, 2018). Individuals working in

traditionally authoritative roles, such as the project manager, used their authority in constructive ways to support teams operating in an agile framework (Macheridis, 2018).

In contrast to a tightly controlled plan-driven approach found in traditional project management, agile project managers shared control of decision-making with team members when deciding on the level of upfront planning to use in a project (Heeager & Nielsen, 2020). Where traditional project management models relied on a prescriptive, plan-based routine, the agile project manager favored experimentation (Leybourne, 2009). The agile project manager leveraged incremental planning, decentralized decision-making, and experimentation in scrum, which is the most popular form of agile in software development and was built upon a framework designed to embrace change (Schwaber & Sutherland, 2017).

Scrum

Scrum was considered by the professional and academic community as the most common form of agile project management (Zavyalova et al., 2020). Although there were other agile project management methodologies, such as kanban, a continuous flow-based model, and lean development, which focused on quality and efficiency, scrum remained the unofficial standard agile methodology in the United States (Cobb, 2015). Rouse (2007) described scrum as an agile model that is based on small, empowered, self-organizing teams working in an interdependent manner. Team member autonomy was foundational to scrum, especially during the planning process, where the project manager relinquished control to the team, and adopted the role of facilitator (Virag, 2021).

Scrum included unique team roles, such as the scrum master. A scrum master's primary focus was to assist team members in understanding scrum practices and values and facilitating the scrum process (Schwaber & Sutherland, 2017). It was common for the project manager to

assume the role of scrum master in an organization's transformation to agile project management (Noll et al., 2017). This study refers to the "scrum master" as the agile project manager. The agile project manager facilitated planning with team members where work was decomposed into short time ranges, often two weeks in duration, called sprints. At the end of each sprint, team members reflected on the objectives, failures, and successes (Schwaber & Sutherland, 2017). Reflection was an agile project management activity that helped teams identify opportunities for improvement and respond to change (Medinilla, 2014). Agile project management was appealing to organizations seeking operational flexibility to manage change and uncertainty (Taylor, 2016). Highsmith (2004) stated that reflection and experimentation supported the adaptive capabilities of teams.

Traditional Project Management

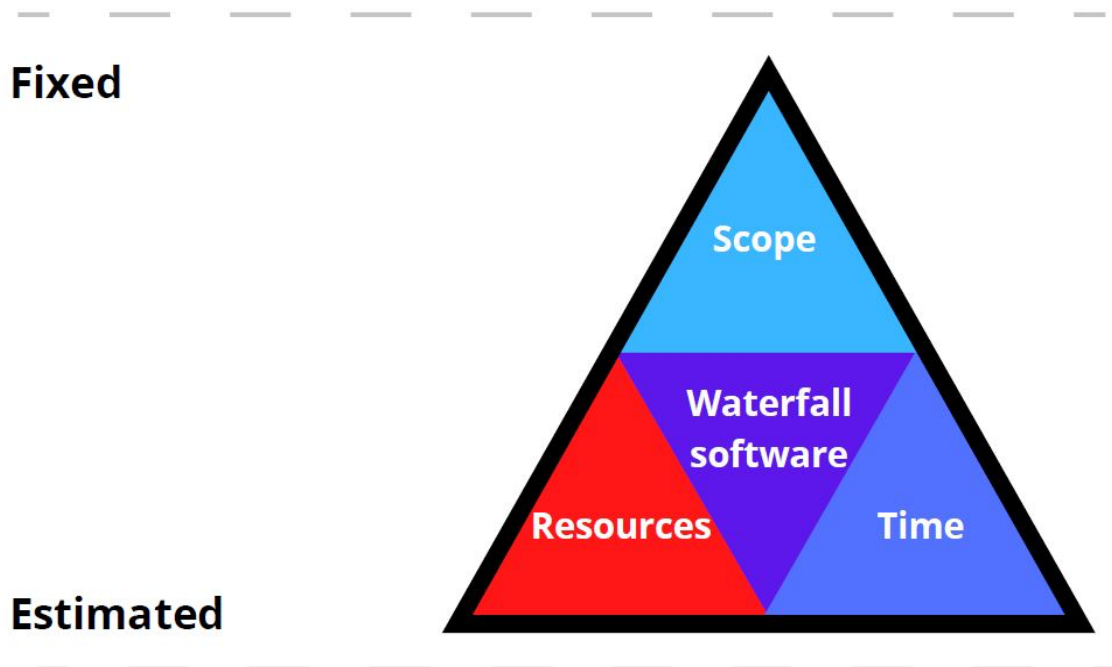
As of 2021, there were over 603,120 project management professionals employed in the United States, with an average age of 46, and average annual salary of \$96,238 (Zane, 2021). Traditional project management methods aligned with the 19th century management view that the best approach to running a complex organization was through a hierarchical structure, with those at the top in control of decisions (Saynisch, 2010). The traditional management structure divided an organization into unique functions that plan based upon the assumption of control and predictability (Laszlo & Laszlo, 1997). Traditional project management was often referred to as a waterfall model, because of its use of discreet phases where the product was deliberately planned at the outset of the project, designed, developed, and implemented (Zavyalova et al., 2020).

Iron Triangle

A fundamental focus for the traditional project manager was the iron triangle, which represented the basic criteria by which project success was measured (Pollack et al., 2018). The three criteria of the iron triangle included whether the project was delivered within budget, by the due date, and to the agreed upon requirements (Pollack et al., 2018). In industry, the iron triangle represented the most common measure of project success (Bryde, 2008). In managing projects against these criteria, traditional project managers imposed rigid formal controls, often associated with linear processes (Terblanche & Nkukwana, 2017). Figure 2.1 is a graphical representation of the iron triangle in the traditional project management methodology (Atlassian, 2022).

Figure 2.1

Graphical Representation of the Iron Triangle in Traditional Project



As noted in Figure 2.1, resources and time were estimated, and scope was fixed in a traditional project management paradigm. Traditional project managers learned to work within these boundary conditions. Chin (2004) emphasized that the use of formal controls in traditional project management aligned well with large and slow-moving projects.

Controlling Project Activities

Project activities were tracked on the project schedule, which was controlled by the project manager (Project Management Institute, 2021). Project managers controlled the schedule by monitoring the status of project activities and coordinating any necessary changes to the schedule to deliver the desired results (Project Management Institute, 2021). Another approach used by traditional project managers to control project activities was through documentation (Chin, 2004). In traditional project management, the completeness, correctness, and coordination of project documentation provided the basic premise of the quality of the results (Tuhacek & Svoboda, 2019). Using project documentation to justify quality of results elevated risk of the project manager becoming consumed with documenting changes, which provided the optics of serving a purely administrative function, thus undermining the project managers' relevance (Chin, 2004). Although there were similarities between the traditional project manager and the agile project manager roles, these similarities were often a source of confusion (Hoda et al., 2008).

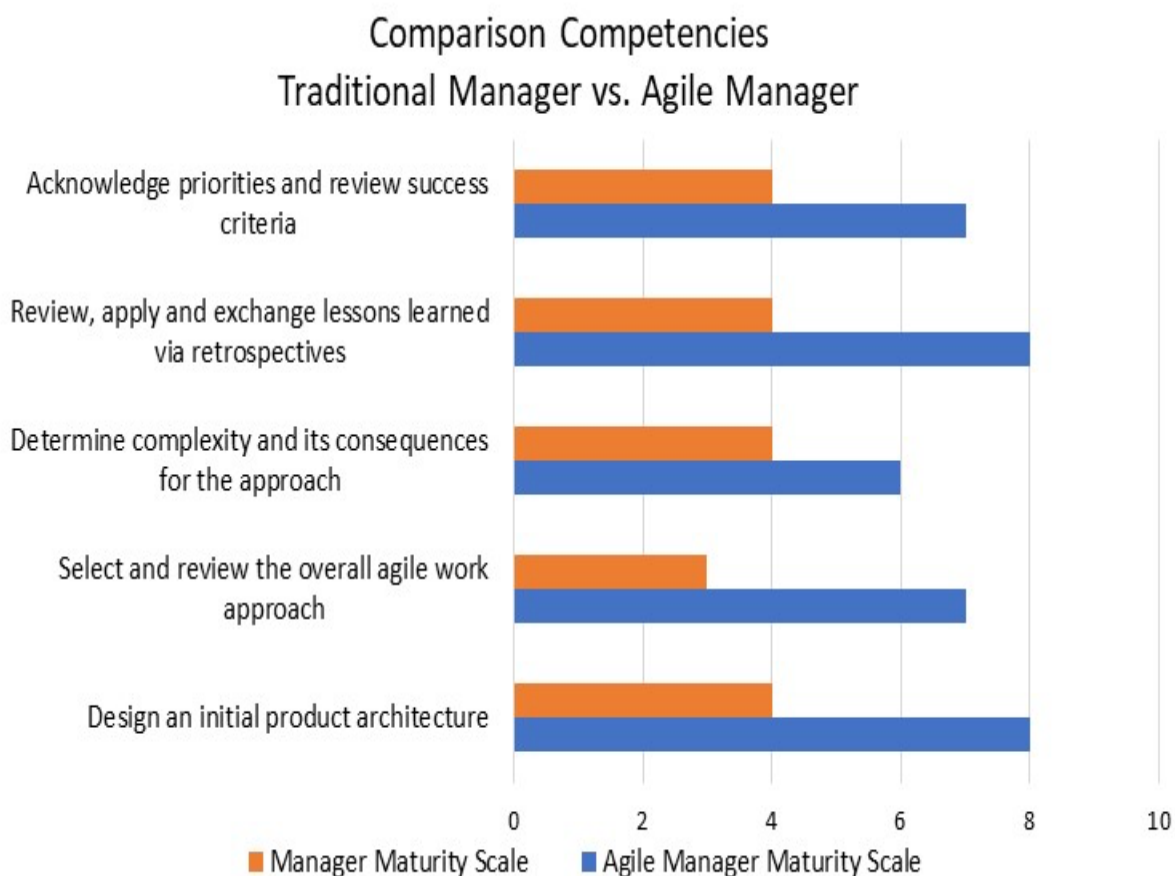
Transitioning to the Role of an Agile Project Manager

There were key differences between the traditional project manager and the agile project manager roles with respect to competencies. The change in paradigms from a traditional project management method to an agile methodology initiated the need for project managers to advance

their competencies (Bushuyev et al., 2021). Figure 2.2 depicts a comparison of the traditional and agile manager competencies (Bushuyev et al., 2021).

Figure 2.2

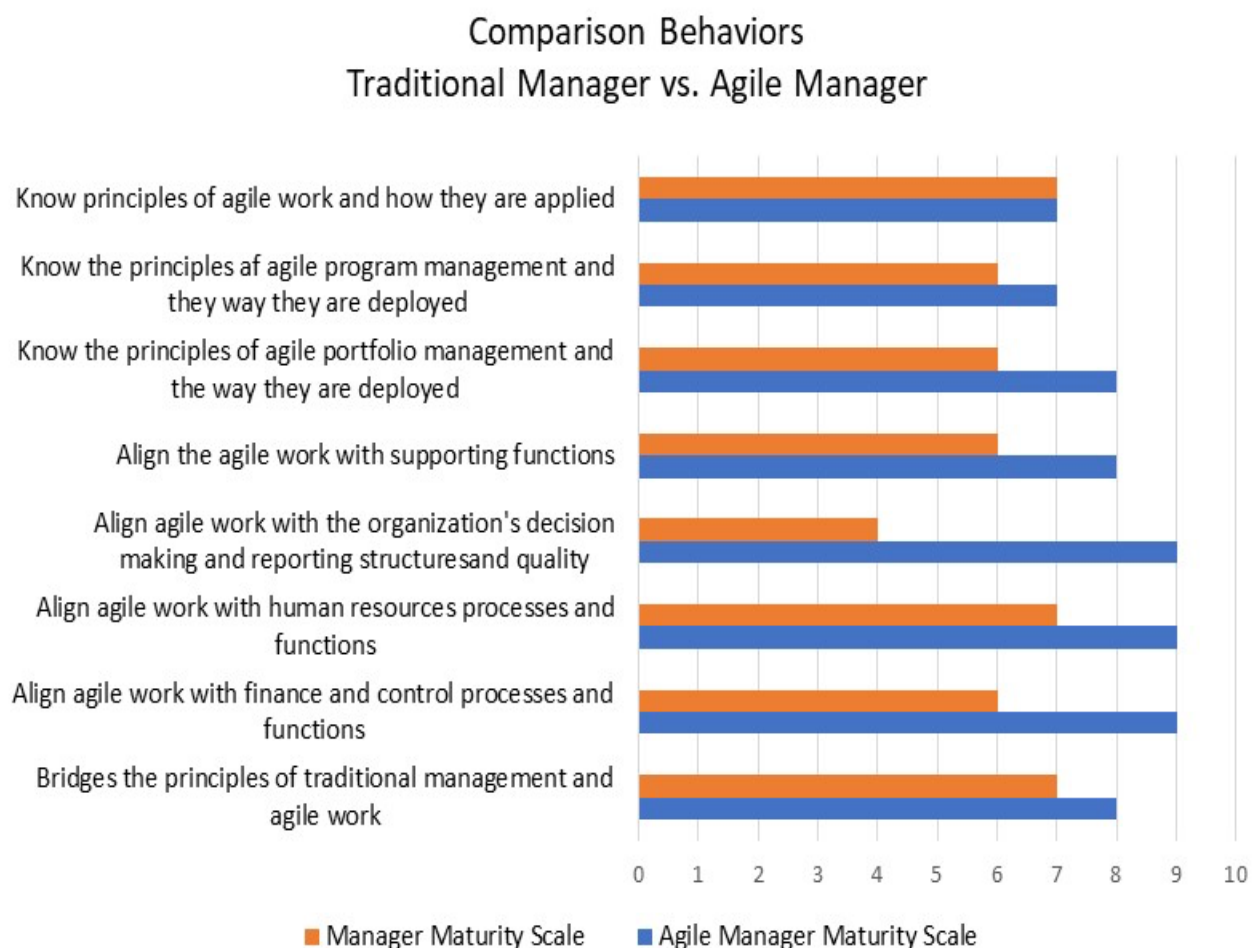
Comparison Competencies Between the Traditional Manager and Agile Manager



Behaviors of project managers are significant factors in driving change in an agile transformation (Bushuyev et al., 2021). Bushuyev et al. (2021) described a divergence between the behaviors of traditional project managers and agile project managers. These behavioral differences are indicated in Figure 2.3.

Figure 2.3

Comparison Behaviors Between the Traditional Manager and Agile Manager



A review of the literature noted that the shift in competencies and behaviors of traditional project managers adopting agile project management methodologies included elements of organizational change, which exuded emotions in individuals (Kataria et al., 2018). The project managers' emotions that resulted from the need to navigate a change in competencies and behaviors represented a critical factor in their lived experience when transitioning from traditional project management to agile project management methodologies.

Organizational Change

Schweiger et al. (2018) described organizational change as a process that motivates organizations to transcend from one state of being to an alternate state of being. The transition from the heavily process-centric approach used in traditional project management to the short, iterative, test-driven, and people-centric development approach found in agile project management was considered extremely important for project managers (Chandra Misra et al., 2010). In adopting agile methodologies, project managers experienced changes in work culture, management style, and work processes (Chandra Misra et al., 2010). The literature highlighted coaching and facilitation as two essential behaviors of agile project managers.

Coaching

The agile project manager was responsible for educating and directing the team to ensure the agile method was understood and used (Taylor, 2016). These behaviors aligned to that of a coach or mentor. Terblanche and Nkukwana (2017) stated that teams express a need for project managers to act more like a coach and facilitator, and that agile project management was about motivating people to work together. Coaching began with the project manager being more involved with the project team, which was challenging for project managers who lacked knowledge on the relevant aspects of the project (Terblanche & Nkukwana, 2017).

Facilitation

Agile project managers coordinated individuals on the project team rather than directing them (Nerur et al. 2005). Facilitation played a key role in the knowledge sharing and cooperation among project managers and team members, which benefited project success (Srikantaiah et al. 2010). Where the traditional project manager relied on controlling behaviors, the agile project manager required a more facilitative approach (Taylor, 2016). In guiding the team through the

agile process and team ceremonies, agile project managers were expected to facilitate and orchestrate, rather than control and dictate (Taylor, 2016).

Understanding the Behavior of Project Managers in an Agile Transformation

Change management, leadership, complex adaptive systems, and identity control were several themes that appeared throughout the literature. Subthemes identified when conducting this study were learning, innovation, and adaptability. Through these themes, this study highlighted the changes required of project managers in an agile transformation. Agile project managers were required to learn new behaviors and competencies (Bushuyev et al., 2021). Project managers also served as organizational change agents in an agile transformation by leading teams through the transition (Pádár et al., 2017). Leveraging projects to drive organizational change was not a simple feat. Lehmann (2010) noted that integrating change management into the project management function was a challenge for organizations and project managers.

Change Management

Hornstein (2015) stated that the integration of project management and change management was a necessity. AlManei et al. (2018) defined change as a behavioral shift of the whole organization from one being to another. Change management theory underscored the importance of fostering trust, which was a core responsibility of project managers in leading transformational change (Oborski, 2019). Early change management models such as Kotter's (1997) eight-steps reinforced the notion that before you can initiate change in the organization, you must transform behaviors and help others understand how the new behaviors relate to improvements. As facilitators, project managers served in a leadership capacity in an organization's transformation to agile project management (Pedersen, 2013). Change

management facilitated the transition of individuals, teams, or the entire organization by guiding them through the difficulties of transitioning from the current state to the intended future state (AlManei et al., 2018).

Kotter's (2012) research on group dynamics resulted in an actionable eight-step model for implementing transformational change: establish a sense of urgency; form a powerful coalition; create a vision; communicate the vision; empower others to act on the vision; plan for and create short-term wins; consolidate improvements; institutionalize new approaches. Kotter (2012) argued that as the rate of change and complexity increases in the environment, leaders must create and sustain changes required to compete in the current competitive world. Change was uncertain and often difficult. Both Lewin and Kotter's research on group dynamics in complex systems have provided insightful models in which to effect change in organizations (Rose, 2013). To effect change, project managers influenced the behavior of team members through trusting relationships (Oborski, 2019). Trust facilitated a culture of goodwill and positive interaction (Pedersen, 2013).

Trust

Establishing trust with followers allowed leaders to gain buy-in to support the change (Kotter, 2011). Pedersen (2013) stated that it is essential for project managers to develop trust with team members. Trust supported a healthy team culture by nurturing optimal performance and followers' sense of responsibility (Pedersen, 2013). A lack of trust between leaders and followers served as a barrier to gaining the support of followers (Kotter, 2011). To motivate followers, the project manager used transparency to establish trust by providing participants the ability to visualize and sense a connection between their own needs and the goals of the broader organization (Kotter, 2012). Agile project managers also fostered trust by empowering teams and

sharing decisions. Thus, the theme of change management in this study explored the connection between the project managers' leadership style and their ability to influence behaviors that effect transformational change to agile project management methodologies.

Leading in Complex Systems

Horner (1997) stated that leadership is influenced by an individual's traits, qualities, and behaviors, and defined leadership theory as the study of the process by which teams and leaders integrate efforts allowing responsiveness to change. The study of leadership extended cultures and theoretical beliefs and required an understanding of the changing environment in which an organization operates (Horner, 1997). As a facilitator and organizational change agent, project managers were intimately involved in leading an agile change initiative (Pedersen, 2013). A critical distinction was that leading and managing were two unique activities in driving change (Kotter, 1997). Kotter (1997) claimed that successful change requires a process that is 20% to 30% management, and 70% to 80% leadership. The following section explores leadership styles: situational, servant, facilitative, enabling, and complexity leadership. These leadership approaches surfaced in the literature as central behaviors exhibited by project managers in the transformation to agile project management.

Robbins and Judge (2019) stated that leadership behavior was comprised of two primary constructs, the first of which focused on initiating structure, and the second involved consideration for people. Project managers used these skills to fulfill a dual role that includes a technical and a sociocultural component (Neuhauser, 2007). Project managers used their technical expertise to plan and execute objectives. In addition, project managers learned to understand the needs of team members, which demonstrated consideration for people (Neuhauser, 2007). Aij and Teunissen (2017) stated that in an improvement culture, "task

identity, feedback, autonomy, belief in improvement, and honesty were the core attributes of leaders who successfully implemented an improvement culture” (p. 5).

Situational Leadership

Situational leadership required the leader to adjust their approach based on the details of a situation, and often required a restructuring of the situation, the perceptions, and expectations of team members (McLaurin, 2006). In situational leadership, project managers established a balance between initiating structure and consideration, as there was no one style of leadership to influence project team members (Jacques et al., 2008; Kerzner, 2009; McLaurin, 2006; Prabhakar, 2005). Choosing the best leadership style for a situation required assessing the current state of a team’s agility capabilities, which were key factors in planning and organizing an agile change implementation (Macheridis, 2018).

Servant Leadership

The Agile Business Consortium (2017) claimed that mentoring future leaders in the practices of servant leadership supported the growth and sustainability of an agile culture. Servant leadership focused not on control, but on relationships and empowering others (Bass & Bass, 2008). Merriam and Tisdell (2016) stated that servant leaders focused on establishing trust with teams through communication and relationship building. Servant leadership also contributed to team learning (Leybourne, 2009).

Shastri et al. (2021) described the agile project manager as a leader who served the team by promoting agile values, facilitating the team’s functioning, and removing obstacles. Agile project managers demonstrated servant leadership through facilitating, mentoring, negotiating, process adapting, coordinating, and protecting the team (Shastri et al., 2021). Holtzhausen and de Klerk’s (2018) research demonstrated that agile project managers use servant leadership

extensively, and that there was a moderately strong correlation between the agile project managers' use of servant leadership and team effectiveness. Servant leadership required facilitation skills (Sutherland & Schwaber, 2017). Agile project managers demonstrated a central idea in facilitative leadership; the requirement that leaders spend time doing the work and favor personal interactions over other forms of communication (Gallos & Schein, 2006). A closer look at facilitative leadership was warranted given its prominence in servant leadership.

Facilitative Leadership

Facilitative leadership highlighted two core values: teams used authority and responsibility to make informed choices; teams developed an internal commitment to team members (Gallos & Schein, 2006). Facilitative leadership involves a leader establishing a balance between group process and group structure (Gallos & Schein, 2006). Agile relied on self-managed teams that shared decision-making (Sutherland & Schwaber, 2017). Levine (2019) stated that a leader was responsible to assist the team in facilitating fact-based decisions, gaining broad input, and ensuring alignment on team outcomes. Leaders were required to accomplish these goals efficiently, while also respecting the time of team members (Levine, 2019). Facilitative leadership was critical to the agile project manager who served the primary role of team facilitator, guiding individual teams on the agile values, principles, and process (Virag, 2021).

Effective leadership in complex systems was not limited to traditional leadership styles. Change management and leadership theory provided a fundamental ingredient for change, namely that sustaining change required the participation of those affected by the proposed changes (Wojciechowski et al., 2016). Agile project management methods supported behaviors

that created and initiated change, including accountability, communication, engagement, and transparency (Wojciechowski et al., 2016).

Enabling Leadership

Dynamic environments required rapid production of knowledge and innovation to survive (Koch & Leitner, 2008; Uhl-Bien et al., 2007). Enabling leadership is a key component of complexity leadership (Backlander, 2019; Uhl-Bien & Marion, 2007). Complexity leadership emphasized the significance of leaders practicing enabling leadership to influence processes that drive adaptive outcomes (Uhl-Bien & Marion, 2007). Enabling leadership sought to solve a key challenge of management; managers needed to learn to balance team structure and autonomy to drive outcomes (Hill et al., 2017). Through enabling leadership, agile project managers used dynamics inherent in complex adaptive systems to drive organizational learning, creativity, and adaptive capabilities (Backlander, 2019). Baskin (2002) noted that enabling leadership has the ability to increase staff engagement so that people in the organization remain connected. Baskin (2002) stated that the challenge to enabling others to lead was that traditional managers have been trained to think operationally, not abstractly, which led to a reliance on command-and-control tactics. Because enabling leadership was central to complexity leadership, additional insight into complexity leadership was warranted (Uhl-Bien & Marion, 2007).

Complexity Leadership

The complexity leadership model sought to leverage the dynamic capabilities of complex systems to enable the conditions that foster creative problem solving, adaptability, and learning in organizations (Uhl-Bien & Marion, 2007; Uhl-Bien et al., 2007). Enabling leaders did not attempt to stabilize the organization or try to specify a desired future state (Plowman et al., 2007). In complex systems, effective leaders encourage innovation and assist followers in

interpreting change rather than directing change (Plowman et al., 2007). Effective leaders in complex systems help followers understand the situation and adapt so they can solve their own problems and achieve greatness (Plowman et al., 2007).

Complex Adaptive Systems

Complex adaptive systems are defined as networks of interaction between interdependent agents who are bound by a common goal (Uhl-Bien et al., 2007). In the mid 1990's, Hedlund's (1994) research found similarities between complex adaptive systems and organizational structures used to manage the flow of knowledge between individuals and departments. Complex adaptive systems developed naturally in social systems and were capable of learning and adapting quickly to solve problems creatively (Carly & Hill, 2001). When adapting to uncertainty, leaders considered the interdependencies among the system's components (Marle, 2020). Thus, project complexity influenced how a project is managed.

A highly complex project required initiating new team behaviors and organizational structures that were flexible and adaptable (De Toni & Pessot, 2020). This point was supported by Marle (2020) who stated, "the point where project complexity has overwhelmed the capacity of managing has been one of the reasons of emergence of alternative management principles, like agility, which favored dynamic, iterative, flexible, incremental, and user-centric development" (p. 2). In addition, a study by Maqsoom et al. (2020) examined the significance of complexity risk on the relationship between control modes and project performance. Findings of this study demonstrated that decentralized decision making and sharing control assisted organizations in meeting targeted performance goals (Maqsoom et al., 2020).

Complexity theory offered insight into recognizing patterns in the relationships of team members (Rapuno & Valickas, 2021). Project managers were leaders of complex systems who

collaborated with team members, and influenced interaction patterns to drive learning (Klijn, 2008). The agile project manager facilitated the team's capacity to learn from their collective experiences, and championed the importance of experimentation in the learning process (Cooke-Davies et al., 2007; Stacey, 2001; Thomke, 2003). Experimentation allowed individuals to learn from success and failure, adapt to change, and create new products, services, and businesses (Thomke, 2003).

Identity Control

An open question in understanding the lived experience of project managers in an agile transformation is whether the process of identifying with the changes influences a project manager's behaviors and satisfaction. Agile project managers may be forced to relinquish control of decision-making to the team, which may introduce uncertainty (Johnson, 2016). Johnson (2016) conveyed that the uncertainty required sharing control of the project plan and decision-making with team members, which may cause project managers to exude emotions and actions that are counterproductive. Excessive change forced on individuals may increase anxiety and stress (Johnson, 2016). The change to agile methodologies may influence anxiety with respect to how project managers identify with the new role of agile project manager. This idea was supported by Maddrell (2016) who stated that anxiety is associated with the process of relinquishing a past identity and developing a new identity. Elstak et al. (2015) extended this point by claiming that effective change leadership may challenge participants to not only formulate a new identity that reflects the change in the present, but also sustain the new identity into the future.

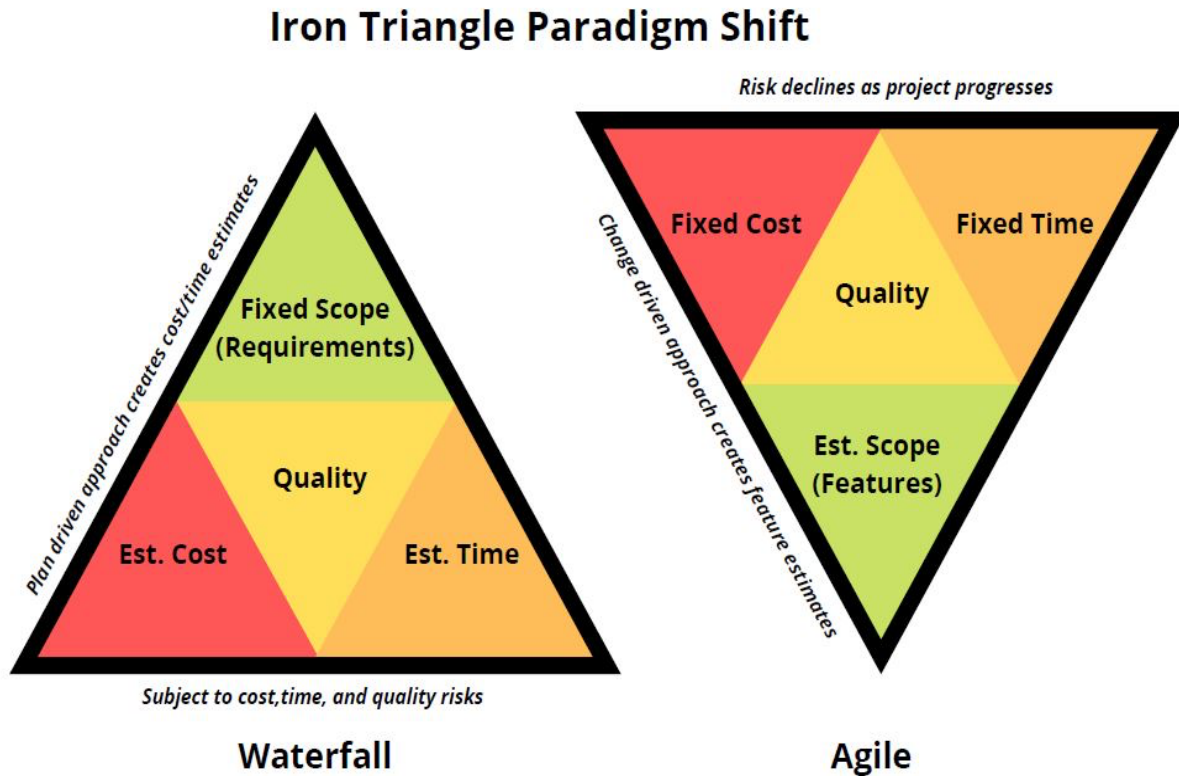
Challenges Faced by Project Managers when Adopting Agile Methodologies

In complex adaptive systems, leaders may foster conditions that allow the new behaviors and direction of the organization to emerge through continuous, dynamic interaction (Uhl-Bien & Marion, 2007). A significant challenge for project managers adopting agile methodologies is the ability and willingness to learn new skills and behaviors (Walker & Lloyd-Walker, 2019). Agile project managers must commit to lifelong learning to retain relevant skills and knowledge to complement the new environment (Walker & Lloyd-Walker, 2019). Backlander (2019) stated that agile project managers lead not through autocratic control but by enabling others to balance structure and flexibility, which can contribute to a team's outcomes. In contrast, traditional project managers often prefer to lead by initiating structure (Wright, 2012). The shift to agile project management may be problematic for project managers who are used to controlling a highly structured plan-driven process (Mayfield, 2010).

A review of the literature identified the concept of a paradigm shift in an agile transformation. Traditional project managers may find this paradigm shift challenging in their transition to agile methodologies (Visual Paradigm, 2022; Woodman, 2022). A visual representation of this paradigm shift is shown in Figure 2.4 (Visual Paradigm, 2022; Woodman, 2022).

Figure 2.4

Paradigm Shift Between Traditional and Agile Project Management



Where requirements scope is fixed in traditional project management, scope is flexible in agile project management, yet cost and time are fixed (Visual Paradigm, 2022). In traditional project management, the project manager is responsible for accurately estimating cost and time based upon a fixed-scope project. This paradigm shift represents a new way of working, which may present challenges for project managers. The Iron Triangle is insufficient as a means of measuring project success under agile methodologies because it ignores other valuable project success factors such as the effects on stakeholders, satisfaction, and learning (Visual Paradigm, 2022).

Project managers may experience uncertainty and tension in transitioning to agile project management because they are held responsible for project outcomes, yet they delegate decision-making to the team (Moe et al., 2009). Taylor (2016) stated that agile project managers may experience trouble helping teams reach an empowered state due to tension in the system. One example of tension in an agile system is the introduction of new online tools for teams to collaborate and visualize work. Bhatnagar and Grosse (2019) stated that the digitization of work may create a disruptive change to the routines of most employees. Another example of tension in an agile system is rooted in its team structure and composition (Wohllebe & Götz 2021). While there are advantages to the agile cross-functional team structure, such as reduced dependencies on other teams, functional learning in cross-functional teams may be a challenge (Wohllebe & Götz 2021).

Change may be difficult for traditional project managers transitioning to an agile methodology. Kotter (2013) stated that effective leaders demonstrate a willingness and ability to adapt to change. Organizational change can surface in a variety of ways and include broad-based transformational change, or come in the form of smaller, incremental changes to work processes or roles (Kotter, 2013). Whether change impacts the larger organization or select individuals, such as project managers, the process of change may be difficult. The uncertainty associated with change includes a human dynamic defined by a sense of loss (Castillo et al., 2018). Kataria et al. (2018) stated that the extent of organizational change did not reduce its emotional impact on those affected by the change. Any change can generate a human emotion (Kataria et al., 2018).

Professional Development Available to Project Managers Adopting Agile Methodologies

At the turn of the century, there was limited training available for project managers adopting agile project management, and often the training that was available created tension,

especially for project managers who were used to operating in a control culture (Taylor, 2016) Agile project management training has evolved over the past decade, with a variety of options available to project managers for professional development to support a transition to agile project management (Yang, 2019). Agile project management training was offered through a variety of professional learning and development organizations (Yang, 2019). Individuals may perceive a variety of barriers to adopting agile. Ghobadi and Mathiassen (2016) stated that project managers may place an emphasis on project setting barriers, while team members may emphasize barriers related to communication, project organization, and team capabilities. Agile learning and development professionals can close this communication gap by creating a shared understanding of the knowledge-sharing barriers among team members living through an agile transformation (Ghobadi & Mathiassen, 2016).

Summary

This literature review summarized existing scholarly content related to the lived experience and leadership of project managers when adopting the agile mindset during a change from traditional project management to agile project management methodologies. The literature reviewed highlighted the relationship between transformational change and the behaviors, leadership style, and identity of project managers under the traditional project management and agile project management methodologies. Change theory revealed the significance of project managers nurturing relationships and developing trust with team members to drive and sustain change (Kotter, 2011). Leadership theory uncovered the dual role of project managers in balancing control and consideration for people (Robbins & Judge, 2019). The speed of technological advancements and rise of the knowledge economy may warrant a change to the project manager's traditional leadership approach. The literature noted the prevalence of agile

project managers using servant leadership extensively (Holtzhausen & de Klerk, 2018). Project managers need to commit to lifelong learning to retain relevant skills and knowledge to complement the new system (Walker & Lloyd-Walker, 2019).

In an agile transformation, the project manager may serve as the primary facilitator for change (Leybourne, 2009). Extreme levels of managerial control, often found in traditional project management, may falter in complex environments (Maqsoom et al., 2020). As facilitators in complex systems, project managers fulfill a critical role in team learning and development (Klijn, 2008). Complex systems theory and the complexity leadership model revealed the requirement that agile project managers lead not thorough autocratic control but by empowering and enabling others to balance structure and flexibility (Backlander, 2019; Devereux et al., 2020; Uhl-Bien & Marion, 2007).

The identity control model highlighted the idea that change drives human emotions (Johnson, 2016; Luhrmann & Eberl, 2007). Project managers require a conscious effort and willingness to change as they let go of old habits and identities to develop a new sense of self (Maddrell, 2016). The literature provided an understanding of the changes traditional project managers experience when adopting agile methodologies. Traditional project managers may replace old habits of controlling team activities with servant, enabling, and facilitative leadership associated with leading in complex systems. The complexity leadership model originated from the study of complex systems and emphasized the leaders' focus on leveraging dynamic interactions to develop emergent outcomes, including adaptability, learning, and innovation (Uhl-Bien & Marion, 2007; 2009). A thorough understanding of leadership in complex systems was significant for this study. These findings can assist project managers in responding to changes associated with a transition to agile methodologies.

CHAPTER 3: METHODOLOGY

Rising complexity in work structures and technology highlight the importance of business agility and change readiness in achieving objectives and solving problems (Rozak et al., 2021). In a complex environment, agile learning strategies are critical to survival (Armanious & Padgett, 2021). Fagarasan et al. (2021) stated that agile project management methods are now three times more prevalent compared to traditional project management methods. Turetken et al. (2017) noted that the popularity of agile project management methodologies has continued to increase. Organizations were cognizant that business agility was critical to survival and have shifted focus to learning how to scale agile practices (Turetken et al., 2017). Organizational leaders increasingly use projects to drive performance and long-term value creation (Nieto-Rodriguez, 2021). Projects facilitate more frequent organizational transformations, new product innovation, and the adoption of innovative technologies (Nieto-Rodriguez, 2021). As an organizational leader, project managers require effective skills to manage change, foster team learning, and increase business agility (Bushuyev et al., 2021). Project managers may find this change problematic if they are unable to adopt the agile mindset to lead in complex systems (Rozak et al., 2021).

The purpose of this phenomenological study was to understand the lived experience and leadership approach of project managers who have transitioned from a traditional project management methodology to an agile project management methodology. The rationale for this study was that project managers could improve the likelihood of success in an agile transformation by gaining a deeper understanding of organizational change and leadership in

complex systems. This study sought insight into two research questions. The research questions were:

Research Question 1: How do project managers who have transitioned from a traditional project management methodology to an agile project management methodology describe their lived experience?

Research Question 2: How do project managers who have transitioned from a traditional project management methodology to an agile project management methodology describe their leadership approach before, during and after the transition?

The study investigated the project managers' experience in leveraging interaction dynamics among network agents to drive learning, innovation, and adaptability. Bushuyev et al. (2021) stated that agile project managers utilize leadership behaviors that differ from those of traditional project managers. Zheng and Muir (2015) emphasized that the development of a leader's identity is iterative and involves multiple identity facets that evolve with the individual's understanding of leadership. The study sought to close a gap in the literature on the emotional impact and learning demands placed on project managers during the transition to agile methodologies. The identity control model and complexity leadership model served as a lens to understand the emotions and perceptions of project managers when transitioning to agile methodologies (Luhmann & Eberl, 2007; Uhl-Bien & Marion, 2007).

Site Information and Demographics

This study focused on project managers at six Fortune 1000 companies. The principal investigator identified the participating sites based upon public knowledge concerning the organizations' transition to agile project management methodologies. The companies operated on a global scale. The project management organizations of the study's participants engaged in

software and product development projects. The six sites included one privately held corporation and five public companies.

The North American Industry Classification System (NAICS) represents the standard used by federal statistical agencies in classifying business establishments for the purpose of collecting, analyzing, and publishing statistical data related to the U.S. business economy (NAICS, 2022). Three of the five public companies that employed the study's participants operated in the commercial banking industry classification (as defined by NAICS [2022]). The pseudonyms CBWF, CBSS, and CBCO were used in the study to refer to these three public commercial banking companies. A fourth public company that employed participants in this study was categorized in the electronic shopping and mail-order houses industry classification (as defined by NAICS [2022]). The pseudonym ESMA was used to refer to this public company. The fifth and remaining public company that employed this study's participants operated in the air conditioning and warm air heating equipment and commercial and industrial refrigeration equipment manufacturing industry classification (as defined by NAICS [2022]). The study used the pseudonym ACCG to refer to this public company. The sole privately held corporation that employed this study's participants was classified in the miscellaneous financial investment activities industry (as defined by NAICS, [2022]). The study used the pseudonym MFFI to refer to this private company.

Although the participants employed at these sites represented three unique industry classifications, all the project managers that participated in this study focused on software and product development projects at their respective sites. This factor was not a surprise given that agile project management originated in the software and product development industries as a means for engineers to respond rapidly to changes in their environment (Cockburn, 2001). In

addition, gaining the perspective of project managers' experiences that were employed at multiple sites and industries provided a broader perspective of the project managers' experience. Limiting research to a single institution could introduce cultural biases as a factor in the project managers' experiences.

Participants and Sampling Method

The sampling approach for this study targeted project managers at Fortune-1000 companies who transitioned to agile project management within the past six years. The recruitment method used in this study involved a preliminary recruitment email (see Appendix A) to identify potential participants. Each site had a range of 12 to 20 potential participants. Prior to selecting project managers for semistructured interviews, the principal investigator ensured that participants had practical experience in traditional project management prior to adopting agile project management. Participants were asked to respond to the recruitment email and verify their traditional project management experience in their email response. Excluding project managers who did not possess experience using traditional project management methodologies before adopting agile project management was significant to strengthen the study's integrity because the study focused specifically on the lived experience of project managers transitioning from traditional project management methodologies to agile methodologies. The recruitment email also provided the criteria that required that prospective participants in the study transitioned to agile methodologies within the past six years. All participants were over 18 years of age. This stipulation was included in the Participant Information Sheet found in Appendix B which was emailed to all prospective participants. The currency of the participants' transformation to agile was a factor for relevancy of the study's results.

This study used a purposive sampling method, which is a form of nonprobability sampling (Burns, 2016). Nonprobability sampling is an appropriate methodology when the target population under review shares common traits (Statistics Canada, 2013). Participants in this study shared the experience of living through a transformation from traditional project management to agile project management methodologies. Purposive sampling was suitable for this study because the data collected from participants was generalizable to project managers who shared the experience of transitioning to agile methodologies (Etikan et al., 2016). Lester (1999) stated that when research includes multiple participants, the strength of inference from analysis of the data increases rapidly as themes recur across the participants.

The sampling method of this study was rooted in Ellis's (2007) approach to qualitative research and emphasized seeking the greater good of the research by extending benefits beyond the researcher. By participating in the study, project managers had the opportunity to reflect on their agile transformation experience so they could become more effective change agents. The study's findings may benefit project managers transitioning or considering a transition to agile methodologies.

Researchers have a responsibility to inform participants of risk factors before gaining their consent (Ellis, 2007). Tracy (2010) supported this view by emphasizing credibility and sincerity in qualitative research. The sampling approach for this study adhered to Creswell and Creswell's (2018) guidance to select a sample size that reflects the study's design. Patten and Newhart (2018) stated that the researchers' ability to generalize arguments to a population becomes limited when bias influences participant selection. The study's phenomenological design warranted selecting a sample range of three to 10 participants (Creswell & Creswell, 2018).

Instrumentation and Data Collection

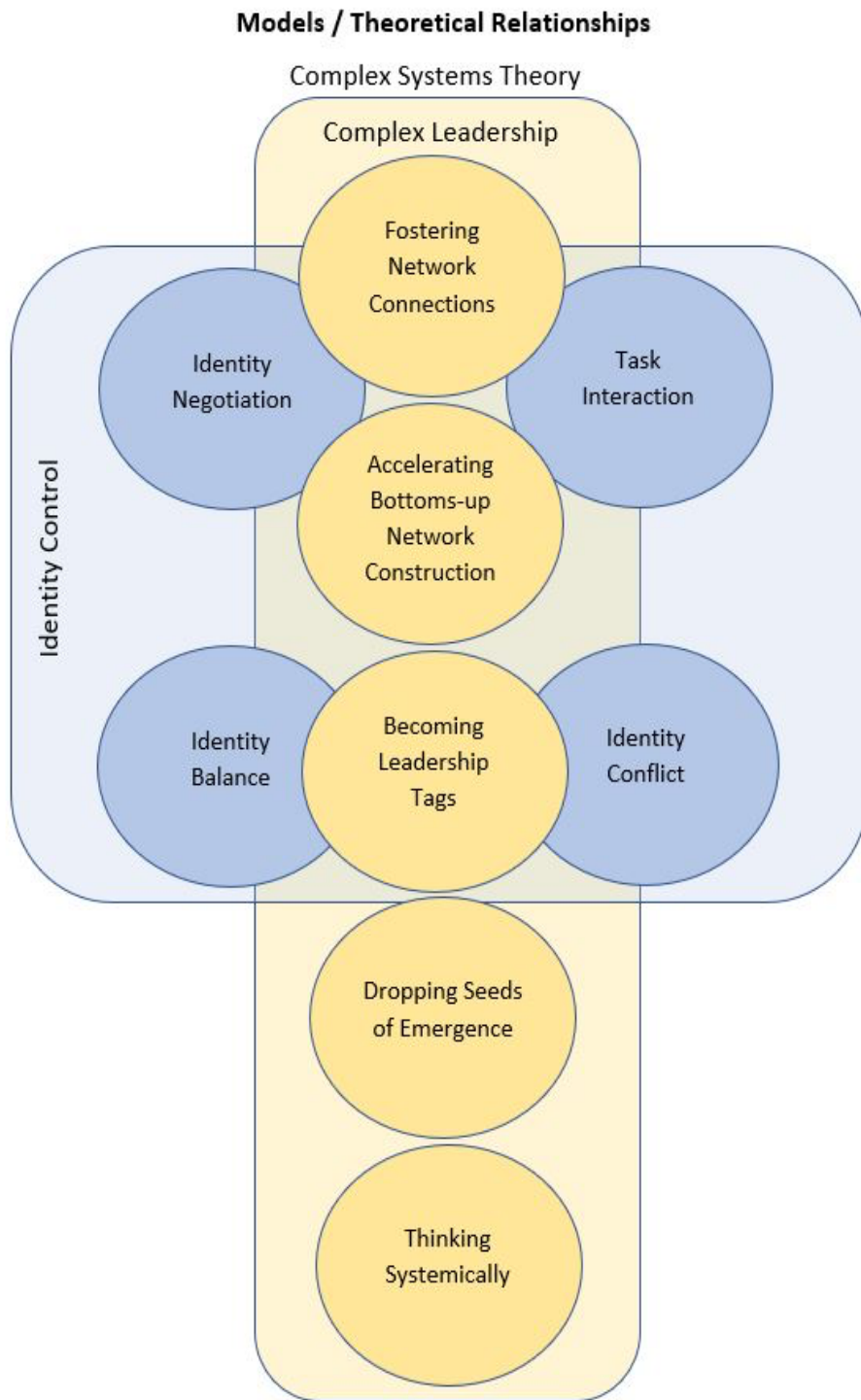
The data collection instrument used in this study included individual qualitative interviews using a semistructured format. The participant interviews were conducted using Zoom in a private setting to ensure others could not hear the conversation. The interviews were 30 minutes in length. Video and audio of the interviews were recorded via Zoom. Participants had the option to not turn on their camera. Participants were permitted to skip any of the questions or end the interview at any time. The principal investigator designed semistructured interview questions as open-ended and refrained from asking leading questions. Participants received deidentified audio transcripts of the interviews to ensure that responses were accurate. All data files were password protected and stored on the principal investigator's personal computer, accessible only by the principal investigator.

The interview questions were designed to align with the study's research questions, themes, and framework. The interviews adhered to Castillo-Montoya's (2016) protocol that includes four distinct groups of questions: introductory questions to acclimate the participants to the study; transition questions that connect the study's purpose to the research questions; key questions that align with the study's research questions; and closing questions to conclude the interview and highlight next steps.

The study's framework leveraged multiple theoretical models to view the lived experience and leadership of project managers in an agile transformation. The study of complex systems, complexity leadership, and identity control were used in the study to gain an understanding of the project managers' perceptions and emotions during the agile transformation. A graphical representation of the relationship among the models and theories used in the study is shown in Figure 3.1.

Figure 3.1

Relationship Between Models and Theories Used in the Study



How the study's participants identified with the change to agile work structures that rely on autonomous teams and shared decision-making was viewed through the lens of the identity control model (Luhmann & Eberl, 2007). Interview questions were designed by the principal investigator to align with the four phases of identity development during a transformational change event as described by Luhmann and Eberl (2007). The four phases were:

- identity negotiation
- identity balance
- task interaction
- identity conflict

The complexity leadership model served as the lens through which to view the project managers' leadership approach during the transition to agile methodologies (Uhl-Bien & Marion, 2007). The principal investigator designed specific interview questions to understand the significance of the five leadership behaviors of complex leadership as they related to the project manager's lived experience in a transition to agile methodologies. The five leadership behaviors of complex leadership were:

- fostering network connections
- accelerating bottom-up network construction
- becoming leadership tags
- dropping seeds of emergence
- thinking systemically (Uhl-Bien & Marion, 2007)

Structuring interview questions through the lens of the identity control model and the complexity leadership model facilitated an understanding of the lived experience and leadership approach of project managers transitioning to agile methodologies (Luhmann & Eberl, 2007;

Uhl-Bien & Marion, 2007). This approach reinforced alignment with the study's core themes: change management, leadership, complex adaptive systems, and identity control.

Data Analysis

The study applied a multi-stage process of data gathering and analysis. Once the process of collecting responses to participant interview questions was complete, the principal investigator established commonalities between the participant interviews. The principal investigator used an open coding approach to initiate the coding process. Open coding involved conventional content analysis coupled with directed content analysis to identify incidents with commonalities (Ford, 2014). The data gathered from the participant interviews was analyzed in accordance with the Van Kaam method as described by Moustakas (1994). The Van Kaam method used in the study included several steps to gain an understanding of the perceptions and emotions of project managers during their transition to agile methodologies. For each interview transcript, the data analysis process utilized eight steps. These steps were:

1. Analyze each participant response and note any expressions applicable to the study's phenomena, then organize these expressions into groups.
2. Assess each expression to determine if it is relevant in understanding the participants' experience. Label these expressions and include them in the study's core set of expressions in the lived experience of the participant. These core expressions are known as invariant constituents.
3. Group the invariant constituents into themes.
4. Validate the themes and underlying invariant constituents against the interview transcript to ensure accuracy. Eliminate any outliers.

5. Describe the resulting themes and experiences using the participants' actual language. This step involves developing textural descriptions for each of the themes and experiences gathered from the participant interviews.
6. Generate individual structural descriptions of the participants' experience to determine possible reasons for the experience. Reasons may include the participants' feelings or perceptions associated with the experience.
7. Create a textural-structural description for each participant. The textural-structural description is a composite of the experience, themes, invariant constituents, feelings, and meanings.
8. Combine the individual textural-structural descriptions into a composite for the broader group of participants in the study.

The principal investigator applied the eight procedural steps in a logical manner. Once the analysis of each interview transcript was complete, previously analyzed transcripts were reassessed to define both primary and secondary themes in the data. Themes attributed to a small number of transcripts were reviewed for relevancy to the broader study. Textual descriptions for each transcript were generated. The textural descriptions included the actual language of each participant that related to the core themes. A concept map that graphically depicts the themes attributable to each participant was developed. Textural descriptions were added to each concept map to gather the participants' thoughts and emotions related to each of the themes. The participant descriptions were then summarized into a composite concept map for the study. The principal investigator leveraged the composite concept map to provide a comprehensive view of the study's results.

Limitations, Delimitations, and Ethical Issues

Limitations

One limitation of this study was the relatively limited number of studies concerning the experience of project managers in an agile transformation. A second limitation of this study was the small sample size and subjective approach to data collection. Although a small sample size is common in qualitative research, it represented a potential limitation for this study. A third limitation of this study was the limited scope of topical domains within the available literature on agile transformations. The literature focused primarily on the business technology domain, which could present a potential limiting factor.

Delimitations

A delimiting factor for this study was attributed to the knowledge and experience of the participating project managers. Only project managers with prior experience using traditional project management methods who later migrated to agile methodologies were included in the scope of the research. A second delimiting factor was related to the scope of the study. The study focused specifically on the lived experience and leadership of project managers in an agile transformation. Although the scope of the study did not include an assessment of the participating sites' readiness to initiate an agile transformation, the study acknowledged the influence this factor may have on the project managers' lived experience when transitioning to agile methodologies.

Ethical Issues

The author acknowledged his prior experience as both a traditional project manager and agile coach. The author's prior experience had the benefit of placing the principal investigator in the frame of the research as an interested party. However, acknowledging the potential of

researcher bias was an important consideration. The principal investigator conveyed to participants that the goal of the study was to understand their lived experience in an agile transformation. The study's intent was not a critical assessment of a company nor any employees or associates of a company.

Trustworthiness

Lincoln and Guba (1985) stated that the trustworthiness of a qualitative study rests on five criteria. These criteria are:

1. **Credibility:** confidence in the “trust” of the findings.
2. **Transferability:** showing that the findings have applicability in other contexts.
3. **Dependability:** showing that the findings are consistent and could be repeated.
4. **Confirmability:** a degree of neutrality or the extent to which the findings of a study is shaped by the respondents and not researcher bias, motivation, or interest.
5. **Authenticity:** extent to which researchers fairly and completely demonstrate a range of different realities and describe participant lives. (Lincoln & Guba, 1985; Polit & Beck, 2014).

In-vivo coding was used to capture the participants' perceptions using their actual language from interview transcripts (Khamung et al., 2022). Through in-vivo coding techniques, the principal investigator demonstrated the different realities of the participants' experience.

Informed Consent

Data was not collected without the participants' knowledge and consent. Prior to securing participants for the study, the principal investigator sought approval from the dissertation committee and University of New England's Institutional Review Board. Initial contact with participants occurred via email and included the preliminary screening questionnaire to recruit

and qualify participants. Participants received a participation information sheet to review prior to completing the screening questionnaire. Participants screened and selected for the study were asked to engage with the principal investigator in a 30-minute Zoom interview. After reviewing the participant information sheet a second time, the participant verbally acknowledged their intent to proceed with the interview prior to responding to any interview questions. The principal investigator assured participants of confidentiality for their willingness to contribute to the study.

Given the study's phenomenological design, the principal investigator ensured that participants understood the intent of the study was to explore their lived experience when transitioning from traditional project management methods to agile project management methodologies. Questions were not designed to be sensitive or personal in nature, however a participant's reflection on their lived experience in a transition to agile methodologies may increase anxiety related to a stressful event in their life. To mitigate psychological risk of the interview questions, participants were reminded of their right to skip any question that makes them uncomfortable or withdraw from the study completely at any time.

Confidentiality

Confidentiality referred to agreements made between researchers and participants, through the consent process, about if and how researchers protect information provided by the participants (University of New England, 2022). Though limited, there was the risk of a security breach of the study's data, including data falling into the hands of unintended audiences. A security breach can result in a breach in confidentiality, which would have caused reputational harm to the participants. There were no security breaches noted during this study.

To mitigate the risk impact of a security breach, pseudonyms/codes were used in place of participant names to hide the identity of participants. Interview transcripts were stripped of all

personally identifiable information and replaced with pseudonyms instead of the participant's name. Codes provided the means to deidentify the data and secure participant confidentiality. Concealing the participants' identity allowed participants to convey their opinions without social pressures (Skulmoski et al., 2007). All data files were password protected and stored in a secure location on the principal investigator's personal computer. The principal investigator had sole access to this personal computer. Interview audio/video and all personally identifiable information obtained for the study was destroyed after all transcripts had been verified for accuracy. The master list key used to retain identifiers linked to coded study data was stored securely with the principal investigator, and separately from the study data. The master list was destroyed after all transcripts had been verified for accuracy and after data analysis was complete.

Conflicts of Interest

To avoid any conflicts of interest, participants did not receive compensation for contributing to the study. As a gesture of gratitude, the principal investigator provided participants with the details of the study's results. One potential conflict of interest was the risk of skewing the study's results due to the selection of participants from a single industry or company. To mitigate this potential conflict, the study recruited eight participants from four distinct industries. Prior to initiating participant interviews, the principal investigator ensured that all participants reviewed the participant information sheet prior to responding to the recruitment email. Participants reviewed the participant information sheet a second time prior to the start of the interviews. Maintaining these standards of conduct helped defend against conflicts of interest and supported the study's validity (Menchini, 2020).

Summary

This study was a phenomenological study of the lived experience and leadership approach of project managers transitioning from traditional project management to agile project management methodologies. This study sought to understand how project managers transitioning to agile methodologies described their lived experience and leadership approach during the transformation to agile methodologies. The eight project managers who participated in the study were employed at six sites representing four industries. Participation was purely voluntary. The data collection methods included a preliminary screening questionnaire to facilitate recruitment and semistructured Zoom interviews with participants. Open-ended interview questions were rooted in the identity control model (Luhrmann & Eberl, 2007) and the complexity leadership model (Uhl-Bien & Marion, 2007). Interview questions aligned with the study's primary themes: change management, leadership, complex adaptive systems, and identity control. The principal investigator applied manual coding techniques to analyze and identify patterns in the data (Cypress, 2018; Saldana, 2011).

The relatively limited number of studies focused on the project managers' lived experience in an agile transformation was a limiting factor. The principal investigator's experience leading agile transformations was acknowledged as a potential conflict of interest. Maintaining confidentiality of the participants' identity through deidentification of data allowed participants to express their opinions free from social pressures (Skulmoski et al., 2007). The study's adherence to appropriate sampling, data gathering and analysis procedures, and ethics supported trustworthiness of the study's results (Sabar & Sabar, 2017). The methodological design of the study provided significant insight into the project managers' lived experience and leadership in their transition to agile project management methodologies.

CHAPTER 4: RESULTS

The purpose of this study was to understand the lived experience and leadership approach of project managers who have transitioned from a traditional project management methodology to an agile project management methodology. This study utilized a phenomenological research design to investigate the experiences of project managers of U.S. corporations during a transition to agile project management. The study's phenomenological design was justified because it is powerful for understanding subjective experience and gaining insight into an individual's motivations based on individual perspectives (Lester, 1999; van Manen, 2017).

The research questions this study sought to explore were:

Research Question 1: How do project managers who have transitioned from a traditional project management methodology to an agile project management methodology describe their lived experience?

Research Question 2: How do project managers who have transitioned from a traditional project management methodology to an agile project management methodology describe their leadership approach before, during and after the transition?

The research questions were based on Luhrmann and Eberl's (2007) identity control model and Uhl-Bien and Marion's (2007) complexity leadership model.

The data collected in this study was produced through interviews with eight project managers currently employed at Fortune 1000 companies. The project managers shared the experience of transitioning from a traditional project management methodology to an agile methodology within the past six years. Interviews occurred over a two-week period in late February 2023 through early March 2023. Individual interviews were conducted with each

participant in a private setting via Zoom and lasted approximately 30 minutes. The interviews were the primary means of collecting the study's data. With the participant's approval, each interview was audio and video recorded. The audio was transcribed using Zoom's auto transcription feature.

When recruiting the study's participants and collecting data, the researcher followed proper procedure and research protocol. The researcher provided interview transcripts to the participants within 24 hours of the interview to review information for accuracy. Participant names were replaced with pseudonyms as defined on a master list. The researcher provided participants five calendar days to respond with transcript edits, after which time the transcript was considered accurate. There were no changes requested by participants to the interview transcripts. Once member checking of the transcripts was complete, the recorded Zoom interviews were destroyed.

Additional measures were used to protect participant confidentiality. All interview transcripts were stored on a password protected laptop computer accessible only by the principal investigator. This master list was stored securely and separately from the interview transcripts and was accessible only to the principal investigator. After all transcripts were verified by the participants, the master list was destroyed.

Analysis Methods

Participant interviews were analyzed in accordance with the Van Kaam Method as described by Moustakas (1994). Manual coding was used to generate themes. The researcher used a three-column table to analyze the interview transcripts. The transcript consumed the far-right column. The left-adjacent column contained codes associated with the participants'

responses to the interview questions. The far-left column contained higher level themes.

Participant themes were analyzed for commonality to identify themes for the broader study.

For each interview transcript, participant responses were analyzed to note any expressions applicable to the study's phenomena. Expressions were organized into categories and consolidated into a core set of themes. Previously analyzed transcripts were reassessed to confirm both primary and secondary themes in the data. Themes attributed to a small number of transcripts were reviewed for relevancy to the broader study. A textural description for each participant was generated. The textural descriptions included the actual language of each participant. A summary and analysis of the themes attributable to each participant was developed to identify areas of commonality. Participant themes were summarized to form a comprehensive view of the study's results.

The study's participants served as project managers with their respective organizations. The eight participants were sourced from six Fortune 1000 companies. The six companies operated in four unique industries. Five of the six companies were public companies while one was privately held. A brief profile of each participant can be found in Appendix C. The study's participants are listed in alphabetical order by last name in Table 4.1.

Table 4.1

Participants

Name	Industry
Talia Davis	Commercial banking
Len Healey	Miscellaneous financial services
Ben Lane	Commercial banking and consumer lending
Ann Lennon	Electronic shopping and mail-order house
Yanna Michaels	Commercial banking
Jack Murphy	Miscellaneous financial services
Dave Presley	Commercial banking
Sandra Smith	Air conditioning and warm air heating equipment and commercial and industrial refrigeration equipment manufacturing

Presentation of Results and Findings

Manual coding of the study's data revealed four primary themes and five subthemes. The first theme, change, presented two subthemes. The second theme, servant leadership, yielded two subthemes. The third theme, learning, produced one subtheme. The final theme, natural attitude, did not yield any subthemes. The structural outline for the remainder of chapter was adapted from Cannon (2020) and Menchini (2020). Themes and applicable subthemes revealed in the data are illustrated in Table 4.2.

Table 4.2

Themes and Subthemes

Theme	Subtheme
Change	Resistance
	Understanding
Servant leadership	Empowerment
	Enablement
Learning	Experimentation
Natural attitude	

A conventional coding approach was used for this study. In conventional coding, codes are defined during data analysis and derived from the data (Hsieh & Shannon, 2005). Coding was performed manually without the assistance of specialized coding software. Prior to coding, the theme of natural attitude was not anticipated to be central to the study. Conventional coding of the data exposed the idea that participants would have a natural attitude towards agile methods is significant to the study. It was expected that change, servant leadership, and learning would surface as themes in the data. The relationship between servant leadership and the subthemes empowerment and enablement was also expected. The relationship between learning and the

subtheme experimentation was also expected, however the participants' elaboration on the value of a safe-to-fail environment for experimentation was greater than anticipated.

Schwaber and Sutherland (2017) noted the significance of experimentation in an agile methodology since experimentation supported the adaptive capabilities of teams (Highsmith, 2004). Brown (2011) stated that effective leaders in complex systems encourage experimentation, and Leybourne (2009) extended this idea to agile project managers who favored experimentation. It should come as no surprise that experimentation was revealed as connected to the learning and development of agile project managers and teams.

Coding revealed the notion that project managers had a natural attitude towards agile methods that was based upon common-sense thinking and personal preference. Participants expressed varying attitudes towards agile methodologies. Several participants found servant leadership appealing and in alignment with their natural attitude and behaviors. This revelation intersected with Zheng and Muir's (2015) idea that project managers held an identity standard that defined their understanding of leadership. During the interviews, participants reflected on identity standards that defined their experience. Participants revealed that agile felt like a "natural fit" based upon their values and preferred way of working. In hindsight, the idea that project managers possessed a natural attitude towards agile should have been predicted.

Theme 1: Change

The introduction of agility was primarily about changing the product development process (Varl et al., 2020). Cooper and Sommer (2018) stated that the agile framework was adaptive and thrived on change. Ali et al. (2017) emphasized that improving an organization's adaptive capabilities required change management. Coding results aligned with these views and

revealed that participants were cognizant of the need to manage change associated with the transition.

Change in this study took two notable forms. The first of these forms was related to managing change at an organizational level as it pertained to the broader group of employees and a willingness to embrace change. The second of these forms was related to the project managers' ability to manage change affecting them on a personal level.

In describing change from an organizational vantage point, Ann emphasized that "It was a lot of change management, and looking at how humans communicate understanding." Talia emphasized that "We don't always address change management, thinking about the J-curve, thinking about where people are." When reflecting upon his agile experience, Len reiterated that "A whole lot of time is spent on change management." Coding also revealed examples of participants managing change on a personal level.

Jack spoke about managing change when adopting a new role within the project team. The change forced Jack to replace his approach with a democratic approach to decision-making and task management. Jack stated, "How those things get done was now totally in control of the squad." Ben shared Jack's sentiment. He shifted his focus from tasks to deliverables after transitioning to the role of scrum master. Ben stated, "In traditional you would task master as opposed to in an agile mindset you are really focused on deliverables." Ben also described changing his routines to help manage change on a personal level. He emphasized implementing "breakout room sessions" to improve his understanding of the products they were building. Gaining subject matter expertise improved Ben's ability to serve the team by managing dependencies and removing impediments.

Ann also elaborated on the human element of her organization's transition to agile. Change management was prevalent in the transformation. As a change leader, Ann emphasized the need to "anchor on shared outcomes" to manage change. She spoke of the importance of "psychological safety" for team members to gain comfort with the change to agile. Ann stated:

If we can anchor on shared outcomes, it's easier to navigate through that change.

Psychological safety and being very aware, empathetic, and understanding. So, it's to understand the individual, how they feel, their stake in it, and then finding common ground. Like understanding people's point of view on what they value.

Subtheme 1: Resistance

Participants were unanimous in perceiving organizational resistance to agile. Coding revealed that resistance came in several forms. The first form of resistance was associated with the project managers learning new behaviors. A second form of resistance came from team members learning how to operate as a team rather than as individuals. The third form of resistance was sourced in management's understanding of the agile mindset and rules of engagement when interacting with teams. A fourth form of resistance was rooted in customers' unwillingness to accept an iterative development approach and frequent product and system implementations.

Although participants had a positive experience with their agile transition, coding of the data identified examples of the participants resistance to change. Yanna, for example noted her resistance was due to an abundance of meetings, documentation, and debating with project team members on role clarity.

So, we tried agile, and it just doesn't really work. Like meeting on every decision and wanting to make sure everything's documented. You find yourself constantly trying to

find people, constantly setting up calls and always asking, is this your role, is this what you do?

The second form of resistance was rooted in the team. Sandra experienced resistance from the team when initially attempting to empower team members to define, prioritize and assign tasks. Team members resisted taking a more active role in task management because they perceived that Sandra was responsible for this function. Team members maintained this view as a carryover mindset from working with Sandra as a traditional project manager. Sandra stated:

When I was in a traditional role they were sort of like looking for me to direct them, tell them what to do. So, from an agile perspective, it was much more collaborative and team members had more autonomy. So, I think that's a source of resistance from team members.

The third form of resistance was associated with management's lack of familiarity with the agile mindset. Len expressed a passion to protect his team from management who resisted the organization's transition to agile in less explicit ways. Len described the need to remain vigilant for management behaviors that focused on the individual rather than the team. He noted that he had to "stay very wide-eyed for any kind of anti-patterns." Len elaborated: "It might be management coming to look at an individual team member's productivity rather than focusing on the team's productivity. At that I would want to stand up and say, No!"

The customers represented a fourth form of resistance to change revealed in the study. As the project manager, Sandra found herself on the receiving end of customer resistance to change. The uncertainty associated with changing to iterative project plans and frequent implementation was a primary source of anxiety for customers. Operating in a highly regulated industry influenced the customers' willingness to assume risk. Customers were risk averse and frowned

on frequent product implementations. Because the customers were from the regulated space, they did not like the idea of getting frequent deliveries.

Subtheme 2: Understanding

Given that the theme of change was central to the study, it was expected that coding would yield the subtheme of understanding. Kotter's (1997) eight-steps of leading transformational change reinforced the notion that before you can initiate change, you must help others understand how change relates to improvements. Participants highlighted that not all team members and stakeholders had a clear understanding of the agile mindset. Jack for example reflected on facilitating a shared understanding of agile to guide individuals through the transition. He stated, "People really needed help in understanding what agile was about."

Dave spoke of the need to clearly communicate a shared understanding of the change to agile. He emphasized the importance of everyone understanding the direction the organization was headed. A shared understanding of change was significant because individuals in the organization handled change differently. Dave stated: "It is important for everyone to understand the whole change cycle and the J-curve. It was important for me to understand where they are. So, I look at helping teams and my role in that transition."

Talia also emphasized the need to establish a shared understanding of the agile mindset and behaviors. She stated:

If we're functioning as a team, we all need to have a better understanding of the agile mindset and behavioral driven development to help them change their mindset, to help them become more agile. Like I need to make sure that we're all aligned, that we all understand what the vision is, and that we are singing from the same song sheet.

Ann noted a similar emphasis on ensuring that stakeholders shared an understanding of change. Ann focused on aligning stakeholders on shared outcomes. Ann stated, “If we can anchor on shared outcomes, it’s easier to navigate through that change.” Ben also reflected on the importance of organizations having a shared understanding of change. He focused his efforts on aligning team members and stakeholders with the goals the organization wished to achieve. Ben noted, “Let’s make sure that everybody understands the goal of what we’re trying to do.”

Sandra expressed frustration with executives when attempting to correct their understanding of agile. Executives often mischaracterized the benefits of agile as simply delivering work more expeditiously. This misunderstanding served as a source of tension during the transition. Sandra stated, “internally we had some challenges with executives from the perspective that to them agile meant fast.”

Theme 2: Servant Leadership

It was expected that the theme of servant leadership would be a core component of this study. Holtzhausen and de Klerk (2018) noted that agile project managers exhibit servant leadership skills to build trust with team members and stakeholders. The Agile Business Consortium (2017) supported this point when noting that servant leadership supports the growth and sustainability of an agile culture. Study participants expressed these views during their transition to agile. Len reflected on his use of servant leadership with respect to decision-making. He noted, “servant leadership is the mindset. I’m not making decisions for the team. The team is making decisions for themselves.”

Dave reflected on using servant leadership during his transition to agile. He noted that servant leadership constituted a critical competency in his transition. Dave stated, “you got to

just roll your sleeves up to help the team.” He underscored the importance of servant leadership for agile project managers during a transformational change event. Dave stated:

We talk about servant leadership, you know. That’s a core competency for agile project managers. So, it’s really meeting people where they are at, and helping them through that change. I enjoy helping people move forward and see different ways of working.

Ben reflected on using servant leadership to support his team. He described soliciting feedback from all team members when leading and making decisions. When speaking of servant leadership, Ben emphasized the need to “read the room of people” and provide all team members a “seat at the table to offer opinions.” Ben stated: “You need to leverage servant leadership. It’s an interesting balancing act. So, you talk through it to figure out what’s in the best interest for all.”

Several participants described using servant leadership in the transformation to agile. This view is consistent with Shastri et al. (2021) who stated that facilitating, mentoring, negotiating, adapting, coordinating, and protecting the team are behaviors exhibited by servant leaders. Bass and Bass (2008) extend servant leadership behaviors to include empowerment. The coding of the data revealed empowerment as a subtheme associated with the theme servant leadership.

Subtheme 1: Empowerment

It is not surprising to learn that coding revealed empowerment as a subtheme central to the study. The agile methodology was distinguished from traditional project management methods in its emphasis on empowering teams to work autonomously (Cooke, 2010). Rouse (2007) describes scrum, the most popular form of agile, as based on small, empowered, self-organizing teams working in an interdependent manner. Kotter’s (2012) eight step model for

leading change emphasized the need for leaders to empower others to act. As predicted, participants expressed empowerment as significant in their transition to agile. Len associated the value of empowerment with building trust during agile transformation. Len stated, “it’s empowerment and creating environments of success and trusting people that are doing work to do the work properly.”

Len elaborated on this view by making a distinction between traditional project managers managing people, and agile project managers managing processes. Len noted: “It would be a focus on empowerment. My agile role is a management role in the sense that you’re managing the creation of processes within the scrum framework. So, you’re not actually managing the people.”

Ben described empowering teams during his transition to the agile. He described the difference between directing team members and offering guidance and support when determining the path forward. He emphasized that teams need to feel empowered to solve problems. Teams relied on Ben for guidance. Ben stated:

I think in the agile space, you really want the team feel empowered to discern from a problem-solving perspective how they’re going to move forward. So, you’re there not so much as a heavy hand, but you are like kind of a consultant to provide input.

Ann spoke of empowering team members during the transition to agile. She motivated team members around intended outcomes but refrained from making decisions for the team. During the interview, Ann described her approach to empowering teams, and contrasted this view with her approach as a traditional project manager. She stated:

This is the outcome we intend, and I’m going to empower you to make decisions within the agile framework to get us there together, whereas, with traditional project

management, you make these decisions. So, it's a lot more fluid and creative in an agile space, and it's like a lot more prescriptive and scheduled in traditional project management.

Subtheme 2: Enablement

Coding results demonstrated that participants emphasized using servant leadership to facilitate change and guide teams in the planning and execution of project deliverables. Servant leadership also required proficiency in relationship building (Merriam & Tisdell, 2016). As a relationship builder, participants reflected on their role in enabling relationships among team members to foster collaboration and learning. Participants spoke of enabling teams to share knowledge and align dependencies. Coding also revealed participants' efforts to enable relationships between the team, project stakeholders and management.

The subtheme of enablement was evident in Ann's heightened awareness of the need to enable relationships, build trust and ensure delivery of outcomes. Strong relationships, from Ann's perspective, strengthened trust and fostered learning. Ann stated:

We need to enable relationships with teams and stakeholders and understand how we need to interact with each of those people to ensure that outcomes are holistically valuable across the organization. So, I think it builds a lot of trust and learning within teams and the organization.

Dave extended these views when reflecting on enablement during his transition to agile. He noted the need for teams to develop relationships with the product owner and other teams. Dave used these connections to align dependencies and support organizational learning. Dave stated:

I need to ensure a close connection with my scrum team and the product owner and other teams in which you have dependencies. Like I may even encourage retrospectives with other teams as a way of connecting individuals and sharing knowledge.

Talia emphasized enablement during her agile transition. She spoke of enabling relationships between the team members simply by leveraging the scrum framework. She described using scrum's daily standup meeting to connect team members and share knowledge.

Talia stated:

I try to connect individuals in what we call the daily standup in scrum. This is where I would bring the team together to address who is doing what, what's impacting us, causing us to have a delay. So, connections and sharing knowledge are important to work through obstacles.

Both Ben and Sandra also spoke of enablement. Ben focused on enabling relationships between the team, product owner and stakeholders. Enabling these relationships allowed Ben to align the organization with the business value of deliverables. Ben noted: "I think the one thing from like an agile perspective is you want to build connections with stakeholders and product owners to call out the business value of what we are looking to deliver." Sandra described serving as a liaison to enable the sharing of information between her team and stakeholders. She contrasted her agile role to traditional project management where she was focused primarily on the product delivery and implementation. Sandra stated, "I spent more time in a liaison role building relationships as opposed to the delivery role."

Theme 3: Learning

Learning was an anticipated and consistent theme across study participants. The theme was rooted in the agile methodology, as noted by Cooke-Davies et al. (2007) who emphasized

that agile project managers facilitated the team's capacity to learn from their collective experiences. Learning was exposed in the study in several forms. Participants spoke of their own learning and development when adjusting to the agile role and practices. Participants also reflected on their role in facilitating the learning and development of team members. A third form of learning pertained to participants educating stakeholders on the agile mindset. Participants recalled a specific group of managers referred to as "the "frozen middle" who needed to be monitored to ensure change was not stifled.

Talia reflected on her team's learning as well as her own. She recalled needing to learn how to visualize work. Traditional project schedules were no longer used in an agile framework. Talia and her team required an alternate means to assess progress. She stated, "We needed to learn different ways to visualize work. So, like individuals learn in very different ways." When discussing a specific team ceremony in scrum, the sprint retrospective, Talia described facilitating team learning and development through process improvement initiatives. She stated:

I look for process improvements. Your focus is getting that team to be a high performing team. Like I had everyone on the team swarming on work and learning together. So, it really is that growth and development, because that's a big part of who I am. Like helping people get to that next level.

During the interview, Ben described his efforts to facilitate team learning and development. He established short-term objectives with his team to learn incrementally. Ben stated: "Let's establish some short-term milestones that we can achieve. We're going to reflect and learn and it's going to take us some time." Ann also described taking an active role in the learning and development of teams. According to Ann, learning collectively built trust within the

team. Ann stated: “You have to facilitate learning and the team’s growth and development. So, I think it builds a lot of trust within teams and the organization.”

Finally, Dave referred to facilitating learning for stakeholders and teams. He focused on organizational leaders’ learning and development during the transition. Leadership struggled with adopting the agile mindset. Dave worked to close this knowledge gap. He stated:

The biggest challenge is leadership because they don’t get it. They still want their dates. Like they still think that everything’s a priority. So, it’s a frozen middle layer, and I worked with leadership to build rapport with them and explore how I can help them learn and get better and help their teams learn and get better.

Subtheme 1: Experimentation

Throughout the interviews, participants described the value of experimentation in organizational learning and development. The discussions highlighted the participants’ perception that experimentation facilitated learning. This view was consistent with the literature. Thomke (2003) described experimentation in agile as a means for individuals to learn from success and failure, adapt to change, and innovate.

Participants spoke of “failing fast” or providing teams a “safe-to-fail” environment. Len noted the importance of providing teams with a safe environment in which to experiment, learn, and develop. He highlighted the benefit of experimentation and learning from failure as a vehicle to improve. Len stated that he “encouraged experimentation, failing fast and not being afraid to fail.” He extended this point to team learning by stating, “we learn from that.” Ben also supported the use of experimentation and a safe-to-fail environment. He described the importance of “failing fast” in an agile culture. Ben accepted failure when experimenting so long

as it happened expeditiously. Ben stated, “fail fast and move on. Realize that it’s okay to fail fast.”

The interview with Dave also revealed the subtheme of experimentation. Dave noted that a safe-to-fail organizational culture afforded team members the freedom to work differently. His reference to a culture of experimentation coincided with Chandra Misra et al.’s (2010) idea that agile transformations require changes in work culture and management style. Dave stated:

Forcing that culture around experimenting and being okay with failure encourages people to work differently. Learning from where we’ve gone wrong and not punish anyone.

Enforcing feedback. So, I supported a culture around experimenting and it being OK to fail.

Finally, Talia described using experimentation in agile. She contrasted experimentation in an agile framework with traditional project management methods where experimentation was not as prevalent due to a fear of failure. Talia stated: “Everybody learns to experiment with different solutions to figure something out. Like those kinds of things can happen in a waterfall environment, but they tend not to because individuals are apprehensive about stepping out of their role or failing.”

Theme 4: Natural Attitude

The idea that participants would have a natural attitude towards the agile methodology was not predicted. In hindsight, the revelation of the participants’ predisposition to agile methods was not entirely unexpected. We learned through participant interviews that some project managers welcomed the change to agile while others resisted the change. A significant challenge for project managers adopting agile methodologies was the ability and willingness to learn new skills and behaviors (Walker & Lloyd-Walker, 2019). The shift to agile project management was

becoming problematic for project managers used to controlling a highly structured plan-driven process (Mayfield, 2010). The notion that participants would have an attitude towards replacing their routines, skills and behaviors could have been expected. Four of the eight participants referred to agile accommodating their natural or preferred style working. Two participants described a disconnect or mismatch between their natural approach to managing projects and the agile approach.

Len noted that his transition to agile felt “natural” and was an “awakening” for him. He specifically described joy in empowering others to make decisions and planning the intended course of action. Evident in Len’s feedback was his commitment to team autonomy. From Len’s vantage point, these values more closely reflected life. Len stated:

It just feels a lot more natural to me. Like it was an awaking, and one of those things that just felt refreshing, and truer to life in a sense. So, I’m not going to try and control stuff. I’m going to empower them to figure out the best way. So, self-organizing teams is a big tenant that I take very seriously.

Dave also described a seamless transition to agile. He noted that his approach as a traditional project manager relied on the same values and behaviors he was already using. Dave saw himself as a hands-on project manager willing to work side by side with the project team to accomplish objectives. He abhorred project managers who focused heavily on change control documentation and status report. Dave stated:

It was easy. I felt it was very similar to what I was doing already. I was always someone to roll up my sleeves and really just dig in and understand the product. Understand what the team is doing. Like I’m not one to just create a risk log. I found that quite boring. I want to understand what I can do to unblock the team.

Yanna and Sandra's natural approach to managing projects did not align with the agile mindset. The highly regulated nature of their industries served to influence their discomfort with agile. Yanna's natural tendencies as a project manager leaned towards note-taking and change control. She found these habits difficult to break. De-emphasizing documentation did not come natural for Yanna. She stated:

I could not help myself, but take notes, and then do change control processes. Like you're back to where you started originally, because how do we know unless we document it. So, eliminating documentation just felt uncomfortable to me. Changing behaviors to be more of an agile behavior. Like it's difficult to adopt.

Sandra described discomfort in relinquishing control to the team and learning how to sell the agile approach to her customers who operated in a highly regulated environment. She described convincing customers to accept frequent system deliveries. These changes represented an unnatural shift for Sandra and her customers. Sandra stated:

It took authority away. It took some of my control. External stakeholders weren't sure about this at all. So, I had to kind of become a salesperson, like that this was going to help you in the long term. So, the selling didn't feel natural for me.

Summary

This was a phenomenological study on the lived experience and leadership approach of project managers in an agile transformation. The study emphasized the perceptions and experience of project managers who transitioned from traditional project management methods to agile project management methods during a transformational change event at their respective organizations. The study's data revealed four themes and five related subthemes. The first theme revealed was change. This theme entailed two related subthemes: resistance and understanding.

The study's second theme was revealed to be servant leadership. The related subthemes of servant leadership were shown to be empowerment and enablement. The study's third theme, learning, was shown to have one subtheme: experimentation. The study's fourth theme was natural attitude. The coding of data revealed relationships between the study's themes and subthemes. Coding showed that participating project managers served as change agents during the transition to agile. As change agents, the participants demonstrated the significance of leadership skills to enable change and foster learning for their organizations. Participants also revealed a natural attitude towards agile methods that was rooted in their preferred approach to serving team members and stakeholders.

Chapter 5 reviews the themes revealed in the study's data and presents implications and interpretations of its findings. Recommendations for further action and investigation are also enumerated in Chapter 5.

CHAPTER 5: CONCLUSION

With change and complexity on the rise in the global economy, agile learning strategies are critical for organizations to compete and survive (Armanious & Padgett, 2021). Leaders find agile project management methodologies appealing because they can improve an organization's responsiveness to change and uncertainty (McPherson, 2016). The change to agile methods is not a simple feat for project managers. Literature on organizational transformations to agile describes the change as problematic for traditional project managers who must learn to facilitate and orchestrate, rather than control and dictate (Taylor, 2016). Furthermore, the literature characterizes extreme levels of managerial control as prone to failure in a complex environment because it restricts organizational learning, creativity, and responsiveness (Maqsoom et al., 2020; Uhl-Bien et al., 2007). Chandra Misra et al. (2020) noted that agile transformations require project managers to adapt to changes in work culture, management style, and work processes. The opportunity to understand the project managers' response to these changes served as the catalyst for this study's phenomenological exploration of the lived experience and leadership of project managers in an agile transformation.

This study focused on project managers at six Fortune 1000 companies who transitioned to agile methodologies within the past six years. The six companies include one privately held corporation and five public companies. The project management organizations of the participants were involved in software and product development projects. Gaining the perspective of project managers from multiple organizations and industries provided a broader view of their lived experience when leading and managing transformational change to agile methodologies.

The participants' experiences were not unique. During the time this study was conducted, agile project management methods were and continue to be pervasive in industry. Interviews with participants highlighted the project managers' leadership and change management role during an agile transformation. Project managers emphasized their role in shepherding change to support the learning and adaptive capabilities of the organization. An interesting point gleaned from participant interviews was the emphasis placed on enabling others to embrace change, and a de-emphasis pertaining to challenges associated with adopting the mechanics and ceremonies of the agile-scrum framework.

The purpose of this qualitative phenomenological study was to understand the lived experience and leadership approach of project managers who have transitioned from a traditional project management methodology to an agile project management methodology. The conceptual framework that guides this study was derived from Uhl-Bien and Marion's complexity leadership model (Uhl-Bien & Marion, 2007). The study's theoretical framework was derived from complex systems theory (Devereux et al., 2020) and the identity control model (Luhmann & Eberl, 2007). The research questions this study sought to explore were:

Research Question 1: How do project managers who have transitioned from a traditional project management methodology to an agile project management methodology describe their lived experience?

Research Question 2: How do project managers who have transitioned from a traditional project management methodology to an agile project management methodology describe their leadership approach before, during and after the transition?

Interpretation and Importance of Findings

The coding process revealed four primary themes and five subthemes. The four primary themes included change, servant leadership, learning and natural attitude. The theme of change yielded two subthemes. The subthemes were resistance and understanding. The theme of servant leadership produced two subthemes. The subthemes were empowerment and enablement. The theme of learning revealed one subtheme. The subtheme was experimentation. The final theme, natural attitude, yielded no subthemes. The interpretation and implications of these themes and subthemes demonstrate that transformational change to agile methodologies represents a significant shift in the mindset and leadership behavior of project managers.

Research Question One

The study's first research question sought to understand how project managers who have transitioned from a traditional project management methodology to an agile project management methodology describe their lived experience. All the themes with the exception of the subtheme, resistance, reflect the participants' optimism concerning opportunities for growth and development. The opportunities were the result of project managers supporting the change to agile methods. The participants overall had a positive experience with the transition to agile and spoke favorably about the effect the change had on them personally or professionally.

Participants seized the opportunity to contribute to the growth and development of others.

The transition to agile provides participants an opportunity to advance their skills and broaden potential career paths. Participants seize the opportunity to engage in organizational and enterprise change management, all based in agile thinking. The change to agile also has a positive effect on participants' personal lives by helping them establish strategies for large projects. The transition to agile methods serves as an "awakening" that reveals a more

meaningful approach to leading projects. Participants describe the change as “refreshing” and “truer to life in a sense.” The agile transformation provides the opportunity for teams to expedite decisions and value delivery to customers. While it was expected that change would invoke anxiety in participants as they learn to break old habits and adopt new routines, the participants do not dwell on the challenges pertaining to learning the mechanics of the agile framework. Instead, participants emit genuine interest and optimism regarding the opportunities that accompanied the change. By seizing opportunities that accompany an agile transformation, project managers can grow both personally and professionally.

Understanding the Power of Culture

The theme of change and the underlying subtheme of resistance are significant in this study. The organizational culture of participants is a source of resistance to change. Leso et al. (2023) noted the importance of culture in enabling change when he quoted the famed management consultant Peter Drucker who stated, “culture eats strategy for breakfast” (p.152). Participants face various forms of organizational resistance to change. Resistance is sourced in team members, management, external customers, and the project managers. The highly regulated culture of select industries represents a unique source of resistance. Industry regulations make it challenging to gain customer consensus to support the adoption of agile methods. The regulatory environment creates a culture of formal documentation and approval of any changes regardless of the magnitude. These issues illustrate the notion that industry culture and behavioral norms are difficult to influence and serve as barrier to change.

Industry culture is not the only cultural factor in elevating stakeholder risk aversion and resistance to change. Cultural norms and behaviors of the management team are also a source of resistance to change. This finding aligns with the idea that organizations are complex systems

and require a fundamental change in the role of management (Beeson & Davis, 2000). Maqsoom et al. (2020) expressed that a culture of excessive managerial control fails in a complex environment. The study's participants align with this view and describe the management culture as a source of resistance. Management reverted to traditional behaviors of mandating date deadlines and establishing overly broad project scope. These behaviors hamper change and delay value delivery to customers. As one participant described, they "still want their dates and think that everything's a priority." The study demonstrates that an agile transformation forces leaders to think differently. An agile transformation requires leaders to develop trust in teams and provide teams the autonomy to own their work (Kotter, 2011). Adopting these behaviors is a significant cultural shift for management according to the participants.

Finally, organizational culture as a barrier to change is evident in the theme of learning and its underlying subtheme, experimentation. Participants emphasize the importance of management supporting a culture of learning by affording teams the freedom to experiment with new ideas. According to participants, the benefit of experimentation is that "you can learn from it and change." A culture that reinforces a safe-to-fail approach is viewed by participants as an enabler of change. Supporting a culture of experimentation, according to participants, is not a simple behavioral shift for management. Participants noted that traditional managers who focus on ensuring staff are always working at full capacity may not recognize the value in allocating time for teams to experiment. This shortcoming serves as a barrier to a successful transition to agile methodologies.

Research Question Two

Dikert et al. (2016) stated that transforming work structures requires coordination and leadership. The study's second research question seeks to understand how project managers who

have transitioned from a traditional project management methodology to an agile project management methodology describe their leadership approach. The study's themes of change and learning portray participants in a leadership capacity. Of particular significance is the need for project managers to adjust their leadership approach to accommodate the transition to agile.

Participants speak of empowering individuals and affording teams the autonomy to own their work. In an agile transformation, the project managers serve their teams as a conduit to management and stakeholders. They leverage soft skills such as communication, facilitation, empathy, and influence. Project managers enable change by strengthening understanding and nurturing relationships, both key tenants of Uhl-Bien and Marion's (2007) complexity leadership model. The participants' description of their leadership approach during the transformation aligns with the literature that describes successful change as requiring 20% to 30% management, and 70% to 80% leadership (Kotter, 1997).

Connecting People and Bridging Knowledge

The themes of change, servant leadership, learning and their underlying subthemes reflect the significance of project managers as connectors of people and knowledge. Data illustrates that agile project managers serve their teams by facilitating and enabling relationships to share organizational knowledge. Although several participants describe the transition to agile as relatively "easy," and "more in line with my preferred style of working," some project managers struggle with the transition. Further investigation of the participants' experience exposes the theme of natural attitude.

The data reveals that agile project management is not synonymous with leading projects using a traditional approach. The traditional and agile project manager roles emphasize different skills and behaviors. Figure 5.1 is a graphical representation of the participants' perceptions of

their leadership approach during the transition as viewed through the complexity leadership model (Uhl-Bien & Marion, 2007). Participants emphasize enabling leadership and place less emphasis on the administrative leadership function.

Figure 5.1

Participant Perceptions of Their Leadership Approach During the Transition

Participant	complexity leadership functions			complexity leadership behaviors				
	adaptive	administrative	enabling	fostering network connections	accelerating bottoms-up network construction	becoming leadership tags	dropping seeds of emergence	thinking systemically
Talia Davis	Green	Orange	Green	Green	Green	Orange	Green	Blue
Len Healey	Green	Orange	Green	Green	Green	Orange	Green	Blue
Ben Lane	Blue	Orange	Green	Green	Green	Orange	Blue	Blue
Ann Lennon	Green	Orange	Green	Green	Green	Blue	Green	Green
Yanna Michaels	Orange	Green	Blue	Blue	Orange	Orange	Orange	Orange
Jack Murphy	Green	Blue	Green	Green	Green	Orange	Green	Blue
Dave Presley	Green	Orange	Green	Green	Green	Blue	Green	Green
Sandra Smith	Orange	Green	Blue	Blue	Blue	Orange	Blue	Blue

Color Key	
Green accent	significant reflection
Blue accent	some reflection
Orange accent	insignificant reflection

The theme of participants having a natural attitude or perception of agile leadership is largely unexpected, but no less critical to understand. The data suggests that the project managers' leadership approach in an agile transformation will vary. The project managers' common-sense way of thinking with respect to leadership in an agile environment is influenced by culture and individual values, which are both an enabler and detractor for change.

Implications

The themes of change, servant leadership, learning, and natural attitude in this study illustrate a key consideration for traditional project managers embarking on an agile transformation. Thomas and Mengel (2008) stated that continuous learning and development of leadership skills provides project managers the competencies to remain relevant and adept at coordinating complex projects. The importance of project managers developing leadership skills is evident in this study. The participants' understanding of leadership is influenced by their organizational culture, norms, and skills. In a transition to agile, project managers need to gain a true sense of self and establish a baseline of their aptitudes and preferred leadership style. This revelation supports the notion that the development of a leader's identity is an iterative process that evolves with an understanding of leadership (Luhmann & Eberl, 2007). Comparing the project managers' baseline to the behavioral demands of agile project leaders provides insight into development opportunities and the scope of change required to become an effective agile project leader.

The contrast between the leadership approach of traditional project managers and agile project managers is significant. The data collected in this study suggests that agile project managers lead by serving and facilitating, not controlling. As a facilitator of change in an agile transformation, project managers must model the behavior they seek in others (Pádár et al., 2017). Shifting focus from enforcing formal project controls to enabling the dynamic and informal relationships of team members to affect project outcomes represents a significant shift in mindset for project managers (Singh & Singh, 2002).

Agile methodologies require frequent communication among stakeholders and team members (Fagarasan et al., 2021). The participants' experience in the transition to agile

emphasizes the significance of communication and soft skills to navigate a complex system of networks. Each network within the organization has unique capabilities and knowledge. Effective agile project managers connect networks to share knowledge and strengthen the adaptive capabilities of the organization (Bushuyev et al., 2021; Hartman, 2008). Accomplishing this task requires unique skills and a commitment to embracing change. Not all traditional project managers make a successful transition to agile. Some project managers view agile methods with disdain and form the opinion that the agile mindset is in contention with their preferred style of working. The study's findings imply that organizational leaders must remain vigilant concerning the norms and skill gaps of project managers adopting agile. This understanding is critical in identifying the necessary training and support for project managers who serve an important role in facilitating change in an agile transformation.

Recommendations for Action

Projects are complex systems and are used by organizational leaders to influence change (Nieto-Rodriguez, 2021). The project manager is a change agent who inspires team members with a shared sense of purpose (Project Management Institute, 2021). The findings reveal the project managers' responsibility as a facilitator of change in an organizational transformation to agile methodologies. The agile mindset involves a different approach to leadership for the project manager. Project managers learn to assign greater value to developing relationships and network connections and deemphasize controlling behaviors. This revelation aligns with the idea put forth by Burns (2004) who emphasized the importance of group dynamics in shaping the behavior of its members.

Project managers would benefit from learning how to balance the adaptive, administrative, and enabling functions of complex leadership (Uhl-Bien & Marion, 2007).

Project managers considering a transition to agile methodologies would benefit from specialized training to develop an agile mindset and lead in complex systems. The training has two primary objectives. The first objective is to help project managers gain an understanding of their preferred leadership style. The second objective is to assist project managers in understanding how their preferred leadership style aligns with the agile mindset. A deeper understanding of the differences between the project managers' preferred leadership style and the agile mindset will afford project managers the knowledge to initiate the changes required to become an effective change agent and agile project manager. Through specialized leadership training, project managers can learn how leadership style influences human emotions. Project managers can use this knowledge to advance their leadership skills, affect change and remain relevant in a transformation to agile methodologies.

Recommendations for Further Study

An intriguing element of this study is the relationship between the participants' perceptions of their agile transformational experience and how they define effective project leadership. The data reveals that industry culture influences the project managers' perception of agile methodologies. Highly regulated industries invoke a risk averse culture that refrains from frequent experimentation and change. Project managers of highly regulated industries do not have a favorable view of agile methods for their organization. Participant responses to interview questions focus on the administrative leadership function of project management and place less emphasis on the enabling or adaptive leadership functions. Agile project managers place greater emphasis on enabling connections and building networks within the organization and attribute less value to the administrative leadership function. Participant experiences suggests that

organizational culture, management philosophy, and natural attitude are interconnected in influencing the project managers' transition to agile methods.

One potential area for further research is to understand the degree to which organizational culture influences a project manager's ability to succeed in a transition to agile methodologies. A secondary potential area for further research is to learn if the project managers' natural attitude could be used to predict the success or failure of their agile transformation. A phenomenological study that focuses on several project managers of a single company that transition from traditional to agile methods would help address a key question; are traditional project managers capable of becoming effective agile scrum masters. A study of this nature could be replicated for additional sites. The results of the studies could be contrasted to identify themes. The ability to identify relationships between the project managers' organizational culture, natural attitude, and success or failure of an agile transformation would benefit project managers and organizational leaders considering a change to agile methodologies.

Conclusions

This was a phenomenological study to investigate the lived experience and leadership approach of project managers who have transitioned from a traditional project management methodology to an agile project management methodology. The setting for this study included project managers at six Fortune 1000 companies. The data revealed themes about the perceptions of change shared by the project managers. The themes include change, servant leadership, learning and natural attitude. The primary themes reveal several subthemes. Organizational leaders make a conscious decision to pursue agile methods to increase adaptive capabilities and remain competitive.

Results demonstrated that project managers experience challenges with learning the agile mindset and adopting a servant leadership style. The study exposes the importance of relinquishing control in lieu of empowering teams and facilitating learning through connections. The study reveals the significance of organizational culture and the project managers' natural attitude. The data supports the notion that the integration of project management and change management is a necessity (Hornstein, 2015). Change leadership theory underscores the importance of project managers enabling relationships; a core requirement in leading transformational change (Oborski, 2019). The study concludes with recommendations for further research on topics related to project managers who transition to agile methodologies.

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APPENDIX A

Participant Recruitment Email

Subject: A Phenomenological Study on the Lived Experience and Leadership of Project Managers in an Agile Transformation

Hello,

My name is Randall Hopkins. I am a student at the University of New England (UNE) and am working to complete the dissertation requirement for the Doctorate in Education program (Ed.D). I have been developing a new research study and ask for your assistance.

The purpose of this study is to understand the lived experience and leadership of project managers who have transitioned from a traditional project management methodology to an agile project management methodology. Improving project management methodologies and enhancing business agility can assist organizations in responding to changing customer expectations and market conditions. By gaining an understanding of leading transformational change associated with the transition to agile project management, project organizations can improve the likelihood of success in an agile transformation. I am seeking 8 volunteers to participate in my doctoral research study.

Would you like to help? To see if you are eligible, please read the requirements below.

Why You Should Participate:

- You will reflect on the challenges and positive experiences related to your experience adopting agile methodologies.
- You will be provided a detailed transcript of your responses to questions conducted during a 30-minute interview conducted privately via ZOOM.
- You will have an opportunity to share your experiences in agile project management.

Who Can Participate?

- Adults between 18-89 years old
- Project managers who have transitioned from a traditional project management methodology to an agile project management methodology within the past six years.
- Those able to attend a 30-minute Zoom interview to respond to several open-ended questions.

If you meet these participation criteria and are interested in volunteering to participate, please review the Participant Information Sheet included with this email. To confirm your willingness to participate in the study, please respond to this email at rhopkins4@UNE.edu. In your email response, please confirm that you meet the study's criteria as defined in this recruitment email and are interested in participating in a 30-minute Zoom interview.

Please let me know if you have any questions. Thank you for helping to improve the experience and success of project managers transitioning to agile project management methodologies.

Best,
Randall Hopkins

Candidate, Doctor of Education
University of New England

APPENDIX B

Participant Information Sheet

Version Date:	<i>February 15, 2023</i>
IRB Project #:	<i>0223-09</i>
Title of Project:	A Phenomenological Study on the Lived Experience and Leadership of Project Managers in an Agile Transformation
Principal Investigator (PI):	Randall Hopkins
PI Contact Information:	Rhopkins4@une.edu (781) 512-4421

INTRODUCTION

- This is a project being conducted for research purposes. Your participation is completely voluntary.
- The intent of the Participant Information Sheet is to provide you with important details about this research project.
- You are encouraged to ask any questions about this research project, now, during or after the project is complete.
- The use of the word ‘we’ in the Information Sheet refers to the Principal Investigator and/or other research staff.

WHAT IS THE PURPOSE OF THIS PROJECT?

The general purpose of this research project is to explore the experiences project managers who have transitioned from a traditional project methodology to an agile project management methodology. Eight participants will be invited to participate in this research as part of the principal investigator’s dissertation research.

WHY ARE YOU BEING ASKED TO PARTICIPATE IN THIS PROJECT?

You are being asked to participate in this research project because you are a project manager aged 18 or older who transitioned from traditional project management to agile project management.

WHAT IS INVOLVED IN THIS PROJECT?

- You will be asked to participate in one semi structured interview with the principal investigator that will last 30 minutes over Zoom.
- You will be assigned a pseudonym to be used in place of your name for the study.
- You will be given the opportunity to leave your camera on or off during the interview, and your interview will be recorded using Zoom.

· You will be emailed a copy of your interview transcript to review for accuracy. You will have five calendar days to respond, or the PI will assume that you have no comments, and the transcript will be assumed to be accurate.

WHAT ARE THE POSSIBLE RISKS OR DISCOMFORTS INVOLVED FROM BEING IN THIS PROJECT?

The risks involved with participation in this research project are minimal and may include an invasion of privacy or breach of confidentiality. This risk will be minimized by using pseudonym for each of the participants names and by eliminating any identifying information from the study. Participants will have the opportunity to review their transcripts for accuracy and will be given the choice to have their cameras off during the interview. Participants have the right to skip or not answer any questions, for any reason.

Please see the ‘WHAT ABOUT PRIVACY & CONFIDENTIALITY?’ section below for additional steps we will take to minimize an invasion of privacy or breach of confidentiality from occurring.

WHAT ARE THE POSSIBLE BENEFITS FROM BEING IN THIS PROJECT?

There are no likely benefits to you by being in this research project; however, the information we collect may help us understand the experiences of project managers who transitioned from traditional to agile project management.

WILL YOU BE COMPENSATED FOR BEING IN THIS PROJECT?

You will not be compensated for being in this research project.

WHAT ABOUT PRIVACY AND CONFIDENTIALITY?

We will do our best to keep your personal information private and confidential. However, we cannot guarantee absolute confidentiality. Your personal information may be disclosed if required by law. Additionally, your information in this research project could be reviewed by representatives of the University such as the Office of Research Integrity and/or the Institutional Review Board.

The results of this research project may be shown at meetings or published in journals to inform other professionals. If any papers or talks are given about this research, your name will not be used. We may use data from this research project that has been permanently stripped of personal identifiers in future research without obtaining your consent.

- Data will only be collected during one on one participant interviews using Zoom, no information will be taken without participant consent, and transcribed interviews will be checked by participants for accuracy before they are added to the study.
- Pseudonyms will be used for all participants and any personally identifying information will be stripped from the interview transcript.

- All names and e-mails gathered during recruitment will be recorded and linked to a uniquely assigned pseudonym within a master list.
- The master list will be kept securely and separately from the study data and accessible only to the principal investigator.
- The interview will be conducted in a private setting to ensure others cannot hear your conversation.
- Participants are given the option to turn off their camera during Zoom interview.
- Once member checking of the transcribed interview is complete the recorded Zoom interview will be destroyed. Once all transcripts have been verified by the participants, the master list of personal information will be destroyed.
- All other study data will be retained on record for 3 years after the completion of the project and then destroyed. The study data may be accessed upon request by representatives of the University (e.g., faculty advisors, Office of Research Integrity, etc.) when necessary.
- All data collected will be stored on a password protected personal laptop computer accessible only by the principal investigator.

WHAT IF YOU WANT TO WITHDRAW FROM THIS PROJECT?

You have the right to choose not to participate, or to withdraw your participation at any time until the Master List is destroyed without penalty or loss of benefits. You will not be treated differently if you decide to stop taking part in this project.

If you request to withdraw from this project, the data collected about you will be deleted when the master list is in existence, but the researcher may not be able to do so after the master list is destroyed.

WHAT IF YOU HAVE QUESTIONS ABOUT THIS PROJECT?

You have the right to ask, and have answered, any questions you may have about this research project. If you have questions about this project, complaints, or concerns, you should contact the Principal Investigator listed on the first page of this document.

WHAT IF YOU HAVE QUESTIONS ABOUT YOUR RIGHTS AS A RESEARCH PARTICIPANT?

If you have questions or concerns about your rights as a research participant, or if you would like to obtain information or offer input, you may contact the Office of Research Integrity at (207) 602-2244 or via e-mail at irb@une.edu.

APPENDIX C

Participant Profiles

Participant 1: Talia Davis. Talia is a 40-year-old female employed with CBWF in the commercial banking industry. Her transition to agile started at the end of 2017. In describing her adoption of agile, Talia focused on the human element of change. She provided valuable insight into her role as a mentor helping individuals understand change as the first step to becoming a high performing team. Talia noted the critical nature of her communication skills to enable team members and stakeholders through change.

Communication was a significant factor for Talia while serving as a conduit of information between her team and stakeholders. Talia referenced the bidirectional nature of communication during the transition to agile. She specifically called out the importance of communication with middle management whose support is critical in an agile transformation. In describing the importance of communication skills, Talia emphasized soft skills, emotional intelligence and empathy when enabling change. She acknowledged that these competencies contributed to building strong relationships as a scrum master.

A transition to agile was a welcome change for Talia. She described the change as feeling natural. Talia enjoyed coaching and mentoring her teams. She adopted behaviors that aligned with her understanding of leadership and preferred style of working. As an agile leader, Talia viewed herself as a developer of people. She strove to improve her understanding of the team's work, and used sprint retrospectives, a recurring scrum ceremony, to drive continuous improvement.

Participant 2: Len Healey. Len is a 40-year-old male who was employed with MFFI in the miscellaneous financial services industry during a transition to agile in 2022. Len described

his agile transformation as feeling natural for him. He emphasized a focus on change management and servant leadership during the transition. Communication skills and building trust were also critical for Len. These skills assisted Len in managing change. Len described learning how to empower teams to collaborate and experiment. He viewed his role as nurturing discovery for team members.

Len emphasized the critical nature of building trust when managing change. He connected building trust to his ability to nurture discovery with team members. Len referred to himself as a trust junkie who used trust to maintain stable lines of communication.

Len was pleased with the transition to agile. He described the change as an awakening and refreshing to relinquish command and control in lieu of servant leadership and empowering teams. From Len's perspective, servant leadership at the organization level enabled learning, which improved agility.

Participant 3: Ben Lane. Ben is a 50-year-old male who was employed with CBCO in the commercial banking and consumer lending industry in 2018 at the time of his agile transformation. He viewed himself as having a sound grasp of the agile methodology and underlying principles and values. Ben described his transition to agile as a positive experience. He enjoyed learning how organizations transform culture. Ben spoke of his role in managing and leading change. He emphasized the challenge of gaining buy-in from team members. Of primary concern to Ben was ensuring a shared understanding of project deliverables and the path to achieve them. Ben recalled the initial discomfort he experienced when he resisted using an iterative development approach in lieu of following a detailed project plan. Relinquishing control to the team to define and prioritize project tasks represented a significant change for Ben. He

welcomed the emphasis on the team and spoke favorably about his role leading individuals in pursuit of a common goal.

Ben relied on his communication skills to enable change. He described learning to read the behavior of others to alleviate resistance. Ben emphasized the need to be mindful of behaviors that accompany resistance to change. He underscored the importance of empowering teams through breakout sessions to ensure a shared understanding of short-term milestones. Ben described his behavior as changing from task-master to empowerment. He defined his role as serving and enabling the team.

Participant 4: Ann Lennon. Ann is a 40-year-old female who was employed with ESMA in the electronic shopping and mail-order house industry in 2018 at the time of her agile transition. She described the transition to agile as easy. Ann's natural leadership style aligned with the agile framework's reliance on autonomous teams. The transition to agile forced Ann to change her focus as a project manager. She described the uncertainty that accompanied change and recalled shifting her focus from outputs to outcomes. Ann was no longer concerned with the volume of work produced by the team. Instead, she focused on ensuring that targeted project outcomes delivered the value customers expected. Ann described relinquishing her rigid, serialized, check-list based project management approach that was heavy on documentation and control. She learned to adopt a fluid, iterative development approach that is foundational to agile.

A central theme for Ann during the agile transition was the need to enable others to accept and succeed in managing the change. Ann recalled the positive impact the transition to agile had on her career. Agile afforded Ann new career opportunities that allowed her to focus on developing others. She described carrying the agile mindset into her personal life as a sailing instructor. Learning how to handle the uncertainty that accompanies relinquishing control of

decisions was a significant shift for Ann, yet she acknowledged the benefit. She spoke of enabling learning and discovery by empowering others and sharing decision-making.

Finally, Ann emphasized respect for people as a driving factor during the transition to agile. She described frustration with organizational politics. Ann spoke positively about roles she enjoyed due to having autonomy. She abhorred office politics and being told what to do. The freedom provided to agile teams is one reason Ann found the transition a natural fit for her preferred leadership style. Ann concluded her interview by underscoring the importance of learning and understanding the system components that orchestrate together. She described the need to bring people together to ensure a successful transition. Ann spoke of using a relationship map to assess those impacted by change. She emphasized building trust through transparency and open communication.

Participant 5: Yanna Michaels. Yanna is a 40-year-old female who was employed with CBSS in the commercial banking industry during her transition to agile in 2019. Yanna's experience with agile was not particularly favorable. She viewed agile as the latest trend in project management and felt that companies would come to the realization that the change to agile was unnecessary.

Yanna described retaining her task-master approach used in traditional project management. She felt a need to closely control tasks to ensure deliverables were met. Yanna noted that her need to control project activities increased after the transition. She found herself pestering and debating with team members. Her efforts to create a shared understanding focused on ensuring that team members understood the repercussions they would face if goals were not achieved. Yanna emphasized that her agile role as a change agent grew frustrating at times. She noted that working in a highly regulated industry complicated the change to agile.

Yanna concluded the interview by reflecting on her positive experience with the transition to agile. Her agile role required close collaboration with team members. A collaborative work environment assisted Yanna in improving her understanding of products and services. She enjoyed learning and using her subject matter expertise to drive productive discussions and challenge team members. Yanna noted the benefit of an improved understanding of the work is that it provides an opportunity to challenge team members. Yanna also enjoyed increased face-time and sharing decisions with team members in the agile framework. She stated that the need to make faster decisions led to the team's willingness to experiment more often.

Participant 6: Jack Murphy. Jack is a 50-year-old male employed with MFFI in the miscellaneous financial services industry. His transition to agile occurred in 2018. Jack described his transition to agile as life-changing. He spoke of agile as a mindset that he has since carried into his personal life.

Jack noted that his ability to influence team members with whom he had no direct management authority was difficult. He characterized his team's resistance to change as a primary challenge. Jack recalled adapting his leadership approach to enable change. He focused on facilitating a shared understanding with others affected by the change. The benefit of a shared understanding, as Jack described, was that it helped to reduce coworkers' apprehension to change. Jack noted that there was a lot of apprehension and resistance on people's part of transitioning.

Jack characterized his leadership style during and after the transition to agile as less command and control and much more empathetic as compared to his leadership style in traditional project management. Jack also described adjusting his behavior and communication skills to foster learning and influence change. For example, when facilitating team retrospectives,

he empowered the team to experiment with small changes to support learning, collaboration and decision-making. Jack viewed himself as a leader and principal actor in enabling change.

Participant 7: Dave Presley. Dave is a 50-year old male whose agile transformation took place in 2018 while employed with CBWF in the commercial banking industry. When reflecting on his agile experience, Dave did not focus on the intricacies of the agile framework and differences with traditional project management methods. His reflection of the agile transformation focused on developing leaders, relinquishing control, empowering teams, and enabling learning. Dave emphasized the need to bring people together to enable change.

Dave stated that the transition to agile was relatively easy for him. He had a desire to improve his understanding of the work performed by the team. He spoke of learning to roll up his sleeves to acquire a deeper knowledge of products they were tasked to build. Dave described this knowledge as beneficial to serving the team. He frowned upon traditional project managers and leaders who often place a heavy focus on controlling the team's tasks and updating status reports. He questioned the value in this approach. Dave highlighted the challenge he faced when attempting to influence leaders to replace these behaviors with a servant leadership.

Dave described serving the team by facilitating retrospectives and challenging the team to experiment with small changes. He emphasized reflection and experimentation to foster learning and build trust. Dave encouraged the team to reflect every two weeks. He emphasized that reflection and a safe environment in which to experiment creates trust among team members to share challenges and experiences without feeling threatened.

Participant 8: Sandra Smith. Sandra is a 60-year-old female whose transition into agile methodologies in 2018 occurred while she was employed with the company ACCG in the Air Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration

Equipment Manufacturing industry. Sandra characterized her experience as challenging due to the heightened regulatory nature of her industry. An iterative development approach requires frequent implementation of product updates, which presented challenges for customers. Sandra noted that regulations required thorough documentation and change control processes, which are minimized in agile.

Sandra described her customers' resistance to change. Agile requires heightened interaction and communication between the development team and the customer to define, build, review and implement product changes on a frequent basis. The product built by Sandra's team was shared across multiple customers, each having specific implementation needs. This issue complicated gaining customer consensus on the timing of product deliveries. Sandra spoke of difficulty gaining customer consensus and getting them involved in the agile process.

Sandra also described the challenge of clarifying team roles. Her team viewed her as a traditional project manager. Team members routinely looked to Sandra to direct their tasks, which was not in her purview as an agile project manager. The team owns the management of tasks in agile, not the project manager. Sandra had to reduce her span of control over the project team, especially with respect to decision-making. Sharing control with the team forced Sandra to invest additional time and effort explaining the products and industry to team members so they could learn and make fact-based decisions. Finally, Sandra described additional frustration with the transition to agile. She spoke of losing visibility into managing project dependencies. Sandra described this lack of visibility as uncomfortable.

APPENDIX D

IRB Approval Letter



INNOVATION FOR A HEALTHIER PLANET

Office of Research Integrity
Institutional Review Board

Biddeford Campus
11 Hills Beach Road
Biddeford, ME 04005
(207) 602-2244 T
(207) 602-5905 F

Portland Campus
716 Stevens Avenue
Portland, ME 04103

DATE OF LETTER: February 17, 2023

PRINCIPAL INVESTIGATOR: Randall M. Hopkins
FACULTY ADVISOR: Ella Benson, Ed.D.

PROJECT NUMBER: 0223-09
RECORD NUMBER: 0223-09-01

PROJECT TITLE: A PHENOMENOLOGICAL STUDY ON THE LIVED EXPERIENCE AND LEADERSHIP OF PROJECT MANAGERS IN AN AGILE TRANSFORMATION

SUBMISSION TYPE: New Project
SUBMISSION DATE: February 14, 2023

ACTION: Determination of Exempt Status
DECISION DATE: February 17, 2023

REVIEW CATEGORY: Exemption Category # 2ii

The Office of Research Integrity has reviewed the materials submitted in connection with the above-referenced project and has determined that the proposed work is exempt from IRB review and oversight as defined by 45 CFR 46.104.

You are responsible for conducting this project in accordance with the approved study documents, and all applicable UNE policies and procedures.

If any changes to the design of the study are contemplated (e.g., revision to the research proposal summary, data collection instruments, interview/survey questions, recruitment materials, participant information sheet, and/or other approved study documents), the Principal Investigator must submit an amendment for review to ensure the requested change(s) will not alter the exempt status of the project.

If you have any questions, please send an e-mail to irb@une.edu and reference the project number as specified above within the correspondence.

Best Regards,

A handwritten signature in black ink that reads "Bob Kennedy". The signature is fluid and cursive, with a long horizontal stroke at the end.

Bob Kennedy, MS
Director of Research Integrity

