

# Navigating Complexity: A Comparative Analysis of Agile and Traditional Project Management Approaches for Enhanced Performance in South Asia's Dynamic Business Landscape

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DOI: <https://doi.org/10.5281/zenodo.10776433>

Published Date: 04-March-2024

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**Abstract:** The purpose of this paper is to have a more in-depth comprehension of how using a variety of different project management approaches may assist businesses in dealing with project completion in a more efficient manner. More specifically, project management is analysed and presented as a positive contribution to insurance and investment organisations for more effective transitions from project management to business-as-usual in the book *Navigating Complexity: A Comparative Analysis of Agile and Traditional Project Management Approaches for Enhanced Performance in South Asia's Dynamic Business Landscape*. This book focuses on South Asia's rapidly changing business landscape. For the purpose of successfully completing projects, a comprehensive framework incorporates the hybrid approach of Agile and traditional project management within theoretical chapters. It functions as a lens through which the empirical facts may be seen and evaluated. The empirical work is based on a single thorough case study of Intesa Sanpaolo Life dac, which comprised seven semi-structured interviews with the company's most authoritative personnel with respect to the topic of this article. This case study was the basis for the empirical research. This case study investigates the management of project closure by analysing existing issues and determining the positive practises that the company in question has implemented. Throughout the course of the data analysis, the authors were able to bring attention to findings that contribute both managerially and theoretically. The originality and relevance of this research lie in the fact that it seeks to improve project-based companies that make use of a hybrid of Agile and conventional project management but struggle to finish projects and transition to the operational phase. This study intends to improve project-based businesses that make use of Agile and conventional project management. As a consequence of this, this presents an entirely novel viewpoint in the project management literature, which considers project closure to be the phase of the project life-cycle that has received the least amount of research.

**Keywords:** Traditional Project Management, South Asian Business Practices, Project Management Comparative Analysis, Project Closure Efficiency.

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## I. INTRODUCTION

Businesses have had a difficult time conceiving of their objectives and turning those objectives into actions throughout the course of the last few decades as a direct result of the continual change in the needs of the market. According to the vast majority of the research that has been conducted on the topic, the severe change that has been described is associated with the need for businesses to build efficient methods for being flexible, adaptable, and imaginative in order to provide

customers with products or services that have unique value (Cobb, 2011, page 57). As a consequence of this, businesses see project management not only as an influential strategy to defend their organisation but also as an enticing way to get additional value (Heising, 2012).

According to Genus and Jha (2012), this helps to explain why more and more organisations are moving towards project-based setups as a reaction to too rigid architectural designs and as an attempt to more closely reflect the demands of the present environment. Despite this, the available research and credible statistics indicate that around 18% of current projects are still considered to be failures, and approximately 43% of organisations have had problems with project management (The Standish Group, 2012). According to Cetindamar et al. (2016), failure rates have been increasing, particularly in the information technology sector and other fields in which technology is the key engine of crucial innovation. In addition, the issue tends to become a great deal more challenging if this technology is coupled with the turbulence that is inherent in a financial environment. According to Lobasso (2017), businesses in the insurance and investment industries have two important responsibilities: first, they must work to enhance the efficiency of the project culture at their organisation; second, they must devise their own plan for efficient project management. As a consequence of this, it is now more vital than it has ever been to acquire an awareness of the meaning of projects and project management, as well as the significance of these concepts to the practise of business. This section will offer the research backdrop by addressing the definitions of numerous problems that are discussed throughout the study as well as in the aforementioned literature.

The first step in gaining an understanding of project management is to define the word "project." According to Kerzner and Kerner (2013), a project is a collection of actions or activities that have a distinct objective, start and completion dates, consume resources, have a budget, and may fulfil several functions. Projects are described as "temporary endeavours undertaken to create a unique product, service, or result" in the Project Management Institute's (PMI) Project Management Body of Knowledge (PMBOK® Guide) (PMI, 2013, p. 3). Initiatives, in other words, are the ways through which businesses may capitalise on the unpredictability of the market in order to bring about good change (Turner, 2014, page 20). After reading these definitions of projects, one can get to the conclusion that defining project management is as simple as saying "the way of managing a project is project management." In point of fact, this problem is rather challenging. According to Kerzner and Kerner (2013), project management may be defined as the act of making efficient use of already existing resources via the reorganisation of management and the implementation of novel management methods in order to exercise better control. Recently, the demand on project managers to effectively finish their projects has increased in tandem with the growing complexity of initiatives. In order to judge whether or not a project was successful, PMI (2013) referred to the fulfilment of the project's schedule, budget, and scope as the "iron triangle." It is no longer sufficient in today's competitive climate to characterise a project as successful only by resolving the triple restrictions, which is also known as the project's iron triangle.

This is because the interests of key stakeholders and the value of the project play a vital part in determining whether or not a project is successful (Dvir et al., 2003). Previous literature on project management defined projects as being grouped in processes or phases, which together make up what is known as the project lifecycle. Henri Fayol was the one who originally presented this method, and he did so by dividing the project into five distinct stages: planning, organising, commanding, coordinating, and controlling (Wren, 1990). The research conducted by Adams and Barnd (1988), on the other hand, identifies four phases of project development as follows: conception, planning, execution, and termination. According to the Project Management Body of Knowledge (2013), there are four phases that make up the project life cycle. According to PMI (2013), the key stages of a project include the following: the beginning of the project, project organisation and preparation, project work, and project completion. These phases are meant to be taken as a whole and serve as a starting point; nevertheless, it is important to keep in mind that they may be coupled with other phases. According to PMI (2013), the phase known as "project initiation" is the one in which activities such as "developing the business case," "conducting feasibility studies," "assembling the project team," "setting terms of reference," and "creating facilities" are carried out. The second phase, known as organisation and preparation, focuses on planning the project, which involves organising the use of resources, creating a budget, developing communication methods, and ensuring the quality of the work. The third phase of a project is referred to as the execution phase, and it is during this phase that the team actively works on the project to generate the deliverables and controls the delivery, scope, quality, time, risks, and costs (PMI, 2013).

The last phase of the project is called the project closure phase, and it is during this phase that all of the activities are finished and the project is handed over to operations. According to Kerzner and Kerner (2013), the use of project management is

becoming more widespread across a variety of business sectors, including but not limited to the following: construction, information technology, pharmaceuticals, hospitals, legal companies, and even governmental and non-governmental organisations. According to Kerzner and Kerner (2013), a number of different sectors are adapting conventional project management, sometimes known as the waterfall technique, to meet the requirements of their organisations and industries in order to successfully operate projects and better adapt to an ever-shifting environment.

## II. PROBLEM STATEMENT

Late in the year 2011, an approach to project management known as Agile, which is more creative and emphasises collaboration, started to acquire significant favour among IT project managers' practitioners. This alternative Project Management methodology emerged as a result of the previously mentioned profound and drastic shift in the market, as well as the exponential growth in technology and innovation, which has been established as an essential requirement of survival, particularly for IT organisations (Cetindamar et al., 2016). Specifically, this alternative methodology was developed in response to the need for IT organisations to remain competitive in the face of accelerating technological advancement. In addition, in contrast to traditional project management, which use the iron triangle as a measurement tool for project performance and the project lifecycle as the mechanism for managing projects, Agile offers ways for managing projects that are more comprehensive and dynamic. In point of fact, the understanding that traditional strategies are often unable to match the competitive standards of today's market was the impetus that led to the development of this novel approach.

Traditional and rigid thinkers are being undermined by the needs for quicker delivery times, product and service differentiation while maintaining extremely high levels of quality, and productivity increases at lower costs. This is paving the way for dynamic and innovative approaches such as Agile (Project Management Institute, 2013, p. 1). This phenomenon has been defined in a number of different ways and with a number of different conceptual frameworks throughout the years, which has resulted in room for interpretation and the possibility of misunderstanding (Leybourne, 2009). As a consequence of this, the authors have decided to describe this concept by focusing on the fundamental concept of agility as well as the values and principles that are responsible for producing its characteristics (see chapter 2, The Agile Manifesto). It has been said that agility is "the ability to create and respond to change" (Highsmith & Cockburn, 2001). This observation encapsulates the core of this innovative approach, which seeks to profit on the complexity of the environment by acknowledging the unavoidable changes that are going to occur. In addition, Agile was designed with the intention of becoming a practical response to the growing need to widen and overcome criteria for the success of projects and project management that go beyond time, money, and quality. Because concentrating only on these three demanding criteria may encourage one to place less importance on the accomplishment of successful business results (Leybourne, 2009) This seems to be the common ground where authors are advocating Agile Project Management as a viable alternative technique.

Because of the high level of rivalry, complexity, and volatility in the modern globalised market, especially in the information technology industry, a substantial amount of work has been placed into developing more imaginative strategies. These diverse ideas finally found common expression under the impetus of a group of software development practitioners in early 2001 (Leybourne, 2009). At that time, they created the Manifesto for Agile Software Development (Beck, et al., 2001). This was the beginning of the Agile Software Development movement. This work, which was designed to assist project managers in dealing with issues associated to software development projects, contains concepts and ideals that have revolutionised their whole approach to project management, therefore altering the views of organisations (Fernandez & Fernandez, 2008). This work's purpose was to assist project managers in dealing with challenges linked to software development projects. In point of fact, Agile Project Management made it possible for pioneers to be the first to embrace complexity and the uncertainty that resulted from it, rather of trying to steer clear of it (Weber et al., 2017).

A rising number of non-IT project managers, who had previously relied on conventional approaches, have progressively moved to project management based on agile principles (Azanha et al., 2017). This may be as a consequence of the popularity and success of Agile implementations in the software and development sector. It seems that the Manifesto for Agile Software Development (Beck et al., 2001) has within its principles the true potential for broadening horizons (Rasnacis & Berzisa, 2017) as well as elements that might potentially aid in overcoming some of the challenges that were highlighted before in the process of Project Closure. This specific aspect, in particular, seems to be understudied by the literature, despite the fact that the vast majority highlights the significance of the consequences that it has (Raith et al., 2017). The stages of the Project Life-Cycle are, as was said before, the beginning of the project, the development of the project, the execution of the project, and its conclusion. According to Havila et al. (2013), the vast bulk of the project

management literature is concentrated on the earlier stages of the project lifecycle. According to Havila et al. (2013), managers often put a larger emphasis on the stages of beginning, developing, and carrying out the plan. According to Sarfraz (2009), the authors of this research consider the phase of the project life cycle known as "project closure" to be the last phase of the process. During this phase, all of the component processes should be finished. At this, the very last phase of the project's life cycle, management should pay very careful attention. It is possible that the risk of unplanned increases in project cost and the amount of time needed to finish projects will be reduced if the project is successfully and efficiently closed. As a consequence of this, it is essential that all contracts connected to the project be completed before the project can be declared officially over (Sarfraz, 2009). According to textbooks on project management, project closure should include project evaluation, recording of all necessary descriptions and data, as well as a final report that describes the whole course of the project (Lock, 2003; Meredith & Mantel, 2000; Turner, 1999).

It is now obligatory, especially for businesses that operate on the basis of projects. Project closing is a vital period for many of their projects, and at this time, many parties from the same firm look at the same project from drastically different perspectives. When a method of project management begins the processes of business as usual, the technique releases itself from its duties for the project. In other words, after the project or product has been released into the market, the project closure phase must entail making transitions that are both effective and efficient to those divisions of an organisation that will be responsible for managing the project as part of their regular business and operational procedures. According to Havila et al. (2013), there haven't been many studies conducted on the project closure phase, which includes the skills and organisation that are necessary for a successful closeout. At the same time, regardless of the success of the project, there is a need to record and keep project knowledge in order to transfer it to other projects. This step, which is usually overlooked during the course of the project life cycle, especially during the project closure phase (Thomas, 2011), is particularly important. The use of lessons learned as a method to facilitate the transfer of knowledge from one project to another is recommended. Therefore, the research gap on project closure methods and competences in general (Havila, et al., 8 2013) and specific tools and methods required for the insurance industry suggests the need for additional research in this field. To put it another way, the literature does not present research specifically on project management approaches and closure of the insurance-investment industry.

### III. LITERATURE REVIEW

In this section, the researcher summarise the theoretical grounds for the study, as gleaned via a literature survey that serves as the framework for our following analyses. As will be shown, the adoption of an Agile approach has an influence on many Project Management elements; hence, the section begins with a review of Project Management Change theory, as well as certain well-known change models.

#### 1. History of Project Management

There is a large amount of discussion concerning the beginnings of project management within the body of academic research. Some researchers believe that the 1950s were the decade in which the United States first started developing large-scale undertakings in the aerospace and defence industries (J.-S. Chou & Yang, 2012; Saynisch, 2010b). However, other researchers look even further back in time and believe that the Egyptian construction of the pyramids was the first time project management practises were used (Nicholas & Steyn, 2012).

On the other hand, there is widespread consensus among industry experts that the systematic approach to project management, in addition to its associated tools and procedures, was only developed relatively lately, perhaps in the vicinity of half a century ago. It wasn't until the late 1950s that the modern methods to project management began to emerge, and it wasn't until 2012 that those techniques were formally codified in the ISO/FDIS 21500:2012, Guidance on Project Management (Binder, Aillaud, & Schilli, 2014; Snyder 1987). The usual technique, which is characterised by careful planning and management, is followed by this ISO standard. Kwak (2005) identifies four stages in his research, which are shown out in Table 2. These phases are meant to more accurately represent the evolution of modern project management. In the following paragraphs, one will find an in-depth discussion of each of the four historical periods, as well as examples to back up the claims being made. In the early 1900s, advances in technology, such as the automobile and telephone, made it possible to increase the mobility and speed of communications.

These served as facilitators for projects like as the Hoover Dam, construction of which started in 1931 and continued until 1936, when it was completed on schedule and without exceeding its budget. Henry Gantt came up with the idea for the

Gantt Chart during this time period. This chart was designed to depict project schedules and is still in use today. The work breakdown structure (WBS) that was ultimately developed made use of job requirements as its base. Another important undertaking at the period was known as the Manhattan Project, which started in 1942 with the intention of designing and constructing the world's first nuclear weapon. The Office of Scientific Research and Development (OSRD) was in charge of coordinating the project, which included participation from a wide variety of institutions and other organisations.

It culminated in the successful testing of the bomb in 1945. Project management activities were a significant contributor to the many technological advancements that occurred in the decades that followed. For example, NASA sent six different spacecraft to the moon between the years 1969 and 1972. The Apollo Programme Office was responsible for carrying out project management practises such as mission scheduling by using the programme evaluation and review technique (PERT), as well as evaluating the overall success of the project (Kwak, 2005). The development of minicomputers and silicon chips in the 1960s paved the way for the introduction of personal computers a decade later.

Conversations in 1962 about the concept of a "galactic network," which was dreamed of by MIT's J.C.R. Licklider, marked the beginning of the project that would become the Internet. According to Leiner et al. (2009), the Advanced Research Projects Agency (ARPA), which was responsible for the creation of the ARPANET, the predecessor of the Internet, planned and supervised the project. In 1971, Intel introduced a microprocessor with a 4-bit data width, which later became the foundation for the company's development of future processor series. Bill Gates and Paul Allen established Microsoft in 1975. During the same decade, a number of other enterprises specialising in the production of project management software were established, such as Artemis (1977), Scitor Corporation (1979), and Oracle (1977). Important approaches to project management were developed during the period between the years 1950 and 1979, including the critical path method (CPM)/PERT and material requirement planning (MRP). Initially, CPM/PERT was used in government projects that required large-scale computer systems that were operated by specialist programmers (Kwak, 2005).

The focus shifted to people and their interactions with multitasking personal computers throughout the 1980s and early 1990s. These computers were more effective than older mainframe computers in managing and regulating intricate project schedules. Because project management software is now more readily available, project management practises have become both more effective and easier to implement. According to Leiner et al. (2009), the emergence of important networking technologies such as local area networks and Ethernet technology occurred roughly around the same time. Two projects that were carried out during this era that are particularly noteworthy are the England-France Channel project (1989-1991) and the Space Shuttle Challenger project (1983-1986). The canal was the result of a collaborative effort between many countries that required substantial project coordination and included a large number of contractors from both countries. These contractors included engineering corporations, financial institutions, and other linked organisations.

Language barriers, differences in units of measurement, and difficulties in communicating in general provided particularly difficult challenges for project teams during this time period. The disaster that befell the Space Shuttle Challenger brought more focus to the fields of project management (Kwak, 2005), particularly risk management, quality management, and the dynamics of groups. In the middle of the 1990s, the emergence of the Internet made it possible for new breakthroughs to be made in project management practises. The development of the Internet's capacity to provide speedy, trustworthy, and interactive web browsing, as well as online shopping and a myriad of other services, contributed to the exponential rise in the platform's appeal. Through the facilitation of rapid and straightforward communication, it made it possible for businesses to become more productive, efficient, and customer-oriented. The development of Internet-based technologies brought about significant improvements in project management and control, which led to an increase in the number of businesses that adopted and made use of project management practises. Over the course of the last several decades, this development has helped to establish project management offices, often known as PMOs. The Year 2000 (Y2K) project, which had the purpose of preventing computer and system problems as a result of the turn of the millennium, is possibly the most notable initiative from the end of the twentieth century.

The Y2K project was designed to prevent computer and system malfunctions as a result of the turn of the millennium. One of the challenges faced by this programme, which included many different federal agencies, was coordinating and monitoring activities across the United States government. The Y2K project had substantial challenges in project management as a result of the rigorous limitations that it was required to adhere to. These constraints included a short deadline as well as the rising difficulty of coordinating across companies that were interdependent and connected. As a result of the fact that millions of companies all over the world launched similar projects with the same objectives, the Y2K

project became the project with the most documentation in the history of project management (Kwak, 2005). A good number of these companies established their very own project offices and implemented various practises, tools, and processes for project management. It was necessary to use project management software such as the Primavera project planner in order to successfully coordinate the operations of a complex and interrelated project. In recent years, the following developments have significantly influenced and advanced project management practises (J. K. Pinto, 2002): (1) shorter product lifecycles require greater investments in research and development; (2) narrower product launch windows are required to keep up with increasing competition; (3) global markets provide new sales opportunities but also challenges due to increased competition; and (4) increasingly complex and technical projects. As a result of recent developments in the administration of projects and projects themselves, the status of project managers has recently been increased. In the past, those in charge of managing projects have had to contend with a scarcity of training, political resistance from line managers, limited career opportunities, insufficient recognition, and an absence of procedures and organisational structure. On the other hand, management writers such as Tom Peters and executives such as Jack Welsh were enthusiastic proponents of the project management job and have contributed to the position's present positive reputation (J. K. Pinto, 2002). During the course of the previous century, developments in technology have not only had an impact on globalisation, product lifecycles, and the whole corporate environment; they have also had an effect on the way project management is conceived and practised. Historically, project management was focused on an approach that was rational and predictable. This method placed an emphasis on the components of project management that dealt with planning and control. This traditional method is still prominent in the majority of the literature; examples include the PMBOK Guide (PMI, 2012) and the ISO standard for Guidance on Project Management, both of which were extensively influenced by early concepts about project management. This conventional approach is still widespread in the majority of the literature. Although the PMBOK acknowledged the need for emergent planning in 2004 (Collyer, Warren, Hemsley, & Stevens, 2010), the ISO standard continues to be waterfall-based and does not include emergent and flexible alternatives such as agile (Binder et al., 2014). The requirement for the construction and military industries to plan, control, and manage huge and sophisticated physical projects led to the evolution of traditional management abilities. According to Alias et al. (2014), the primary focus was placed on the control and management of "hard" project performance criteria such as time, cost, and scope. However, in recent years, this approach has come under fire for widespread criticism due to the fact that it is not adaptable enough to deal with complexities and shifting customer expectations. It has also been criticised for failing to handle the emergent nature of front-end work, treating all projects as if they were the same, and failing to account for human difficulties, which are often the most essential variables to consider when it comes to project management (Winter, Smith, Morris, & Cicmil, 2006). All of these failings have been attributed to the fact that it treats all projects as if they were the same. The need for new ways of thinking eventually led to the modification of the organisational structure from functional to matrix, and then finally to project, respectively. Project organisations are flexible in the face of change due to the transitory nature of the work they do. These days, project management also encompasses change management, and those in charge of projects might be seen as change agents. According to Bourne and Walker (2004), the increasing prevalence of this approach has resulted in a renewed focus on project management and the so-called "soft" components of relationship management.

## 2. Traditional project management

There are several methodologies for managing projects, some of which have been adapted to meet the prerequisites of certain project domains. The research indicates that there are two distinct approaches to project management, which are referred to respectively as classic project management and contemporary project management. The PMBOK Guide and the bulk of the IPMA Competence Baseline, in addition to the ISO 10006 standard, are examples of representations of traditional project management. According to Saynisch (2010b), traditional project management is "based mainly on a mechanical, mono-causal, non-dynamic, linear structure and a discrete view of human nature and societies and their perceptions, knowledge, and actions." On the other hand, the PMBOK guide defines traditional project management as "a set of techniques and tools that can be applied to an activity that seeks an end product, outcomes, or a service" (PMI, 2012).

This approach has been used for a significant number of years and decades. It is characterised by a top-down strategy, in which all objectives and responsibilities are conceived at a higher management level and then trickled down through the business. This approach is differentiated by its use. It is a hierarchical organisation with a command and control style of leadership. Since a plan is established at the beginning of the project and there is very little possibility for alteration after its completion, the strategy is highly dependent on the plan. Planning is often handled in a centralised manner inside a company. The conventional method of project management results in an enormous amount of paperwork and records being

created, which is yet another characteristic that sets it apart. This system is also very well arranged, which slows things down and makes it impossible to make any changes to it. One of the drawbacks is that there is not enough flexibility, which is a disadvantage in today's climate of sophisticated and fast-paced project environments.

The remainder of the team members accept the project manager's directives and focus on their specialised jobs, leaving little opportunity for them to perceive the "big picture" and gain ownership of the project. Only the 18 managers of the project have ownership of the project. The typical approach is comprised of a number of stages, each of which is outlined in the PMI (2012) PMBOK and shown in Figure 2. According to the PMBOK handbook, the process of project management may be broken down into five distinct process categories: initiating, planning, executing, monitoring and controlling, and closing the project. These groups are then broken down even further into a total of 42 project management processes that correspond to the nine knowledge areas that are outlined below. These nine knowledge areas are as follows: integration management, scope management, time management, cost management, quality management, human resource management, communications management, risk management, and procurement management. The traditional method of project management is based on the assumption that future events can be accurately predicted, and that the relevant tools and procedures are already well understood.

When going through the various parts of the process, it is also thought that completed stages will not be revisited. The relevance of the requirements and the well-structured technique that this approach uses are two of its strengths. However, in the project environments of today, the limitations of this method become soon evident. Projects seldom follow the expected sequential flow, and customers often struggle to specify all of their demands at the beginning of a project (Hass, 2007). Numerous sectors make use of individualised iterations of the aforementioned steps of the procedure. As can be seen in Figure 3, this methodology, which is used in software development, is referred to as the waterfall model, and it organises a number of tasks in a sequential fashion. The majority of well-known practises and tools for project management were developed with large, drawn-out projects in mind. According to Chin (2004), in fast-paced and unexpected environments, these tactics are not only ineffectual but also time demanding. Business needs System requirements Design Construction Testing Deliver Operations & maintenance 20 are far more intricate, interwoven, and dependant on one another than they were in the past.

Alliances are formed between involved parties such as strategic suppliers, customers, stakeholders, competitors, political parties, governmental groups, and regulatory entities in order to meet the challenges posed by unforeseen changes, global competition, shorter product lifecycles and the associated time-to-market pressure, rapidly advancing technologies, and increasing business complexity. These alliances are formed in order to meet the challenges that are posed by these factors. Because of these improvements, the projects that are carried out in this new business environment are correspondingly more intricate, which results in an increase in the level of complexity associated with project management. Methodologies of contemporary project management, such as lean management and agile project management (APM), have emerged to assist firms in adapting to changing business environments and improving their projects. According to Conforto and Amaral (2010), the body of research available has only a limited number of therapies that are clearly defined and effective, as well as comprehensive analyses of the results of these treatments.

According to Conforto, Salum, Amaral, da Silva, and Magnanini de Almeida (2014), the majority of the solutions that are now available are intended to assist in the construction of a more flexible strategy that can be updated in response to the contingencies of a project's environment in order to improve the performance of the project. One of the prevalent approaches to project management is the agile project management (APM) methodology, which is applied most often in the field of software development. However, research is being conducted all the time to determine whether or not APM can be used to different kinds of projects. Agile project management is a technique to managing projects that is extremely iterative and incremental (Hass, 2007). This method emphasises strong collaboration between stakeholders and developers in order to understand the domain, determine requirements, and prioritise features. As can be seen in Figure 4, the agile method is comprised of a number of brief iterative planning and development cycles.

This allows for the ongoing examination of intermediate outputs and subsequent adjustments to be made if users and stakeholders need them. As a direct result of this, the whole project team working on a product, including any stakeholders, will continually work to improve it. This approach makes it possible to make speedy modifications to a product in the event that previously unanticipated requirements emerge. The next chapters of this book go further deeper into the topic of agile project management and explore it in more detail. A further contemporary method of project management that has been

investigated in the research literature is known as project management second order, or PM-2. This is a relatively new paradigm, and the people who developed it predict that during the next few decades, it will emerge as the preeminent approach to resolving the challenges and meeting the requirements of the third century (Saynisch, 2010b). According to Saynisch (2010a), PM-2 is a methodology for "mastering complexity in projects and project management." The PM-2 methodology is predicated on a behavioural model of project management, which takes into account "soft factors" like human interaction and attitude shifts. PM-2 considers traditional project management to be an important component of project management; however, this approach has to be enlarged in order to include dynamic, non-linear, and multi-causal structures and processes. In addition to that, it must include the concepts of self-organization, networking, and progression. These criteria are satisfied by PM-2. The PM-2 method is not further investigated in this research since we are constrained by the parameters of this study; rather, it is only offered here for the sake of completeness. The philosophy of project management is built on the organisational discipline known as project management (OD).

Project Management is a long-term conceptual effort at the Project Management level to improve the organization's effectiveness and viability, particularly its problem-solving and renewal processes, particularly through more effective and collaborative management of Project Management culture, frequently with the assistance of a change agent or catalyst and the use of applied behavioural science theory and technology [11]. Project Management is an effort to improve the organization's effectiveness and viability, particularly its problem-solving and renewal processes, particularly through more effective and collaborative management of Project Management culture. It is a response to a changing environment, as described by Warren Bennis, and it may be seen as a complex educational change strategy with the goal of shifting an organization's ideas, attitudes, values, and structure to the point where it is better suited to adapt to new technologies, markets, or obstacles [6]. While behavioural science has been crucial in laying the framework for the research and practise of Project Management development, new and developing disciplines of study such as systems thinking, leadership studies, Project Management leadership, and Project Management learning have emerged as Project Management catalysts in recent years.

The process is the focal point of project management, which also employs linear models and places a focus on incremental and ongoing shifts in status. Despite the fact that the concept of project management development did not become widely accepted until the 1950s, Kurt Lewin (1898-1947) is often considered as the concept's original father. Lewin is credited with being a pioneer in the fields of group dynamics and action research, both of which are currently used as the basis for the process known as project management. It's possible to think of project management as a continuation of the project management development process. It is a process that significantly modifies the organisational structures, processes, and behaviours in order to bring about a fundamental shift in the strategic direction that an organisation is headed in. According to Munro [42], transformational change is often defined as the need for organisations to progress in response to alterations in the surrounding environment. The ability to change gears quickly and deftly is essential for satisfying customer needs, but not all businesses are able to do so effectively.

According to Blumenthal and Haspeslagh [7], in order for transformational change to take place, the majority of people within an organisation need to make changes to the behaviours that they engage in. In most cases, this is achieved via the completion of a time-consuming process that fosters paradigm changes and provides assistance to the business in better integrating into or establishing ideal future environments. The transformation of project management requires changes to both the strategy and the organisation in order to be successful. Tushman and O'Reilly [71] state that "long-term success is marked by increasing alignment among strategy, structure, people, and culture." Companies that are successful are those that regularly update their strategies, structures, and skills to fit with the environment. According to Tushman and O'Reilly [71], older, larger, and more successful companies generate "structural inertia" and/or "cultural inertia." According to Tushman and O'Reilly [71], resistance to change has its origins in the organization's structures, systems, procedures, and processes, which are linked to Project Management size, complexity, and interdependence. Inertia in the firm's culture develops when the lessons that were learned from previous successes get embedded in the commonly held expectations, stories, beliefs, and standards of how things should be done in the organisation. Haveman [28] asserts that a company's level of complacency increases in proportion to the degree to which its culture is institutionalised. Because bureaucratic organisations suffer considerable rigidity in the application of rules and regulations, which considerably limits their capacity to adjust in reaction to changes in their environment, maintaining company culture is a crucial component of change management. A basis for understanding the interconnectedness of numerous variables and how they may respond to change may be found in the Project Management change models that are specified in the Project Management change theory. As a



result, they are suited for grouping and contextualising the agile adoption difficulties and best practises that arose from our study. This is because they have the appropriate structure and content. In this section, we will provide a high-level overview of a number of noteworthy models, and the Method chapter will clarify how we intend to use models of this kind to our research. Several frameworks have been developed on the basis of the 12 agile principles, and by using these frameworks, various application iterations have been customised to the characteristics of a variety of projects (Cobb, 2011, page 101). In spite of these relatively little alterations, the purpose of this research is to investigate a comprehensive picture of agile project management techniques by using a generic framework that has received the approval of the PMI community.

The pliability and malleability of this system are the bedrock upon which it is built. However, iterations make it possible for projects to be managed with the goal of continuous improvement in mind (Fontana et al., 2015). At first look, the agile technique seems to be time-consuming. According to Lindstrom and Jeffries (2004), the activities of requirements gathering, planning, designing, programming, testing and releasing, as well as monitoring and controlling are all included in each iteration cycle, also known as a spirit. According to Measey and Radtac (2015), page 17, one of the most distinctive characteristics of agile is its innate capacity to welcome and adapt to change via the use of "spirits" and "quick feedback loops." In contrast to the waterfall approach, the agile methodology does not prioritise the collection of a significant portion of the project's requirements prior to the beginning of the planning phase. After tracking and monitoring the mid-goal releases, the project team is able to gather feedback and requirements from the key stakeholders in order to plan and address new intermediate goals and short releases until the final product meets customer specifications (Cobb, 2011, p. 138; Lindstrom & Jeffries, 2004). This allows the project team to plan and address new intermediate goals and short releases until the final product meets customer specifications. (Raith et al., 2017) As a consequence of this, the agile methodology suggests that modifications be fully understood and appreciated within each iteration or phase of the process. As was said earlier, the Agile approach acknowledges that changes to the project's scope are inescapable due to the many unknowns and unpredictability of customers. As a result, the Agile methodology welcomes uncertainty and complexity as fundamental qualities of today's projects (Serrador & Pinto, 2015; Melo, et al., 2013). As a consequence of this, putting emphasis on and integrating the key stakeholders as a proactive component of the iterative process guarantees that the output is aligned and in harmony with the number of changes that projects will encounter (Conforto & Amaral, 2016). However, it would not be possible to achieve this level of productive synergy between the project and its stakeholders if the project team did not have a great deal of latitude inside the organisation. According to Hoda and Murugesan (2016), an agile strategy calls for a significant amount of individual agency on the part of members of self-organizing teams.

The research that has been conducted on the topic highlights both the benefits and the drawbacks of self-organizing teams, as well as the ways in which these groups could be better able to concentrate on certain activities. However, from the point of view of project management, increased motivation, employee satisfaction, improved management of requirements, and particularly higher quality of delivered systems seem to be adequate to compensate the flaws of project management by contributing value to a company (Azanha et al., 2017). In addition, a number of studies have shown that the Agile methodology is effective in terms of time savings, having the capacity to reduce the overall amount of time required for the development of numerous IT projects (Azanha et al., 2017). Because of this, the quick reactivity of Agile may provide a threat to the dominance of traditional project management in terms of general project management style (Serrador & Pinto, 2015). Delay has been highlighted as one of the key causes of project failure, and Agile may be able to reduce the risk of delay. In addition, Agile has prepared the way for a number of diverse forms by sharing these common principles as beliefs. Some of these various forms include Scrum, which is one of the most prominent, XP (Extreme Programming), Crystal, and others (Azanha et al., 2017; Cobb, 2011, p. 122).

The Agile Manifesto, together with its ideas and principles, has developed into a philosophy and point of reference for putting into practise the "various flavours" of agile methodologies that were previously described. When examined more closely, each flavour of agile is distinguishable from the others by a somewhat unique application and execution of the same ideas and principles. They all, however, underline communication, collaboration, and the requirement for iteration as the only effective ways of accepting changes within the framework of continuously focused continuing progress (Malik, 2013). This is the only way that changes may be successfully accepted. Last but not least, according to Northern et al. (2010), agile methodology supports the idea that providing features, which can be thought of as individual components of a product, is more important than painstakingly documenting the whole process, which may be considered as unproductive and time-consuming duties. As a direct consequence of this, the fundamental assumption is based on informal contact rather than formal meetings, documentation, and service level agreements.

### 3. Project Complexity

In the current economic climate, when project scenarios are getting more complex and unexpected, the use of contemporary practises in project management has shown to be useful. The management of complicated projects calls for an exceptional level of expertise, and the use of traditional methods alone is not considered to be sufficient in light of the complexity of today's projects. Although the term "project complexity" is used rather often, nobody can really agree on what it means. Williams (1999) is of the opinion that in order to address the problems that are associated with project management, it is necessary to first establish a definition of project complexity. According to Baccarini (1996), the complexity of a project is "consisting of many varied interrelated parts and [it] can be operationalized in terms of differentiation and interdependency." Nevertheless, while analysing the complexity of a project, it is essential to make a distinction between the different types of complexity being addressed.

The two most common types of project difficulty are the organisational complexity and the technological complexity. It is possible to differentiate between vertical and horizontal organisational structures. Horizontal differentiation is defined by the number of organisational units (for example, the number of departments and/or groups) and the task structure (for example, 23 personal specialisation or division of labour), whereas vertical differentiation is defined by the depth of the organisational hierarchical structure (for example, the number of levels). An further aspect of organisational complexity is the degree of operational interdependence, which describes the interactions that take place between the various components of the organisation. The variety or diversity of task aspects can be used to differentiate technological complexity from other types of project complexity (Baccarini, 1996). These aspects include: (1) the number and diversity of inputs and/or outputs; (2) the number of tasks required to produce a project's end product; and (3) the number of specialised parties (such as subcontractors) involved in a project. The term "technological complexity" may refer to a number of different things, including interdependencies across activities, teams, inputs, and different technologies. According to Williams (1999), who bases his findings on Baccarini's (1996) research, the overall complexity of a project consists of two dimensions, each of which contains two subdimensions, as can be seen in Figure 5. yet, Williams adds uncertainty to the concept of complexity, which is equal to Baccarini's elements of complexity; yet, the structural complexity and its sub-dimensions are the same.

The term "uncertainty" refers to the precarious nature of the assumptions that form the basis of the activities. Two criteria are used to classify the degree of uncertainty: the degree to which the goals are well-defined and the degree to which the methods for achieving those objectives are well-defined. According to Williams (1999), there are two primary factors that contribute to the expansion of the structural complexity of a project: The first factor is the interplay between product complexity and level of difficulty. The complexity of a product, and hence of a project, might increase as a result of product improvements, size reductions, or tighter intra-connectivity. The second factor is the increased time constraints, the ability to finish a project fast, and the lowered time-to-market, all of which place extra pressure on a project team and elevate the complexity of the project.

As was said before, the word "project complexity" is open to a variety of different interpretations. According to Baccarini (1996), it is possible to take the interpretation that it encompasses all that is challenging. According to the white paper published by Mosaic Project Services (Mosaic-Project-Services, n.d.), the difficulty of managing projects is determined mostly by the following four factors: 1. The scale of the project, as measured in terms of value; 2. The degree of technical complexity in developing the output arising from the features of project work and deliverables, as assessed in the amount of time that is necessary to give the deliverables; 3. The extent to which a project is fraught with unpredictability; 4. The intricacy of the interpersonal dynamics within the project team and in the wider environment of the endeavour. The degree of complexity that is connected with a project is determined by all four factors; however, a project manager can only impact the final two factors by reducing uncertainty and improving relationships among stakeholders, especially those that exist among the 25 people who are working on the project. A project manager is not able to make any adjustments to the size or degree of technical complexity since such factors are fixed. Despite the fact that the size of a project has a direct bearing on the degree of difficulty involved in accomplishing its objectives, this does not always mean that large projects are tough or complicated.

The term "mega projects" has grown increasingly common in published works over the course of the previous decade; these projects are not necessarily "big" projects, but they are substantial, difficult, and of tremendous financial importance. Because of the complexity of these endeavours (such as the politics involved and the engagement of stakeholders), they are often broken up into a series of more manageable tasks. The technical difficulty of a project is determined by two factors:

the amount of work that must be done to accomplish the project's objectives, as well as the standards that must be met by the output (that is, the good, service, or result) that must be created. According to Mosaic-Project-Services (n.d.), one of the most common warning signs of technical challenges is a limitation on time or the duration of the project. Uncertainty will always be present in some form or another in relation to a project; nevertheless, what really matters in terms of project management is how the uncertainties are acknowledged and handled. Either trying to reduce unnecessary uncertainty as much as possible or embracing it and seeking for opportunities that may come as a consequence of it is possible for an efficient project delivery strategy, which is also often referred to as a project plan. The effectiveness of interactions not just within a project team but also with other stakeholders, both internal and external, is a final dimension of complexity that must be considered.

There are a lot of elements that might affect the level of difficulty of a project, including the size of the team, the geographical spread of the team, and the number of project sponsors. Some authors take the traditional approach, viewing project success as a unidimensional construct that is concerned with meeting budget, time, and quality (Brown & Adams, 2000; Bryde, 2008; Fortune, White, Jugdev, & Walker, 2011; Muller & Turner, 2007). On the other hand, other authors see it as a complex, multi-dimensional concept with many more attributes beyond budget, time, and quality (Atkinson, 1999; Jugdev & Muller, 2005; According to Mir and Pinnington (2014), since so many projects fall short of their objectives, it is essential to identify the factors that have a beneficial influence on the completion of a project. The following is a summary of the research that was conducted by J. K. Pinto and Slevin (1988b): "There are few topics in the field of project management that are so frequently discussed and yet so rarely agreed upon as the notion of project success." There is no guarantee that successful project management will result in a successful project.

Their objectives differ, and past research and practical application have demonstrated that it is possible to finish a successful project even if project management is unsuccessful, and vice versa (Shahin & Jamshidian, 2006). A successful management of a project may increase the likelihood that the project will be successful, but it cannot guarantee that the project will be successful. To ensure the overall success of a project as well as the long-term success of an organisation, it is essential to have the ability to choose projects that are acceptable and screen efforts that may be doomed to fail. The fact that each project is one of a kind, in conjunction with the lack of a comprehensive list of project success indicators, makes it difficult to forecast which initiatives will be successful. Even further, Shahin and Jamshidian (2006) go so far as to suggest that it is impossible to create a complete checklist of project success criteria that is relevant to all projects. Because of the wide variety of project sizes, degrees of complexity, and features, the criteria for successful completion will be different for each project. For instance, Shenhar and Dvir (2007) provide five factors for determining whether or not a project was successful: the level of efficiency, the impact on consumers, the impact on staff, the level of improvement in direct business, and the level of future planning. They do, however, highlight the fact that these five qualities may not be relevant to all sorts of projects and that they are subject to change through time (both in the short term and the long term). In addition, they propose a sixth dimension that includes considerations pertaining to environmental preservation. In the end, they come up with the Diamond model, which is comprised of four different aspects (Shenhar & Dvir, 2007; Carvalho & Rabechini Jr, 2015): novelty, complexity, technology, and stage. In the field of project management, Schultz, Slevin, and Pinto (1987) carried out the first systematic classification of significant success factors and presented their findings.

They found that there are two distinct categories of variables that impact the execution of a project: strategic factors and tactical ones. Client counselling, the selection of human resources, and the training of individuals are all examples of "tactical" variables, while "strategic" aspects include the purpose of the project, support from senior management, and the timing of the project. According to the findings of study carried out by Alexandrova and Ivanova (2012), the impact of the factors that determine a project's level of success changes as it progresses through its lifecycle. After doing study in this area, the initial dimensions of time, money, and quality were broadened to include the following three dimensions: (i) obtaining the satisfaction of the end user, (ii) ensuring the happiness of other stakeholders, and (iii) achieving the fulfilment of the client organization's strategic objectives (Baccarini, 1999; Shenhar et al., 2001). In conclusion, in order for the project to be successful (Baker, Murphy, & Fisher, 2008), it is essential that all stakeholders be entirely satisfied with it; yet, it is common knowledge that this is contingent on the individual perspective held by each stakeholder. One further method is that of Harold Kerzner, who alters the original dimensions by adding scope modifications without causing the process to be disrupted.

#### IV. METHODOLOGY

The methodology employed in this article is crucial in achieving the research objectives and addressing the research questions. A description of the research strategy and technique used throughout the thesis will also be provided, which will be important in understanding the empirical methodology in this article.

##### 1. Research Philosophy

Research philosophy is concerned with the evolution and character of knowledge (Saunders et al., 2012). This study is advancing knowledge at a little-studied but critical phase of the project life cycle. It is understood that philosophical differences may arise amongst other academics in formulating the philosophical attitude and designing the study because business and management researchers do not agree on one optimal philosophy (Tsoukas & Knudsen, 2003). In the following sections, the writers attempt to clarify their research philosophy.

##### 2. Ontology

Because ontology is the assumptions about the nature of reality (Saunders et al., 2012), the ontological assumptions in this study impact the way the research was perceived and analysed throughout the project closure phase. The project closing phase restrictions and transition from projects to operation are the research objects. Traditionally, the project closing phase has been one of the most disregarded areas of a project, and this study will look at what restrictions exist and how they may be avoided, as well as establish a framework for a successful project closure. As a result, the study will employ a subjectivist ontological approach, which asserts that social reality is formed by social actors' perceptions and subsequent acts (Saunders et al., 2012).

The study also argues that reality is produced by social interactions between actors, which partly establish shared meanings and realities (Burrell & Morgan, 1979), which is why this study will attempt to explore the human parts of reality. Because individuals view the amount of integration between the agile and waterfall approaches to project management differently, their interpretations will vary. Unlike the objectivist approach, this study is interested in multiple perspectives and narratives to better understand the differences in the social realities of various social actors (Saunders et al., 2012). As we connect with the social actors in the selected region, we would recognise, reflect on, and challenge our own values to include into the study (Cunliffe, 2003). In this study, interviewees interact with the project environment and attempt to make sense of the project phases through their own interpretations of events, and their actions are deemed meaningful in the context of these socially constructed interpretations and meanings (Saunders et al., 2012).

##### 3. Epistemology

Although ontology may seem abstract at first, its importance to epistemology is evident (Saunders et al., 2012). The beliefs about what constitutes acceptable knowledge and how we convey that information to others are referred to as epistemology (Burrell & Morgan, 1979). Because epistemology differs so much, there is a broader variety of methodologies available; nonetheless, it is critical to grasp the consequences of these assumptions in terms of the selected approach and the constraints of future study results (Saunders et al., 2012). At one extreme, positivist approaches tend to formulate a generalised idea of the phenomenon studied (Hudson & Ozanne, 1988), while interpretivist approaches consider subjective meaning and reasons to explain social phenomena (Saunders et al., 2012). Because the method used in the research is a semistructured interview with some authoritative individuals, the epistemological assumption depicts that the findings from this research will not be generalised to all types of projects, but will provide a guideline to successfully close projects in the selected industry. As will be detailed later, using a semi-structured interview as a data collection approach allows the authors to delve further into noteworthy responses and information by asking follow-up questions (Roulston, deMarrais, & Lewis, 2003). This assumption directs the study in an interpretivist direction.

##### 4. Research Orientation

In terms of data collection, analysis, and research procedures, the research will be directed by the research direction component of this study. This is done with the purpose of connecting the philosophical perspectives that were mentioned before to the entire research setting. This supplies a base for what has previously been explored as well as the undiscovered zone (Creswell, 2012). The study subject is formed by looking at the past literature review and figuring out what needs to be examined further. In addition, the philosophical orientations, assumptions, skills, and beliefs of the researcher were taken into consideration during the course of this investigation (Ghauri & Gronhaug, 2010).

Both deductive and inductive reasoning are considered to be forms of research procedures (Saunders et al., 2012). According to Bryman (2016), both deductive and inductive reasoning are used to link research to theory. According to Saunders et al.'s (2012) definition, deduction is a kind of reasoning in which, if the premises are true, then the conclusion must also be true. On the other hand, induction is the process of coming to conclusions that have not been tested based on premises that are already known. According to Saunders et al. (2012), deductive reasoning is one of the most important methods in the natural sciences for formulating hypotheses and putting those hypotheses to the test via a series of propositions. This is because deductive reasoning shows the causal relationship that exists between different concepts and variables. An inductive method was used for this investigation since the research issue might be interpreted differently by different people and cannot be generalised. The authors' desire to first collect data and then develop a framework was another justification for the authors' decision to use an inductive technique. The writers focused the majority of their energy on doing extensive background study on the topic on a regular basis and making an effort to identify a connection between waterfall and agile project management.

## V. FINDINGS AND ANALYSIS

Several frameworks and recommendations for quality data analysis have been produced, despite the fact that the literature has not yet fully agreed on a single and widely accepted analytic approach.

### 1. Case Study Description

For this study, the authors used a qualitative research technique to get a thorough knowledge of project closure management, which may be addressed by analysing problems and identifying beneficial practises using an empirical case study of Intesa Sanpaolo Life. In relation to the previously discussed table (Table 1), an exploratory case study technique (Harrison, 2002) seems to suit with the goal of obtaining multiple viewpoints on the issue. First, a description of the case study is provided, along with the specific perspective on Project Closures. Second, the procedures of data collection and analysis are thoroughly outlined. The offered case study is on Intesa Sanpaolo Life dac. The Irish firm is a subsidiary of Intesa Sanpaolo Vita (the Italian parent company of Life), which is part of the Intesa Sanpaolo Group, Italy's largest capitalization banking group. The firm in issue sells insurance-related investment products to both domestic and foreign markets. Furthermore, a thriving financial climate like Dublin allows firms to seize market possibilities early on and transform them into creative and successful solutions. The corporation discovers ways to turn these chances into tangible competitive advantages by managing initiatives alongside effective business-as-usual. Interestingly, the company's CEO confessed to the researchers that when he first began working (about 30 years ago), Project Management was not part of the Insurance and Investment sector's organisational culture.

The manner in which the firm detects and interprets the dynamism and complexity of market prospects is drawing more attention to its project organisational mindset. Among the many kinds of initiatives managed by Intesa Sanpaolo Life, three stand out. From a strategic standpoint, the organisation considers Business Opportunity initiatives to be the most important. Among the various initiatives of this sort are the introduction of new items and the establishment of new distribution channels. With an average of two projects of this kind produced every year, the business hopes to maintain its competitive edge while also generating enough money and profits to fund the other projects in its pipeline.

Furthermore, a major organisational shift at the organisational structure level has been identified for its strategic influence and significance. The Project Management Office is at the heart of this project revolution. The Project Management Office was formerly part of the Operations department. Among the many consequences of this, two important things should be considered in order to have a better understanding of the company's recent slide. Around 90% of the company's projects were related to ICT or Operations; hence, it seemed to be the most appropriate site for the special Office in charge of project management.

### 2. Data Collection Method

The requirement for researching varied viewpoints of actors directly engaged in project management has been deemed critical for understanding the phenomenon of such a successful firm coping with complicated Project Closures. As a result, an interview seems to be the most appropriate strategy for this study. However, numerous forms of interviews exist due to their commonality of broad application. Because of their formality, they may be divided into three broad groups: structured, semi-structured, and unstructured (Saunders et al., 2009, p. 320). By structured interview, we imply the procedure in which

each respondent in a research interview answers the same identical questions that are delivered by interviewers servilely following a formal interview schedule (Bryman & Bell, 2015, p. 729).

This research will look at the possible relationships between Traditional Project Management and Agile Project Management in terms of knowledge and communication management throughout the Project Closure phase. One of the most intriguing aspects to consider is the fact that this qualitative research approach creates a large amount of data quickly. As a result, researchers must organise, coordinate, and concentrate their efforts throughout the data collecting and analysis stages. Otherwise, the researchers may get disoriented while dealing with the abundance of data and information grouped (Bryman & Bell, 2015, p. 579). The next portion of the chapter provides a full explanation of how this approach is used.

### 3. Empirical Data Analysis

This work is distinguished by an iterative and frequent replay process of data collecting and analysis. In other words, data collection has occurred concurrently with, and affected by, data analysis, making it impossible to separate the two processes as later phases (Bryman & Bell, 2015, p. 581). Thus, implications and intuitions brought out the definitions of the study aims behind the interviews and their subsequent emphasis stage by step of the analysis. Because the study is qualitative, a theme analysis is appropriate for this kind of data analysis. Thematic analysis is often regarded as the most frequent and successful general technique to qualitative data analysis (Bryman & Bell, 2015, p. 579). Inherently, the manner in which the interview criteria were written allows the analysis to begin by detecting themes. In this research, thematic analysis is used as a general approach, which is a framework established by the National Centre for Social Research in the United Kingdom. Its origins may be traced back to the 'matrix-based strategy for arranging and synthesising data' (Ritchie et al., 2003, p. 219).

The main concept behind this framework is to organise the data into key themes and subthemes so that the results may be readily visualised and represented in a matrix. Regardless of the time and effort required to arrange the resources, the matrix might offer an efficient instrument for improved data synthesis. At the same time, thorough attention is essential to reduce the possibility of overlooking information that does not seem to be very relevant at first glance. As a result, following the advice of Bryman and Bell (2015, p.595) on what to keep in mind throughout preparation and analysis seems to be more than enough. All of the data will be read and evaluated iteratively. In order to find as many themes as feasible, marginal notes regarding key statements and observations will be made throughout the research. As previously said, it is critical to be able to take specific information into consideration and so interpret and theorise based on the facts (Bryman & Bell, 2015, p. 595). Following that, transcripts of the interviews are grouped into fragments or quotations and then assigned to the relevant subject within the matrix. Quotes and fragments will be kept as brief as possible, as proposed by Bryman and Bell (2015, p. 599), to enhance the potential efficiency of the material. After categorising all of the material acquired, the researchers realise the need to restrict the themes in the next chapter in order to benefit from a more focused categorization and collection of data to better meet the objective of this study. The index of the analysis consistently goes through iterative processes in order to be polished and more effective in answering the research issue of this study. To summarise, as previously said, this analytical process goes through numerous rounds, which may be classified as a generic 'Analytic induction' (Bryman & Bell, 2015, p. 581), in order to restrict the study and better describe a more thorough research issue. As shown in Figure 6, what began as a broad description of a research topic became more particular, logical, and consistent after being tested 42 against the whole quantity of data gathered and grouped into the aforementioned matrix. That is, the question was changed and enhanced as a result of the study effort.

## VI. CONCLUSIONS

This part presents a summary of the article findings obtained from the analysis of data collected in this study.

### 1. Theoretical implications

Our investigation was based on academic theory, despite the fact that the primary purpose of this thesis was to provide suggestions (best practises) that were more practically oriented. Although there is a good deal of popular writing on the topic of agile adoption, there is very little scholarly research on the issue. The majority of the already published articles concentrate on the practical tools and procedures that are deployed by agile methods at the project level; however, very little study has been done on the implications that Agile methods have for the whole company. We have established a connection between the problem of adopting agile practises and the theory of organisational development and organisational

transformation in order to carry out an analysis that is supported by theory. The creation of an Agile adoption model (a subset of the Burke- which is the theoretical model for our study and the framework used to categorise and arrange the resultant organisational problems and best practises- is the key theoretical contribution of this thesis. This model is a subset of the Burke.

## 2. Practical implications and recommendations

We were able to identify the primary difficulties that arise during the implementation of agile practises inside an organisation thanks to the data gathering and subsequent research that took place in chapter 5. In the following sections, we give our specific suggestions for addressing these problems across all of the many organisational change domains covered by our derived change model. The primary obstacles and successful strategies associated with organisational culture When it comes to the topic of organisational culture, we see a glaring need for education and coaching, in addition to the need that the change be supported by management at all levels. There is a cost to the organisation and it takes time for education and coaching, but we feel that the work pays off in a short period of time and helps enhance motivation and efficiency at the project level. This presents a trade-off.

## 3. Main challenges and best practices related to Leadership

The requirements placed on the company in terms of Leadership are becoming more complicated. The leader position in an agile project is not as clearly defined as it is in conventional project management approaches. Instead, it takes more motivational and coaching abilities, as well as the fortitude to "let go" of some control and trust the members of the team. conventional project management methodologies focus more on the planning and execution of the project. Shared leadership is often an indicator of a team's level of performance, and according to DuBrin, a participatory leadership style will function well when the leader is a member of the team. It is important to keep in mind that the individuals who formerly served as project managers are not necessarily going to be the most effective team leaders in the new teams. In many cases, these individuals will not be the same people.

## 4. Possible future research

While we were working on this thesis, we came up with a number of ideas for new lines of inquiry that may be pursued in the future. Given that this was an exploratory study based on the responses of a small number of interviewees and two case studies, it would be interesting to do more research to see whether or not our findings are still valid when applied to a population with a much larger sample size. Additionally, the diverse ways in which the adaptation is experienced by the various players (for example, team members, management, and customers) might be investigated further. In addition, it would be fascinating to do a specific case study in a firm that is on the cusp of adopting agile practises, with the goal of evaluating the tangible consequences of our suggested best practises.

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