

The Cover Sheet

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Self-Assessment – If there are particular aspects of your assignment on which you would like feedback, please indicate below.

Optional for students

Suggested prompt questions-

How have you developed or progressed your learning in this work?

What do you feel is the strongest part of this submission?

What feedback would you give yourself?

What part(s) of this assignment are you still unsure about?

Progressed Learning: Through this work, I deepened my understanding of Agile methodologies and their application in diverse cultural and regulatory environments, gaining insights into their adaptability and limitations in global contexts.

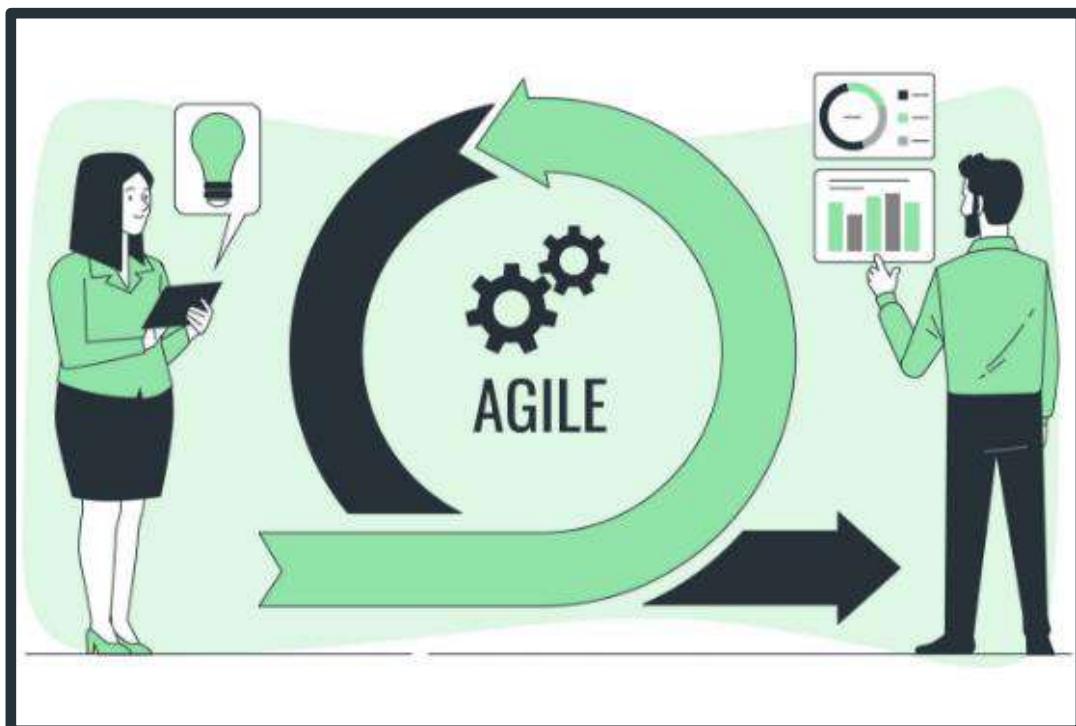
Strongest Part: The strongest part of this submission is the thematic analysis, which provides a well-structured evaluation of Agile's benefits, challenges, and strategic adaptations in international projects.

Self-Feedback: I would advise myself to incorporate more real-world examples to strengthen the arguments and add depth to the analysis, aligning theoretical concepts with practical applications.

Uncertainties: I am still unsure about the completeness of the strategies proposed for overcoming Agile's challenges in international settings, as more nuanced adaptations may be necessary for specific industries.

| Assessor's Feedback (may be delivered in line with the submission) | |
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| Were the learning outcomes met? | Yes <input type="checkbox"/> If not, what was not met: |
| Assessor's response to the student's submission, request for feedback and / or self-assessment (feedback): | |
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| Please take this and other feedback to your next academic tutorial to plan your future work. | |

*"Exploring the Role of Agile Methodologies in
International Project Management"*



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Abstract

In the global business environment, it is essential to foster international project management as the business world continues to expand its operations across borders. The concept of agile is originally from the context of software development and has garnered interest due to its adaptive nature, where work is divided into chunks and delivered in cycles involving a team effort. This research aims to examine the involvement of Agile methodologies in managing international projects, and the advantages, difficulties and further adjustments in those approaches to international environments. The study is classified under qualitative research as it analyses 25 articles, case studies, and reports to identify themes. The implications contribute to advocacy for agile methodologies in multinational corporations, and reveal the major problems of cultural differences, contractual constraints, and technology differences. Multinational organisations like IBM and Siemens offer some cases that provide tangible examples of the positive impact of applying Agile and potential issues involved with implementing it in global projects. The study suggests that Agile methodologies have much to offer for improving the results of projects in the multinational context, provided that these methodologies are properly adapted to address the needs of teams that are culturally and geographically diverse. These include choosing a blended Agile framework, seeking cultural preparedness training for the employees, incorporation of technology, and the development of a flexible decision-making framework. These strategies present a way through which organisations can build on the strengths of Agile and avoid its weak points in international project management. This research aims to advance the knowledge of Agile to global projects so that project managers can get tangible tips when managing multiple projects across different cultures.

Chapter 1: Introduction

1.1 Background

Project management has gone through major changes in the past few decades especially due to the rapid evolution of organisational environments, technological development and changing customer requirements (Nicholas and Steyn, 2020). Agile processes, evolved from software development environments, have grown to become an innovative concept that challenges the best practice and the universal project management frameworks (Daraojimba et al., 2024). As Agile methods have their origins in the values of flexibility, gradual development and teamwork, they offer the required degree of flexibility for responding to the new market conditions, which makes them very attractive in different industries. When applied to the context of international project management, flexibility and ability to prioritise communication and customers makes Agile a promising approach to the improvement of project results (Lalic et al., 2022). Nevertheless, its applicability in multicultural and geographically dispersed organisations has been a subject of research and discussion.

1.2 Problem Statement

The Agile methodologies have been effective in localised software development projects; however, their adoption in international environments poses certain problems. Despite its flexibility, some of the essence of the Agile approach such as face-to-face communication, iteration, and decision-making may devolve into challenges for multinational teams because it requires an organisation to adapt to different cultural contexts, language, and regulatory standards (Gregory et al., 2016). Moreover, Agile focuses much on the customers and the stakeholders, which can be problematic when it comes to dealing with cultures that are strict on the hierarchy (Šmite, Moe and Huerta, 2021). Thus, it is necessary to assess the potential and challenges within the implementation of Agile in international project management and to see if Agile processes can be appropriate for different types of global projects.

1.3 Research Questions

This research will address the following questions:

- 1.** What are the advantages of using Agile in managing international projects?
- 2.** What are some of the difficulties which may be experienced when implementing Agile in an international project?
- 3.** To what extent can different strategies be applied to use Agile methodologies in international project management?

1.4 Aims and Objectives

This study aims at establishing the level of possibility for the implementation of Agile in the field of international project management. The study seeks to establish whether Agile has any benefits in enhancing project performance in a global context and the challenges that may hinder it. It will also concern strategies that might prevent those challenges and make the usage of Agile in international projects possible. The key objectives of this research are:

- To synthesise literature in Agile methodologies and its usage in international project management.
- To determine key issues that may be encountered during integration of Agile in international projects.
- To assess the advantage of Agile methodologies for enhancing the result of a project in a global environment.
- To provide recommendations on how Agile could be used as effectively as possible in international projects.

1.5 Significance of the Study

As the business expands to an international level, it becomes essential to have effective project management tools that can work within different cultures and legal frameworks (Adekola and Sergi, 2016). In particular, this research contributes to the existing knowledge of this topic by

expanding the scope of Agile in international project management to fill the gap that usually exists between the practitioners and academicians. The findings from this research should enable project managers, multinational organisations as well as Agile practitioners to ensure that they adopt a more holistic approach towards Agile that will increase project success rates in cross national contexts. Furthermore, the results could prompt future studies about the generalizability of Agile in different industries and areas, thus enhancing the overall applicability of the Agile concept.

1.6 Structure of the Dissertation

This dissertation is divided into several chapters where each chapter addresses particular aspects of the study. [Chapter one](#) gives the background to the study and sets out the problem statement, research objectives, questions, importance of the study, and the organisation of the work. The [second chapter](#) presents a literature review on Agile methodologies, discussing the development and history of the concept as well as the widespread use of this concept in international project management. The [third chapter](#) of this study describes the method used in this study, including the research design, data collection, and analysis procedures. The [fourth chapter](#) is devoted to results and contains the detailed thematic analysis of the data concerned with the applicability of Agile in the international context. [Chapter five](#) presents these findings from a theoretical point of view and critically reviews the features, advantages, disadvantages, and best practices regarding Agile's application in the global context. Last, the [sixth chapter](#) gives an account of the results of the study, implications for practice, and suggestions for future study.

Chapter 2: Literature Review

2.1 Introduction

The application of Agile methodologies has continued to grow in popularity in the area of project management because of its flexibility and emphasis on the customer. Emerging in the software industry, Agile has scaled across various industries worldwide which makes it possible for project teams to adapt to change. With increasing globalisation in business projects, coupled with the increased incorporation of multinational teams, questions have been raised about the relevance and/or effectiveness of Agile in such contexts.

This literature review aims at critically examining the application of Agile methodologies in international project management. It will look at the diffusion of Agile frameworks across cultures and how this diffusion affects and is affected by culture. Moreover, it will look at important theories that proactively support Agile project management and differentiate between Agile and conventional project management. The evaluation presented in this review will also employ case studies and real-world examples to determine how well Agile works in projects with a global focus.

This literature review focuses on aspects of the evolution of Agile methodologies, theoretical frameworks for Agile methodologies, and practical application of Agile methodologies in the international environment. Moreover, the review of literature used in the study will consider other relevant factors critical to the success of agile in managing international projects while recognising its strengths and weaknesses.

2.2 Agile Methodologies: Concepts and Evolution

Agile approaches developed in response to the issues arising from traditional, linear project management models such as Waterfall. Many of these traditional models emerged with a fairly linear, stage-based process, which caused difficulty when facing growing client demands and a fluid business landscape (Thesing, Feldmann and Burchardt, 2021). At the heart of Agile lies the Agile Manifesto, introduced in 2001, which emphasises four key principles: focusing on people and communication rather than processes and tools, delivering working software frequently rather than extensive documentation, customer collaboration over contract development, embracing

change rather than following a rigorous plan (Baumgartner et al., 2021). The flexibility offered by the agile format of iterative development, constant feedback, and fast adaptation has been especially appreciated in swift-moving contexts such as software development but has been adopted across various fields such as medicine, teaching, and banking (Alsaqqa, Sawalha and Abdel-Nabi, 2020).

The Agile process is made up of numerous well-known techniques, such as Scrum, Kanban, and Lean. For instance, **scrum** advocates the segmentation of extensive projects into smaller, workable sprints or cycles, which can be within two to four weeks (Malakar, 2021). This makes it possible for teams of workers to concentrate on particular elements of the project and be in a position to assess the results on a regular basis and make necessary adjustments on the same. **Kanban** is a workflow management technique that supports a constant flow of work, and is based on the visualisation of work, which makes it more effective when teams are located in different countries, or the team members must work within different time zones (Malakar, 2021). **Lean**, which is derived from Agile methodology, focuses on preclusion of waste and releasing the value to the customer earlier than what has been delivered by the existing system while avoiding steps that do not add value (Surin, 2022).

The usage of Agile can be traced back to the beginning of the 1990s when the conventional methods of handling projects were deemed to be very slow and cumbersome (Aguanno, 2024). When it comes to regular business, there was an increasing demand to deliver goods as early as possible and be prepared for alterations in the markets then, Agile was introduced as a better way. Originally, Agile was created as a framework for software development, but the principles of this approach were evident in other fields after some time (Brhel et al., 2015). Nonetheless, the ways in which Agile shifted from a simple lowly software development tool to a universally recognized project management system were not as smooth as one might imagine. Essential weaknesses that were expressed by critics include the over-emphasis on communication and re hardware, which could be costly in some industries like the pharmaceutical and financial industries where documentation forms an important aspect especially to show compliance and legal requirements (Edison, Wang and Conboy, 2021). Furthermore, the expansion of Agile methodologies all over the world has shown cultural and operational impediments especially concerning the international perspective project management. It might sometimes create contradictions between the

organisation and clients or stakeholders depending on the cultural expectations of the business in various Agile contexts by focusing on the importance of feedback and regular progress check-ins, short evaluation and adaptation cycles (Šmite, Moe and Huerta, 2021).

Nonetheless, the capacity of Agile to transform itself to suit different industries and regions is testimony to the effectiveness of this methodology. In most international settings, Agile approaches have provided ways for project managers to address the challenges of overseeing distributed teams, coordinating with individuals in diverse locations and time zones, and responding to fluctuating market conditions (Kiely, Butler and Finnegan, 2021). It is, therefore, important to question how well these methodologies are effective in the international arena and if they need major overhauls in order to function in different cultures, legal systems and ways of operations.

2.3 Theoretical Frameworks in Agile Project Management

The foundation for Agile approaches is the Agile Manifesto, which focuses on cross-functional cooperation and on delivering value continually (Oladapo et al., 2024). Nonetheless, when it comes to the application of Agile in the context of international project management, it is first necessary to analyse the theoretical concepts that underpin this methodology and the principles that should be followed in all industries and cultures. Agile is, therefore, grounded on **Complexity Theory** that posits that projects, especially the large ones spanning across countries, are not sequential and deterministic but are complex systems with interacting and related components (Morçöl, 2013). Complexity Theory enhances Agile's view of large projects as large systems that can be partitioned into smaller sub-problems and solved in an iterative manner, and where changes to scope are inevitable due to changing information, culture, politics or economics especially in an international setting.

Another important theory that supports Agile project management is **Stakeholder Theory**. Stakeholder Theory is central to Agile because of the constant interaction with the stakeholders with intentions of maintaining current and future project requirements (Sithambaran, Nasir and Ahmad, 2021). Employees participating in international ventures are geographically distributed and, therefore, have specific cultural perceptions, manners of expressing themselves, and approaches to a selection of projects. The practice of daily commitment of stakeholders, including,

for instance, sprint reviews and iteration planning at Agile supports meeting all these diverse international demands (Kalenda, Hyna and Rossi, 2018). However, some critics have claimed that the iterative process of Agile exposes projects to an involvement of the stakeholders up to the point that a project scope begins to grow uncontrollably beyond its initial parameters and goals, thus eventually compromising project timelines and budgets (Sithambaram, Nasir and Ahmad, 2021).

In addition, theories like Cross-Cultural Management Theories including **Hofstede's Cultural Dimensions Theory** are also vital in assessing the effectiveness of Agile methodologies in diverse Culture. Agile main principles like self-organisation, decentralised organisational structures, and individualism entail organisational culture that are inclined toward higher individualism and lower power distance, as seen in the western cultures (Marini, 2024). However, in cultures with high levels of collectivism and high power distance levels, like most Asian and Middle Eastern entities, Agile could conflict with organisational norms with centralised decision making (Matthews, 2022). In these situations, an Agile project manager might have to adapt local practices in their work while retaining the flexibility that Agile provides. These adjustments are typical in terms of the communication, decisions, and teams themselves, always keeping in mind the updating and cultural fit to the Agile approach to work in iterations (Lindskog and Netz, 2021).

Analysing Agile from the perspective of various theories is helpful in identifying its advantages and disadvantages, as well as challenges. For instance, **Contingency Theory**, which posits that the effectiveness of a particular approach depends on compatibility with the external environment, raises concerns over the suitability of Agile in the global context (Cubillos, Reverter and Lafuente, 2024). Despite its focus on stakeholder relations and project flexibility, Agile may not operate effectively in highly regulated industries or legal jurisdictions with strict compliance norms, which require consecutive steps and documents. Thus, although Agile provides a notable setting to the traditional approaches to project management that can be used effectively in the multinational environment, it should be noted that Agile is not a universal solution for managing projects of any kind, especially for the big and diverse.

2.4 Agile in International Project Management: Adaptation and Challenges

Globalisation and the use of Agile in cross-border projects have shown that Agile is versatile, but also the barriers to its use in culturally and geographically diverse settings. A major advantage of Agile is that it has been designed to be flexible where the flexibility is derived from the ability of the team to get feedback from its stakeholders and make necessary changes (Sanchez and Oliva, 2022). This flexibility is particularly useful in a cross-country Project as environmental factors including market forces, change in economic circumstance and politics among others may compel a change on the project in mid-course. However, the current projects are global which creates issues that go against Agile principles such as frequent interactions, feedback, and cultural compatibility among teams (Smite, Moe and Huerta, 2021).

Another limitation of Agile to international project management is that it involves communication across different zones (Hawkins , 2023). Scrum, as an agile framework, focuses on timely communication, which may be seen in daily scrum meetings and continuous feedback. However, when teams are located in several time zones, this kind of communication becomes rather difficult, if not impractical (Hawkins, 2023). It has been argued that, despite the availability of communication technologies that connect dispersed teams, research evidence shows that virtual communication is less effective than face-to-face communication, often resulting in confusion and impersonality within teams (Smith and Ruiz, 2020). This matter becomes worse in cultures that employ many nonverbal signs and signals that are difficult to be detected in virtual modes.

The other crucial topic is the cultural compatibility of Agile practices. Agility is founded on values such as individualism, decentralised decision making, and self organising and these are ~~unaligned~~ with the west. However, there can be some clashes of concepts of Agile with local business practices if the latter stems from collectivist and highly centralised organisational cultures in some geographical zones. For instance, Liu et al. (2020) limited their study to an international software development context linking the United States of America and South Korea. The study showed that all participants in the US team shared the positive aspects of Agile and its iterations, while the South Korean team could not relate to Agile because they lacked the strict heads and organisational hierarchy, which led to confusion and the time taken to make the right decisions (Liu et al., 2020).

Such observations are considered when the organisation adopts Agile methodologies to different settings without disregarding the cultural characteristics that surround a particular project environment.

Furthermore, communication gaps such as language translations can act as major challenges in the way of Agile practice in global contexts. Developed and executed within a flexible framework, Agile encourages communication and fosters the feedback loop between team members, stakeholders and customers (Bundhun and Sungkur, 2021). Still, in contexts where the members of the team might not for instance have the same native language, misinterpretation of instructions happens, which results in delay and low quality work (Bundhun and Sungkur, 2021). Ali and Yang (2021) have provided a way of how language barrier affects Agile communication where it is apparent that slight linguistic differences are likely to result in fundamentally different understanding of the project specification. To reduce these risks, project managers in international Agile projects need to pay more attention to improving awareness in communication, which may call for extra resources like interpreters or culturally sensitive communication lessons.

Thus, apart from the communication barriers, legal/ regulatory impediments that exist between the different countries also create a major problem. To some extent, the concept of agility and the minimization of paperwork contradict local rules that prescribe strict documentation and compliance reporting, especially in such sectors as healthcare, finance, construction, and others (Sahota and Sahota, 2021). Naidoo and Rikhotso (2021) also observed that Agile project managers must strike a fine balance between the use of Agile's incremental processes and compliance to rules and standards in the local country. This is particularly true in areas with rigorous legal standards such as the EU where most project documentation is laid down by law. In these cases, Agile teams have to employ formal documentation practices, which are time-consuming and may potentially offset some of the benefits that Agile methodologies promise.

2.5 Comparing Agile and Traditional Project Management in Global Contexts

It is possible to note that, if comparing Agile PM to other methodologies like the Waterfall, the traditional models are still viable in terms of flexibility for international PM. The logical and systematic process of Waterfall means it has more control in the process and this model can be

preferable in the areas that need more compliance (Kozma, Varga and Larrinaga, 2021). For example, Gasik (2022) observed that the European construction project known as Waterfall had well-defined phases and landmarks that made it easier to plan and manage risks in cross-national construction projects.

However, Agile stands out best in conditions where factors such as innovation and flexibility in the face of change are key determinants of success. In global technology programs, Agile's cycles enable better control of client needs and market dynamics since customers can easily express their needs in iterative patterns that result in shorter times to market and superior customer satisfaction (Sarangee et al., 2022). Study by Karhapää et al. (2021) revealed that Global software development was better handled by Agile since the methodology allowed for accommodation of continuous feedback from stakeholders and customers which are characteristic of international clients.

However, the value that Agile brings has to be balanced against the costs of undertaking Agile, especially in the Global environment where issues such as cultural influences, the law, and language barriers can make Agile implementation difficult. Despite the fact that Agile can easily be adopted to fit different environments, it is not the best suited for organisations and projects that deal with strict legal requirements or projects in different countries since they need to meet certain legal requirements (Santos and Carvalho, 2021).

2.6 Conclusion

This literature review has critically looked at the use of the Agile methodologies in the international contexts of project management. The ability to use the Agile method, its incremental approach and focus on the interaction with other stakeholders can be very helpful for operations in functioning in the international markets. Nevertheless, it highly depends on the company's ability to apply related strategies according to the cultural and regulatory requirements of the countries for operation.

Despite the fact that Agile is undoubtedly superior to traditional frameworks in terms of flexibility and responsiveness to change, it is quite obvious that the constant engagement of stakeholders and decentralised decision-making can be problematic, especially in the context of international cooperation where cultural and time zone differences arise. Furthermore, Agile is often less

documented, which can be dangerous in industries, the norms of which must adhere to local legislation. There is a need for more research on how Agile may be fine-tuned in international project context especially in settings that have strict industry standards that have to be met.

Chapter 3: Methodology

3.1 Methodology

For this research, descriptive **research design** adopting secondary data has been used to analyse the Agile methodologies in international project management. This approach allowed for a focused review of the literature and detailed thematic analysis of what works, what does not work and why regarding Agile methodologies in a global environment. The subsequent chapter succinctly describes the study methodology used in this work by explaining the steps followed in data collection, analysis and interpretation (See Figure 2). This structure guaranteed that all aspects of Agile's use in international projects were discussed in detail.

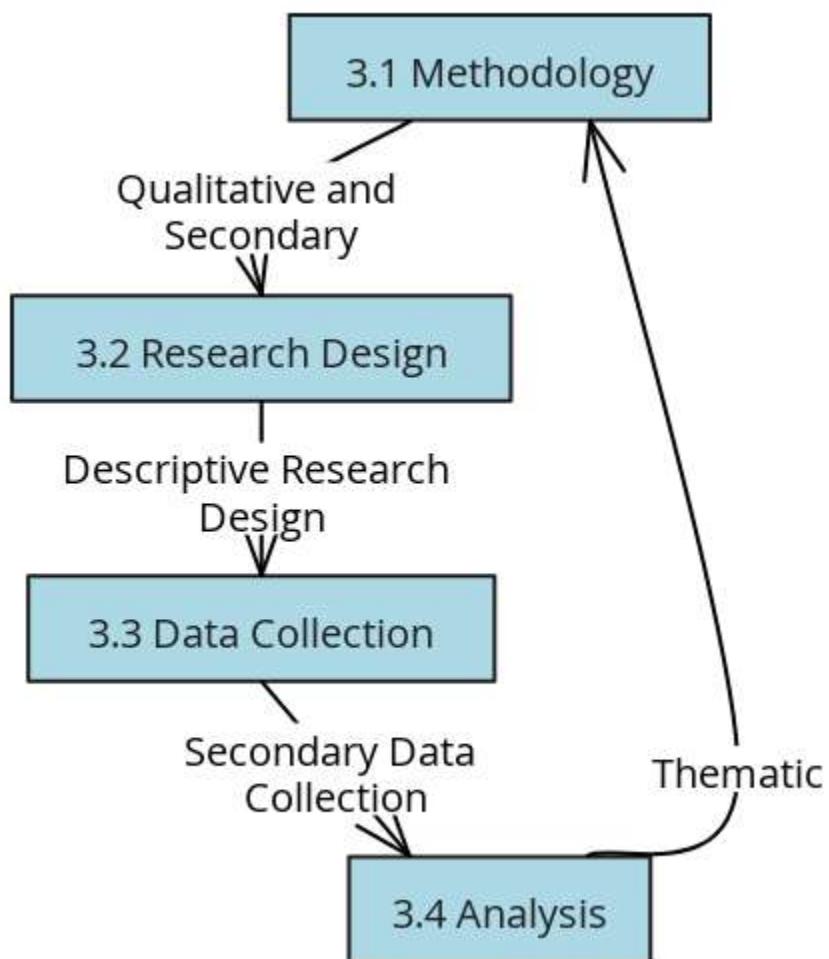


Figure 2: Flowchart diagram representing research methodology (Self generated)

3.2 Research Design and Rationale

With regards to the research design for this study, the researcher employed [descriptive research](#) that relied on secondary data. The reason for selecting this approach was its capability to synthesise, analyse, and interpret existing research on Agile methodologies in IPM to give the study a better context based on a similar setting of cross-cultural environments (Kim, Sefcik and Bradway, 2017). Since there are already numerous studies presented in the field of Agile practices in software development, this study rather continued this line of thought but emphasised the international business environment since Agile methodologies are becoming progressively international business relevant beyond the industry of software development (Christofi et al., 2021).

The use of descriptive design was suitable for this study for two major considerations. First, it enables an assessment of secondary and primary sources of information, including articles, case studies, and reports, as a way of creating an empirical view of Agile in international projects (Kim, Sefcik and Bradway, 2017). Second, the descriptive design is suitable for the study aim of identifying typical Agile practises, their issues, and possible solutions without intervention (Siedlecki, 2020). This design offers a straightforward, research-based, and easily understood narrative that enriches the topic.

3.3 Data Collection

As this research relied on [secondary data collection](#), the primary data collection tools were academic journals, books, case studies, and reports on Agile methodologies and international project management. Data collection was conducted in three distinct stages:

Initial Literature Screening: Studies were sourced from electronic databases including IEEE Xplore, ScienceDirect, and Google Scholar. The terms “Agile methodologies,” “international project management,” “cross-cultural teams,” and “Agile challenges” were used to search for relevant articles. It was beneficial to acquire an overall perception of what has been done in this field prior to a more specific search for additional information.

Inclusion and Exclusion Criteria: With regard to relevance and reliability, specific criteria were used. To ensure relevance, only articles from peer-reviewed, reputed journals, credible case

studies, and reports published between 2018 and 2024 were considered since the subject of Agile project management is developing rapidly. More specifically, sources that did not focus on Agile contexts were excluded based on the criteria.

Data Synthesis: Each of the chosen sources was then reviewed in detail to determine the information about the Agile practises, issues and benefits in global projects. Information obtained from the material was divided based on themes linked with the questions of study, such as “Advantages of the use of agile”, “Challenges in the case of implementation” and “Best practices”. Finally, it was possible to analyse the themes due to such a systematic organisation of data (Hamel et al., 2020).

3.4 Thematic Analysis

Concerning the analysis of the collected data, **Thematic Analysis** was employed to make sense of the patterns and trends in the data. Thematic analysis was deemed suitable for this study because it provided a structured means of analysing qualitative data throughout all the sources to establish an enhanced understanding of the use of Agile in the international project environment (Naeem et al., 2023). The thematic analysis process involved the following steps:

Data Familiarization: This stage involved reading of the selected texts several times in order that the researcher has considerable understanding of what is being read. Several Agile concepts were established, as well as, patterns of difficulties, and advantages of using Agile. This made the data to be comprehensively understood before coding was started by use of this immersive approach.

Coding: After data familiarisation, the initial codes were assigned to fragments of the text that are relevant to the aims of the study. To enhance the reliability of the coding exercise, the exercise was done manually. For instance, the phrases and sections “cultural barriers” “time zone differences” and “Agile maturity” were documented as the codes for impediments to the adoption of Agile across the border. The coding also involved identification of the concept of continually comparing the new codes with the other coded data in order to validate the codes (Locke Feldman & Biddle, 2020).

Theme Identification: The codes were grouped according to the associated general research themes that included the findings. These areas of focus included Agile Benefits in International

Projects, Challenges of Agile in Global Setting, and Best Practices for Agile in Global Context. Each of the themes was considered against the research questions and objectives of the study before identifying them. For example, the ‘Agile Benefits’ theme provided current communication, improved team coordination, and adaptability as some of the benefits that Agile brings to international project groups.

Reviewing Themes: The identified themes were then discussed and re-evaluated in order to ensure the coherence, relevance and suitability of the themes with the data collected. While analysing the data in this stage, the identified themes were considered relevant to the collected data. If there was overlapping, it was merged or placed under a different category to avoid confusion of similar contents. For instance, the first topics included were ‘communication difficulties’, and ‘culture difficulties’, which were categorised under ‘Agile implementation difficulties in a global environment,’ as all of them are real aspects of Agile issues in the global perspective.

Defining and Naming Themes: When the final themes were determined, each was described and named according to the content of that specific theme. This was useful in stabilising the results and also played a role in offering suitable direction where to go within the research process. To each of them some patterns and observations from the literature review were connected, which allowed for a detailed examination of all the issues concerning Agile methodologies in international projects.

3.5 Data Interpretation

The final step involved analysing and interpreting the data in light of the research questions and objectives after categorising the themes. Each theme was evaluated to make conclusions about the use of the Agile methodologies in international project management. The following interpretative strategies were used to ensure a critical approach to the data:

Comparative Analysis: The findings from each theme were also compared with the results from other studies to establish similarities, differences, and areas of research that were not explored. For example, while some sources discussed how Agile improved communication, others pointed out communication barriers that come with the use of time zones in multinational teams (Dühring and

Zerfass, 2021; Šmite, Moe and Huerta, 2021). These two views were then integrated to give a more balanced perspective of Agile strengths and weaknesses in the international environment.

Cross-Referencing Themes: Terms like “Benefits” and “Challenges” were linked to show where Agile’s strengths can be a weakness. For instance, although Agile entailed numerous feedback loops, which were deemed as positive, they incurred considerable coordination demands that were difficult in culturally diverse teams. These cross-references offered the more subtle analysis of Agile as the advantage as well as the element capable of creating issues in the international projects.

Implications for Practice: The interpretation also considered the application of the results to practise, and specifically the lessons for ensuring successful Agile implementation in global programmes. The other themes with the title, “Strategies for Successful Agile Adoption,” offered a perspective on how to manage the effectiveness issues, which were raised as the challenges, like cultural sensitivity training and time zone accommodation. These findings were presented as prescriptive suggestions for practitioners who seek to apply Agile in global project environments.

3.6 Ethical Considerations

Even though this study used secondary data, some steps were taken to address the issue of ethical considerations. In this case, credibility was paramount since this research was to build a coherent, accurate and reliable account from scholarly sources (Rose and Johnson, 2020). These guidelines insisted on citation of original authors and reference making in order to avoid cases of plagiarism. Moreover, only information regarding particular examples was considered to be confidential, and any data that could lead to the identification of the particular organisation or individuals were not discussed in order to adhere to the ethical considerations.

Thus, the presented methodology allowed for comprehensive and systematic research of Agile methodologies concerning international project management. However, since this study adopted descriptive research design, thematic analysis and the critical interpretation of results, it was possible to provide an outcome containing findings and recommendations on the use of Agile in global environments. Division of content by the themes helped to progress the work in accordance with the objectives and questions set for the investigation.

Chapter 4: Results

4.1 Introduction

This chapter presents a summary and discussion of the results of the thematic analysis of peer-reviewed articles, reports, and case studies focusing on Agile methodologies in international project management. Papers were selected from the ScienceDirect, Sagepub, Wiley, IEEE Xplore, and Journal of International Project Management databases, which provide access to only peer-reviewed, recent literature. The focus on eligibility was to establish studies that directly address Agile frameworks in multinational or cross-cultural projects since it offered a wealth of information regarding the benefits and drawbacks of Agile in complex projects.

Employing thematic analysis, the research adopted inductive coding to define categories and subcategories of identified patterns as well as insights in the literature. Initial coding phases revealed an array of factors, which were then grouped into three dominant themes aligned with the study's research objectives: Identified three research themes were: [Theme 1: Advantage of Agile Methodologies for International Project Management](#), [Theme 2: Cross Cultural Implementation Issues in Agile](#), [Theme 3: Strategies for Cross Cultural Implementation of Agile](#). Each of them captures key problems and subtopics, such as flexibility, teamwork, culture, and technological dependence (Figure 3). These themes provide a detailed understanding of Agile's effectiveness highlighting multifaceted relationships in the global context and offering a critical reflection on Agile's function across cultural, organisational and geographical contexts.

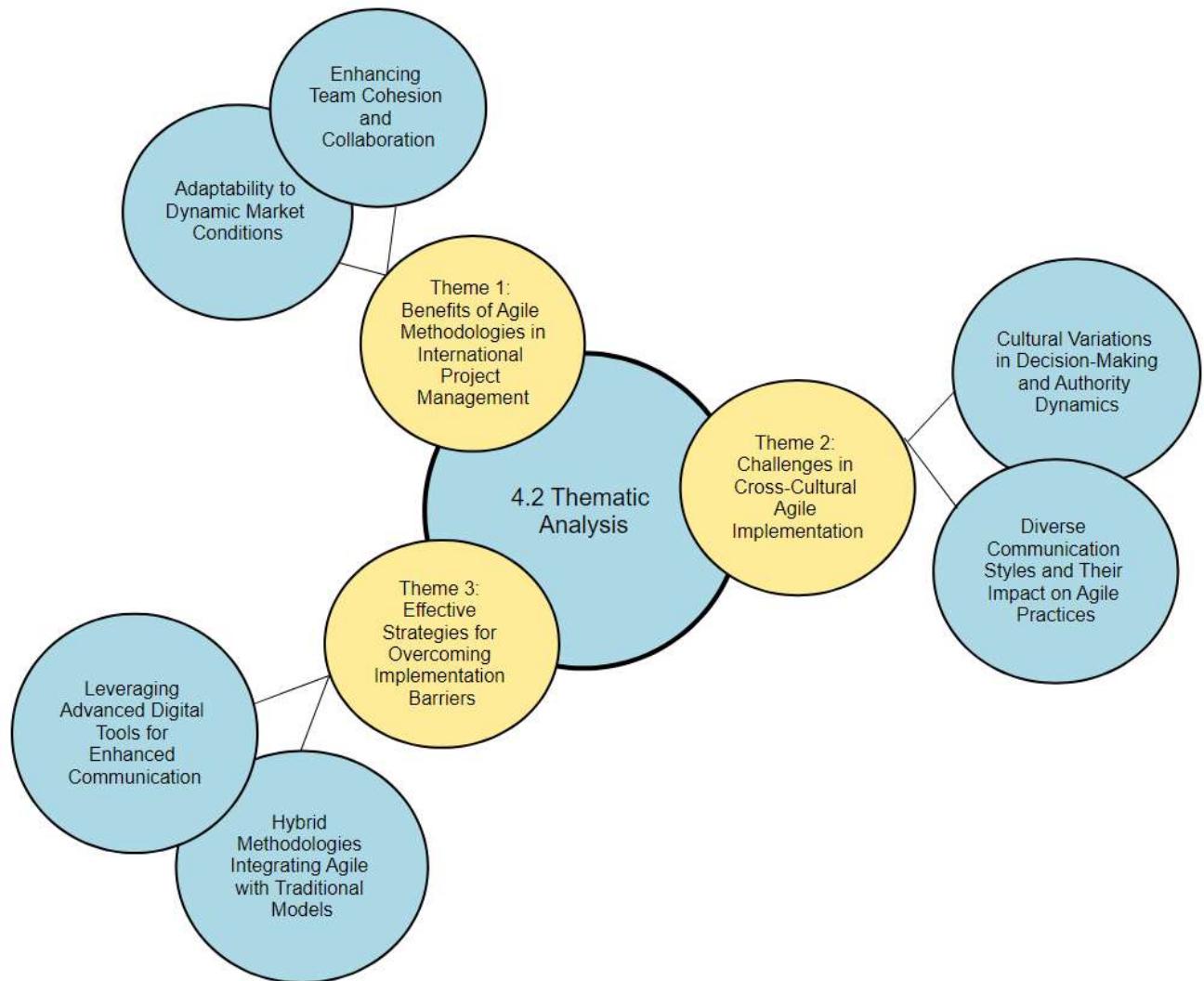


Figure 3: Mind map for thematic analysis

4.2 Thematic Analysis

Theme 1: Benefits of Agile Methodologies in International Project Management

Agile methodologies are often cited for their flexibility and a strong focus on the teams, which serve as a solid basis when working in unpredictable and complex international projects (Pinciroli, 2024). However, emerging from the analysis of the literature, a more complex picture of the ways

these benefits unfold in multinational settings emerges, which oftentimes appears depending on the organisational as well as the team level arrangements that either enhance or limit Agile's possibilities.

Sub-theme 1.1: Adaptability to Dynamic Market Conditions

The ability to make changes quickly is one of the most often mentioned benefits, especially in projects that work in different markets with different conditions (Daraojimba et al., 2024). Mohammad and Kollamana (2024) believes that iterative cycles in Agile are effective in dealing with the volatility of international markets because the adjustments made are incremental to ensure that the project reflects the changing needs of multiple stakeholders. This flexibility is especially helpful in situations where some regulatory or economic aspect has forced the re-evaluation of the goals or the timeline of the project. For example, Kolasani (2023) shows that projects, which implement Agile, perform significantly better under changing market conditions because the basic principles of Agile incorporate a real-time change management strategy.

However, the same characteristic that makes Agile a valuable process also results in fragmentation when not applied selectively. Pererva et al. (2021) argue against the idea that flexibility is always good, noting that in industries where compliance is essential, constant changes might lead to more problems in the sphere of compliance. Taj (2023) further notes that firms which overemphasise the iterative approach that Agile offers may struggle to achieve strategic consistency across different countries and regions, and across different jurisdictions, especially those with high legal standards. From these findings it can be concluded that although Agile is flexible, it is important to comply with industry norms and rules of the local jurisdiction in order to achieve positive results.

Sub-theme 1.2: Enhancing Team Cohesion and Collaboration

A distinguishing characteristic of agile frameworks is that they promote collaboration, transparency, and shared responsibility and can overcome cultural barriers when working in globally dispersed teams (Tyagi, Sibal and Suri, 2022). In Moussa et al. (2022) opinion, the cognitive or group-oriented nature of Agile is most beneficial when it comes to working in a multicultural project environment. For example, daily stand-ups and sprint reviews are explicitly

scheduled points in the developers' work cycle where the team members are getting to know each other's goals and openly share problems and concerns throughout different time zones. Annosi, Appio and Martini (2024) also note that Agile rituals allow the selection of a collective perspective, eradicating hierarchical barriers and giving power to the team members irrespective of culture.

However, such a vision of collaboration is counter-productive in real life. Tyagi, Sibal and Suri (2022) pointed out that Agile promotes open discussion and peer reviews, but this may not go down well with some cultures that are not used to such practices due to high power distance. The teams from such cultures may also find certain elements of the Agile approach such as decentralised responsibility and decision-making models. Furthermore, Rahy and Bass (2021) pointed out that Agile pays attention to the assumption that all team members are similar but in an international team, this appears to be invalid since the team comprises players with different levels of skills and experiences. In these cases Agile means a different structure which should be adapted, one must use for example a traditional hierarchy which is familiar to employees and which will not destroy the staff unity.

| Theme | Benefit | Challenge |
|------------------|--------------------------------------------|--------------------------------------------------|
| Adaptability | Supports rapid response to market changes | Risk of non-compliance in regulated industries |
| Team Cohesion | Fosters collaboration across diverse teams | Conflict with high-power-distance cultural norms |
| Iterative Cycles | Allows alignment with stakeholder needs | Potential for strategic fragmentation |

Table 1: Major themes, their benefits and challenges

Theme 2: Challenges in Cross-Cultural Agile Implementation

The cross-cultural differences present major challenges to the adoption of Agile methodologies in international project management (Caligiuri and Caprar, 2022). The literature also analyses how cultural variations in norms, communication and attitudes towards authority influence the

performance of Agile, and it is identified that Agile may not function effectively in multicultural teams.

Sub-theme 2.1: Cultural Variations in Decision-Making and Authority Dynamics

Agile continues the decision-making process at the lower organisational level, requiring everyone in the team to make decisions, discuss goals, and express their opinions (Attar and Kareem, 2020). This approach, however, undermines the culture that supports authority or hierarchy that is considered appropriate in most organisations. Šmite, Moe and Huerta (2021) give a sound explanation of how the decentralised decision-making model of Agile can challenge traditional cultural norms in international teams. From their study, they note that members of high power distance culture are reluctant to question their seniors, argue with them or even offer suggestions as enjoined by Agile. Zykov and Singh (2020) made a similar point about how Agile's open format can be problematic since professionals from cultures which value hierarchy may view it as disrespect for authority.

Moreover, Zuber et al. (2022) claim that Agile weakens the decision making as a result of its focus on short and joint decision processes in the condition when power belongs to superior officials. In such contexts using Agile may demotivate the team since they are unable to adjust to the new change of direction they have not known. In response to this, some organisations adopt the flexible adaptation which provides for a combined decision making system that is compatible with culture values while trying to observe the tenets of Agile. However, some scholars are sceptical of this hybrid approach, as Meckenstock (2024) suggests, it can compromise the specificity of Agile and cause discrepancies in performance.

Sub-theme 2.2: Diverse Communication Styles and Their Impact on Agile Practices

Agile works best when there is clear visibility and communication on a frequent basis, however, cross-national teams are not always able to standardise their communication. Malyuga (2024) stresses that while Agile highly values certainty and leaning on direct communication, high-context cultures that presuppose the use of nonverbal signals and indirect language may face certain challenges. On the other hand, the low context culture may consider the high context type to be evasive or ambiguous which may bring about some conflict.

Specifically, the literature has indicated that it is rather difficult to overcome these differences in the communication style. According to Tolmantas Dagys (2022), obligatory practices like retrospectives and daily stand-ups, which are integral to Agile, may become sterile and meaningless if the team's communication expectations are not aligned. At times, such rituals can also increase conflicts because the individuals on the team may take a remark as a form of backlash or equally go ahead and consider a suggestion that was never said. Although tools like Slack or Zoom may create spaces for more accurate communication, Imran (2022) notes that technologically facilitated changes cannot overcome fundamental communication disparities.

Theme 3: Effective Strategies for Overcoming Implementation Barriers

Based on the challenges outlined in cross-cultural Agile adoption, several strategies are evident from the literature, with strategies presented as a way of enhancing Agile on international projects. These strategies however are sophisticated and may need enhancement so that they conform to Agile's principles.

Sub-theme 3.1: Hybrid Methodologies Integrating Agile with Traditional Models

To overcome the above limitations of pure Agile in complex environments, some scholars propose that a hybrid project management methodology combining Agile with the traditional paradigm should be adopted. Reiff and Schlegel (2022) agrees with such a concept and especially with the idea of the integration of Agile as a flexible solution with the systematic approach of traditional project management. In some highly regulated industries for example, this hybrid approach provides for the iterative advantages of Agile while at the same time meeting regulatory requirements. Ajayi and Udeh (2024) stated that a hybrid model worked best in projects that needed rigorous documentation and supervision because it can be iterative while also ensuring compliance (Kirpitsas and Pachidis, 2022).

Nevertheless, the weakness of hybrid models has been claimed by critics to weaken the Agile approach by creating structural opposition. Integrating Agile with the other methodologies is counterproductive as it generates a heterogeneous structure, which erodes the basic foundations of Agile which include the provision of fast feedback (Layik, 2021). Therefore, the literature points

out that the application of hybrid methodologies has to be well-coordinated and aligned properly to avoid a loss of focus on Agile's goals.

Sub-theme 3.2: Leveraging Advanced Digital Tools for Enhanced Communication

Due to the location of international Agile teams, it has become mandatory to embrace the use of technological tools to support the Agile development process. Ali (2024) has noted that these tools include communication platforms such as Jira, Slack and Trello, by which a team can use both asynchronous and synchronous communication to stay relevant irrespective of different time zones. Thus, the literature shows that technology can bring interaction but also unfair competition if some of the members of the team have limited access or poor skills in using the equipment. Ragnedda, Ruiu and Addeo (2022) highlight training and support as a factor that contributes to equal representation, arguing that excluding this factor may compromise those with poor computer literacy or with restricted internet connection.

| Theme | Benefit | Challenge | Recommendation |
|-------------------------------|-----------------------------------------------|--------------------------------------------------|-----------------------------------------------|
| Adaptability | Supports rapid response to market changes | Risk of non-compliance in regulated industries | Hybrid models with traditional elements |
| Team Cohesion | Fosters collaboration across diverse teams | Conflict with high-power-distance cultural norms | Cultural sensitivity training |
| Communication Across Cultures | Clearer and more frequent team updates | Misunderstandings due to diverse styles | Use advanced communication tools |
| Digital Tool Reliance | Facilitates coordination in distributed teams | Limited access and technology proficiency | Provide accessible tech solutions and support |

Table 2: Major themes, their benefits, challenges and recommendations

4.3 Conclusion

The thematic analysis of Agile methodologies in international project management demonstrates that the subject is multifaceted with different advantages, difficulties, and factors to consider. Although the Agile frameworks foster flexibility and cooperation crucial when working in conditions of project volatility, they are limited by culture and hierarchy that is typical for MNEs teams. While Agile is designed for being flexible and having effective collaboration, it has theoretical benefits but may not work effectively in practice due to the differences in decision-making processes and availability of communication and technology in the global teams.

To overcome these gaps in the international context, relevant solutions include the use of a variety of practices, including flexible PM methods, new technologies, and orientation on intercultural communication. Further research should investigate the ways in which Agile models can be further developed to meet the requirements of cross-cultural teams so that Agile's principles can then be not only applied but also enhanced to meet the globalised needs of project management.

Chapter 5: Discussion

5.1 Introduction

This chapter offers a critical review of the findings highlighted in the results section, analysing the performance of Agile methods in the context of international project management. Based on the theories and models, the discussion relates to the advantages, problems, and appropriate coping strategies highlighted in the analysis of the theme. Despite originating from software development, many practices under agile methodologies are generally used in many disciplines today because of their current approach of iterative cycles, flexibility and the importance of the team (Zahidul, Ferworn and Islam, 2020). Nonetheless, the literature suggests that it is used in multinational organisations depending on certain cultural, organisational, and technological factors. When grounded in the project management theories including Hofstede's Cultural Dimensions, Tuckman's Team Development Model, and contingency theory, this discussion offers a richer appreciation of the challenges of Agile when implemented across international contexts.

5.2 Discussion on themes

Theme 1: Benefits of Agile Methodologies in International Project Management

Many organisations adopt agile methodologies in the software development process because of its flexibility and its capacity to improve teamwork in project management especially in environments that share high levels of risk and uncertainty (Zahidul, Ferworn and Islam, 2020). The review also reveals that Agile has merits of offering the teams the versatility required in handling fluctuations in stakeholder demands that are typical of international projects. However, these advantages are associated with some challenges particularly when implementing Agile in different cultures and legal systems.

Flexibility is one of the major benefits of Agile, as the changes in requirements can be addressed quickly (Alsaqqa, Sawalha and Nabi, 2020). The Agile's cycles can be discussed in regard to **contingency theory** which suggests that there is no best practice in management and strategies should be adopted depending on the context (Ahmed, Najmi and Ikram, 2020). The aspect of flexibility at Agile is appropriate for global operations because the firm is bound to encounter

unpredictable situations in the various markets in which it operates. Virag, Edward and Remus (2024) pointed out that agility takes the form of opportunistic response by the project managers to the external context especially when there are shifts in the market or regulation environment. However, contingency theory also postulated the idea that the level of adaptability can reach the opposite extreme and create instability (Ahmed, Najmi and Ikram, 2020). The results also indicated that since Agile employs cyclic processes, it may cause fragmentation in the company, particularly in projects that have to conform to regulatory requirements. This is in concordance with research by Ackerman (2023) who postulated that organisations that exist in the controlled environment may not operate well, where there is lack of systematic methods. The decision-making style of employing agility may prove useful in highly volatile environments, but conversely it has its weaknesses in regulated environments, proving that moderation is key. A critical analysis of the literature therefore indicates that while flexibility is a strength of Agile in many cross border projects, lack of overall structure when deploying Agile may be disadvantageous in some industries.

Agile's emphasis on collaboration also aligns well with Tuckman's (1965) [Team Development Model](#), where groups progress through forming, storming, norming and performing (Nanda, Papathanasiou and Zandoná, 2023). Some of Agile's daily practices like daily scrum or sprint review falls in the norming and performing stages of the team development where cohesiveness and productivity are high. Such cohesion is especially productive in international contexts as most team members may be located in different continents or even states. However, based on the literature, it is evident that team cohesion in Agile is context-dependent. As observed by Tamburri and Kamzan (2023), this kind of collaboration may not suit Agile because of the inherent cultural differences that exist in organisations' hierarchical structures. This observation holds true with Hofstede's [Cultural Dimensions Theory](#), especially the power distance dimension. In cultures with high power distance, people may feel uncomfortable contributing to debate, assuming that this is subversive (Cantarero et al., 2018). Therefore, Agile's structure lacks hierarchy, which can be a problem in many cultures, thus diminishing the efficiency of the model when it comes to actual collaboration. Thus, even though cohesive enhancing mechanisms of Agile have clear theoretical benefits, its implementation requires an understanding of the culture within a team.

Theme 2: Challenges in Cross-Cultural Agile Implementation

The thematic synthesis also shows that there are particular difficulties in implementing Agile across cultures because Agile is sensitive to different ways of communication, decision-making, and hierarchy. Using Hofstede's Cultural Dimensions Theory provides a richer insight into how exactly these cultural variables affect Agile in teams across countries.

The regular structure of decision-making at Agile is based on the involvement of team members in project decisions. However, this structure is in conflict with the hierarchical systems that hold authority in high esteem and decision-making power for top officials. Using Hofstede's power distance dimension, it is quite possible to explain such a clash. Employees in a high power distance culture will not challenge authority because experimenting with new ideas and offering constructive feedback is untenable in that culture (Okoliko, 2023). According to JOkoliko (2023), due to its commitment to equity and contribution, members from such cultures are likely to experience discomfort and disengagement, making the approach ineffective. Furthermore, the transformational leadership model can be used here to challenge Agile's assumption of empowered teams. The characteristic of transformational leaders is the ability to get the employees involved to the highest level (Budur, 2020). In Agile, the role of a project manager resembles the one in the traditional methodology, but the decision-making process is more democratic. However, if the leadership does not adopt a cultural sensitivity perspective, this type of leadership behaviour may not work well with the employees who prefer clear instructions. Therefore, based on the literature, Agile might perform better if it incorporated some of the aspects of transformational leadership that can fit into the local culture of hierarchy.

Communication is one of Agile's key components, while working in international teams people can have different communication strategies which creates a conflict with Agile's policies of openness and directness. Hall's (1976) high and low context communication provides a useful framework to understand these challenges (Kittler, Rygl and Mackinnon, 2011). For instance, Japanese and Chinese people are considered to be of high-context origin since they express most of their concerns in a hidden and indirect manner, whereby their American counterparts will directly express what they are implying (Yang, 2020). In cross-functional Agile teams, with possibly conflicting communication styles, daily stand-up meetings and retrospectives may change their purpose. Members from High-context culture can deny direct criticism to avoid disrupting group cohesiveness while low context culture people may perceive this as lack of participation

(Ugorji, 2017). The lack of this communication can slow down Agile's objective of daily collaboration, problem-solving, and participation. According to Sithambaran, Nasir and Ahmad (2021), concepts that can enhance knowledge of intercultural communication could help, but such solutions should be incorporated properly so that they do not weaken Agile's approach. The literature therefore suggests that although Agile overcomes the problems associated with weak external communication, it may require adjustments to suit the communication style particularly where there is diverse cultural distribution.

Theme 3: Effective Strategies for Overcoming Implementation Barriers

The study emphasises the role of organisation flexibility to address the difficulties of Agile implementation in the international project. Such techniques include hybrid project management techniques, sophisticated technology solutions, and cross cultural awareness training, all of which help to ensure that Agile is implemented in multicultural and multinational teams.

Integration of the Agile and traditional project management methodologies becomes evident in organisations with regulatory or cultural constraints. This strategy is consistent with [contingency theory](#), which posits that the management methods should be contingent on the nature of the situation (Ahmed, Najmi and Ikram, 2020). Hybrid methodologies are an attempt to bring together the flexibility of Agile and the more rigid structure of the new traditional models while still meeting regulations and hierarchical environments often found in industries. However, a closer look at the hybrid models will show certain disadvantages. Krishnakumar (2020) notes that the use of hybrid forms may negatively affect Agile's effectiveness since the inclusion of conventional structures tends to bring in silo problems that Agile is designed to eliminate. This observation is in line with [McKinsey's Three Horizons of growth](#) that proposes that any organisation should address the current operational requirements (Horizons 1) and the future strategic opportunities (Horizons 3) (Markopoulos, Aggarwal and Vanharanta, 2019). While Agile and traditional methodologies can coexist and may be beneficial to international teams where it is needed to meet the project goals, it hinders the team's flexibility and ability to solve new problems. Therefore, while hybrid models provide a realistic and workable solution, they should be carefully implemented not to overemphasise the negative aspects of rigidity that Agile was intended to address.

With Agile being adopted in distributed teams, communication technologies like Slack, Trello, and Zoom are essential in supporting synchronous and asynchronous communication within different time zones. Daft and Lengel (1986) [Media Richness theory](#) can be applied to explain the use of these tools. To this theory, people maintain that there is a direct correlation between the richness of media and how effectively communication can occur within such channels (Tseng et al., 2022). When it comes to Agile, technology tools such as video conferencing are effective since Agile necessitates the use of media that can enable real-time collaboration especially across time zones. However, the literature identifies some limitations, which arise mostly from a lack of access or lack of experience with the technological tools. MacLeavy (2020) pointed out that technical difficulties or low access can generate inequality, leaving team members with fewer opportunities in poorly served areas. This is contrary to [resource dependency theory](#) that states that an organisation's success depends on the availability of resources within the organisation (Wang et al., 2020). Equitable access to the communication tools and channels remains among the most significant priorities for Agile teams since communication helps maintain the team's cohesiveness and engagement levels. Consequently, although clients deploy digital tools to support Agile practices, their accessibility and IT assistance must be equal for all participants.

Cultural awareness is increasingly being advised to help improve the use of Agile in a diverse team of workers because of a better understanding of cultural variation in communication, decision-making processes, and power culture. The advantage of such training is well supported by [intercultural communication competence theory](#), which focuses on the abilities and perceptions crucial to successful intercultural communication (Klyukanov, 2020). Janhunen, Eriikka and Mumford (2024) posited that cultural sensitivity training enhanced cohesiveness and dignity in Agile teams at the workplace since culture can be a barrier to effective teaming. However, critics note that cultural sensitivity training may only be moderately effective if not backed up by further fine-tuning of Agile practices. According to Lin (2015), training cannot effectively eliminate cultural issues, including generic perceptions of hierarchy or particular perspectives towards teamwork or obedience. Thus, cultural training can help facilitate Agile implementation in cross-cultural settings, but for this outcome to happen, the organisation must remain committed to diversity and flexibility.

5.3 Conclusion

This discussion implies that while Agile methodologies provide critical benefits to international project management, their efficiency depends on contextual modifications. Using theories like Hofstede's Cultural Dimensions, contingency theory and media richness theory, we understand how Agile fits in multinational projects. Theoretical strengths of Agile include adaptability, collaboration, and cyclic organisation; however, the academic research shows that culture and legal barriers may hamper these benefits if not managed properly.

Integrated approaches, technologies, and cultural competence present potential solutions for mitigating Agile's drawbacks but should be applied in appropriate balance, not to compromise Agile principles. As a result, further research should be devoted to creating the targeted Agile frameworks that, in turn, would incorporate the cultural and regulatory factors into their conditions for Agile adoption within the context of the international project management environments. In this chapter, it can be concluded that Agile methodologies can significantly improve international project results when used by project managers with an understanding of the strengths and weaknesses of these frameworks and the context in which they should be applied.

Chapter 6: Conclusion and Recommendations

6.1 Conclusion

This research focused on the use of Agile approaches in the management of international projects, identifying opportunities and risks in the process. The major strength of the agile methodology is flexibility, cyclical approach, and the centrality of communication, which are crucial for projects involving changes, feedback, and a team. These attributes make Agile suitable for implementation in any culture and regulatory environment because of the variability of stakeholder demand. However, due to cultural differences, regulations, and disparities in technology, the benefits of Agile are often reduced in an international environment. Some of these problems include having different preferred ways of communication, the cultural expectations of a hierarchy, and the problems of relying on technology to implement Agile. The above findings are supported by real-life studies, for instance, Agile projects characterised by cross-cultural teams have proven to be both opportunities and threats to firms like IBM and Siemens. For instance, IBM found Agile to be effective in using it for innovation and flexibility in distributed environments but painful in terms of time coordination. To counter these concerns, what IBM implemented was a Hybrid Agile system to encourage more local decision making while incorporating Agile's flexibility but with structures that can consider the culture.

6.2 Recommendations

1. Adopt a Hybrid Agile Approach to Balance Flexibility with Structural Stability

When working on international project scopes that yield different regulatory environments or teams with different cultures, Agile methods can therefore be combined with certain levels of formality to generate a middle ground between the typical project management methodologies and agile approaches. To address regulatory requirements, organisations can apply Agile's iteration planning in conjunction with more conventional approaches that include setting of milestones, and compliance measures (Wagner and Ford, 2020). For instance, [Siemens](#) working in high-tech industries such as health and energy utilise a middle Agile methodology for their global projects

(Batzangia, 2024). Agile and compliance integrated cycles allow Siemens to meet new project requirements while maintaining compliance with local legislation. This balance has proven effectiveness especially in the regions where the culture is rigid and approves of line organisation thus making Siemens reap the benefits of Agile without coming across culture barriers. Managers should consider the needs of the particular project and use Agile in its combination with the necessary formalities. To maintain consistency and gain acceptance from the team members clear communication of this hybrid model is crucial particularly where the hierarchical culture is well understood and embraced (Mohammad, 2024).

2. Invest in Cultural Sensitivity Training to Foster Cohesion in Multinational Teams

Cultural awareness is crucial in understanding and managing culturally diverse teams in international contexts for Agile project delivery. This is important because it builds an understanding amongst the team members of different communication, power and decision making models which would save time and improve on cohesiveness (Chen et al., 2021). For instance, Agile teams in [HSBC](#), operating in Asia, Europe, and North America integrate cultural sensitivity training. HSBC stated that from 15% in 2021 to 80% of the Technology workforce working fully in Agile teams (HSBC, 2022). Asian staff members adjust to the use of written critique and other direct communication approaches common among their Western counterparts, thus improving cross-cultural interactions (Sahadevan and Sumangala, 2021). Project managers should incorporate cultural sensitivity training when starting the projects and repeat them at times. Training should focus problems related to team characteristics, active practising of roles by intend-to-use scenarios based on the experience of work.

3. Leverage Digital Tools Strategically to Facilitate Communication and Coordination Across Time Zones

The use of organisational tools and applications like Slack, Jira, and Zoom becomes critical in ensuring that the project remains visible and all team members are in touch. Nevertheless, each team member must have equal opportunities and enough practice using these tools, especially when working in areas with weak technological support. For instance, [Microsoft](#), with a diverse

collaboration of its teams around the world, relies on synchronous tools like video calls as well as asynchronous ones, including project boards to enhance Agile practices (Nyktarakis, 2022). This approach enables MS teams to avoid some essential meetings as they are allowed to work in a flexible manner. Microsoft also provides for technical support and training to assure all the team members involved can get optimum interaction with these tools irrespective of where they are sited (Nyktarakis, 2022). Organisations should set policies for Digital tool use, integrating both synchronous and asynchronous techniques. For example, asynchronous tools are most suitable for general updates, while synchronous meetings must occur at appropriate times for everyone (Moorhouse and Wong, 2021). Scheduled training allows team members to be familiar with these platforms and therefore there is more accuracy of participation among the global teams.

4. Adapt Decision-Making Structures to Respect Cultural Norms While Maintaining Agile's Responsiveness

Agility's decentralised decision-making presents complications in organisations that embrace systemization in structures. In this regard, organisations should consider certain types of decision-making frameworks specifically to incorporate Agile while still respecting cultural appropriateness as an important factor, and provide authorities to local leaders to have a better sense of the team's cultural orientation (Hussain et al., 2022). For instance, [Procter & Gamble \(P&G\)](#) realised that it was hard to adopt Agile in organisations that have a strong hierarchical structure particularly in the Asian and Middle Eastern region. P&G made some changes to the structure, adding local managers who could act within the Agile framework and make decisions regarding the local culture without negating Agile's multiprocess structure (Chit and Vasudevan, 2024). It helped P&G to maintain Agile's incremental value and meet the team members' demand for direction and instructions. Managers should look at the cultural norms in teams and assign local champions to translate Agile methods with traditional hierarchy. These leaders occupy an intermediary role within the culture; they facilitate other people's engagement with Agile practises while adjusting the organisational rhythm for that country. Archiving of such practices enables an establishment to design a loose construct of cultural sensitivity in allocations within Agile teams.

6.3 Final Thoughts

There is tremendous potential to improve project performance by applying agile methodologies, but this generally needs effort to adapt. Illustrations from IBM, Siemens, HSBC, Microsoft, and P&G, reveal that although Agile has a solid framework for references, changes are needed when transitioning between MNE environments. To overcome some of the disadvantages of Agile, it is possible to run a hybrid Agile system, conduct cultural sensitivity training for employees, use technologies effectively, make decision-making changes, and improve such practices regularly. These recommendations further help Agile to be more effective on global projects to ensure that teams can collaborate seamlessly regardless of the cultural or geographical barriers hence improving chances of success in today's highly connected world.

References:

- Ackerman, L.S. (2023). Development, Transition, or Transformation: The Question of Change in Organizations. *Publicationslist.org*, 55(1).
- Adekola, A. and Sergi, B.S. (2016). *Global Business Management*. Routledge. doi:<https://doi.org/10.4324/9781315584744>.
- Adipat, S. and Chotikapanich, R. (2022). Sustainable Development Goal 4: An Education Goal to Achieve Equitable Quality Education. *Academic Journal of Interdisciplinary Studies*, 11(6), p.174. doi:<https://doi.org/10.36941/ajis-2022-0159>.
- Aguanno, K. (2024). *Managing Agile Projects*. [online] Google Books. Available at: <https://books.google.com/books?hl=en&lr=&id=TJgsl4WqrzoC&oi=fnd&pg=PA11&dq=The+usage+of+Agile+can+be+traced+back+to+the+beginning+of+the+1990s+when+the+conventional+methods+of+handling+projects+were+deemed+to+be+very+slow+and+cumbersome&ots=QvBzRuudTi&sig=7fTkVXetA67iZlss1xTr01MNmvY> [Accessed 9 Sep. 2024].
- Ahmed, W., Najmi, A. and Ikram, M. (2020). Steering firm performance through innovative capabilities: A contingency approach to innovation management. *Technology in Society*, 63, p.101385. doi:<https://doi.org/10.1016/j.techsoc.2020.101385>.
- Ali, D.U. (2024). Strategies for Managing Remote Teams Effectively. *Journal for Business Research Review*, [online] 2(1), pp.26–38. Available at: <https://journalbrr.com/index.php/Journal/article/view/18>.
- Ali, I. and Yang, J. (2021). *Identifying the challenges of communication in implementing Agile Scrum in Embedded system development in distributed team*. [online] Available at: <https://www.diva-portal.org/smash/get/diva2:1572547/FULLTEXT01.pdf> [Accessed 12 Aug. 2024].
- Alsaqqa, S., Sawalha, S. and Abdel-Nabi, H. (2020). Agile Software Development: Methodologies and Trends. *International Journal of Interactive Mobile Technologies*, 14(11), pp.246–270. doi:<https://doi.org/10.3991/ijim.v14i11.13269>.

Alsaqqa, S., Sawalha, S. and Nabi, H. (2020). Agile Software Development: Methodologies and Trends. *International Journal of Interactive Mobile Technologies*, 14(11), pp.246–270. doi:<https://doi.org/10.3991/ijim.v14i11.13269>.

Annosi, M.C., Appio, F.P. and Martini, A. (2024). Institutional context and agile team innovation: A sensemaking approach to collective knowledge creation. *Technovation*, [online] 129, p.102894. doi:<https://doi.org/10.1016/j.technovation.2023.102894>.

Attar, M. and Kareem, A.A. (2020). The Role of Agile Leadership in Organisational Agility. *Agile Business Leadership Methods for Industry 4.0*, 1(1), pp.171–191. doi:<https://doi.org/10.1108/978-1-80043-380-920201011>.

Batzangia, G. (2024). *PLC picking methods in exercise*. [online] Unideb.hu. Available at: <https://dea.lib.unideb.hu/items/78936834-1537-456e-89ec-0dcfa02fcb94> [Accessed 15 Oct. 2024].

Baumgartner, M., Klonk, M., Mastnak, C., Pichler, H., Seidl, R. and Tanczos, S. (2021). *Agile Testing*. Cham: Springer International Publishing. doi:<https://doi.org/10.1007/978-3-030-73209-7>.

Brhel, M., Meth, H., Maedche, A. and Werder, K. (2015). Exploring principles of user-centered agile software development: A literature review. *Information and Software Technology*, 61, pp.163–181. doi:<https://doi.org/10.1016/j.infsof.2015.01.004>.

Budur, T. (2020). Effectiveness of Transformational Leadership among Different Cultures. *International Journal of Social Sciences & Educational Studies*, [online] 7(3), pp.119–129. Available at: <https://eprints.tiu.edu.iq/390/>.

Bundhun, K. and Sungkur, R.K. (2021). Developing a Framework to Overcome Communication Challenges in Agile Distributed Teams – Case Study of a Mauritian-based IT Service Delivery Centre. *Global Transitions Proceedings*, 2(2). doi:<https://doi.org/10.1016/j.gltip.2021.08.006>.

Caligiuri, P. and Caprar, D.V. (2022). Becoming culturally agile: Effectively varying contextual responses through international experience and cross-cultural competencies. *The International*

Journal of Human Resource Management, 34(12), pp.1–22.
doi:<https://doi.org/10.1080/09585192.2022.2083918>.

Cantarero, K., Szarota, P., Stamkou, E. and Navas, M. (2018). The effects of culture and moral foundations on moral judgments: The ethics of authority mediates the relationship between power distance and attitude towards lying to one's supervisor. *Current Psychology*, 40(2), pp.675–683. doi:<https://doi.org/10.1007/s12144-018-9945-0>.

Chen, Z.-S., Yang, L.-L., Chin, K.-S., Yang, Y., Pedrycz, W., Chang, J.-P., Martínez, L. and Skibniewski, M.J. (2021). Sustainable building material selection: An integrated multi-criteria large group decision making framework. *Applied Soft Computing*, 113, p.107903. doi:<https://doi.org/10.1016/j.asoc.2021.107903>.

Chit, I. and Vasudevan, R. (2024). Navigating Compliance: Strategic Approaches Across Industries An Examination of Organizational Structures and Responses to Regulatory Changes. *odr.chalmers.se*. [online] Available at: <https://odr.chalmers.se/items/7da84bd3-722d-4851-800f-42bd0cde4952>.

Christofi, M., Pereira, V., Vrontis, D., Tarba, S. and Thrassou, A. (2021). Agility and flexibility in international business research: A comprehensive review and future research directions. *Journal of World Business*, 56(3), p.101194. doi:<https://doi.org/10.1016/j.jwb.2021.101194>.

Cubillos, D.B.P., Reverter, J.B. - and Lafuente, J.G. - (2024). Transitioning to Agile Organizational Structures: A Contingency Theory Approach in the Financial Sector. *Systems*, [online] 12(4), p.142. Available at: <https://www.mdpi.com/2079-8954/12/4/142>.

Daraojimba, E.C., Nwasike, C.N., Adegbite, A.O., Ezeigweneme, C.A. and Gidiagba, J.O. (2024). Comprehensive Review of Agile Methodologies in Project Management. *Computer Science & IT Research Journal*, [online] 5(1), pp.190–218. Available at: <https://fepl.com/index.php/csitrj/article/view/717> [Accessed 4 Oct. 2024].

Dühring, L. and Zerfass, A. (2021). The Triple Role of Communications in Agile Organizations. *International Journal of Strategic Communication*, pp.1–20. doi:<https://doi.org/10.1080/1553118x.2021.1887875>.

Edison, H., Wang, X. and Conboy, K. (2021). Comparing Methods for Large-Scale Agile Software Development: A Systematic Literature Review. *IEEE Transactions on Software Engineering*, 48(8), pp.1–1. doi:<https://doi.org/10.1109/tse.2021.3069039>.

Gasik, S. (2022). *Projects, Government, and Public Policy*. doi:<https://doi.org/10.1201/9781003321606>.

Geiger, V., Gal, I. and Graven, M. (2023). The connections between citizenship education and mathematics education. *ZDM – Mathematics Education*, 55(5), pp.923–940. doi:<https://doi.org/10.1007/s11858-023-01521-3>.

Glavič, P. (2020). Identifying Key Issues of Education for Sustainable Development. *Sustainability*, 12(16), p.6500. doi:<https://doi.org/10.3390/su12166500>.

Gregory, P., Barroca, L., Sharp, H., Deshpande, A. and Taylor, K. (2016). The challenges that challenge: Engaging with agile practitioners' concerns. *Information and Software Technology*, [online] 77, pp.92–104. doi:<https://doi.org/10.1016/j.infsof.2016.04.006>.

Hamel, C., Michaud, A., Thuku, M., Skidmore, B., Stevens, A., Nussbaumer-Streit, B. and Garrity, C. (2020). Defining Rapid Reviews: A Systematic Scoping Review and Thematic Analysis of Definitions and Defining Characteristics of Rapid Reviews. *Journal of Clinical Epidemiology*, 129. doi:<https://doi.org/10.1016/j.jclinepi.2020.09.041>.

Hawkins , E.J. (2023). *Scrum Implementation of Agile Methods in Large-Scale Organizations: A Qualitative Exploratory Multi-Case Study - ProQuest*. [online] www.proquest.com. Available at: <https://search.proquest.com/openview/5f4e985061934de22515bbf9ac04c61b/1?pq-origsite=gscholar&cbl=18750&diss=y> [Accessed 11 Sep. 2024].

HSBC (2022). *HSBC Ventures, Innovation & Partnerships*. [online] www.bing.com. Available at: <https://www.bing.com/ck/a?> [Accessed 18 Oct. 2024].

Hussain, W., Shahin, M., Hoda, R., Whittle, J., Perera, H., Nurwidayantoro, A., Shams, R.A. and Oliver, G. (2022). How Can Human Values Be Addressed in AgileMethods A Case Study on

SAFe. *IEEE Transactions on Software Engineering*, pp.1–1.
doi:<https://doi.org/10.1109/tse.2022.3140230>.

Imran, A. (2022). Why addressing digital inequality should be a priority. *THE ELECTRONIC JOURNAL OF INFORMATION SYSTEMS IN DEVELOPING COUNTRIES*, [online] 89(3). doi:<https://doi.org/10.1002/isd2.12255>.

Jablonka, E. (2020). Critical Thinking in Mathematics Education. *Encyclopedia of Mathematics Education*, pp.159–163. doi:https://doi.org/10.1007/978-3-030-15789-0_35.

Janhunen, J., Eriikka and Mumford, J. (2024). *Self-Managing Teams: A Driving Force for Change in Expert Organisations' Work Culture*. [online] Available at: https://www.utupub.fi/bitstream/handle/10024/178069/janhunen_julia_opinnayte.pdf?sequence=1 [Accessed 20 Oct. 2024].

Kalenda, M., Hyna, P. and Rossi, B. (2018). Scaling agile in large organizations: Practices, challenges, and success factors. *Journal of Software: Evolution and Process*, 30(10), p.e1954.

Karhapää, P., Behutiye, W., Rodríguez, P., Oivo, M., Costal, D., Franch, X., Aaramaa, S., Choraś, M., Partanen, J. and Abherve, A. (2021). Strategies to manage quality requirements in agile software development: a multiple case study. *Empirical Software Engineering*, [online] 26(2). doi:<https://doi.org/10.1007/s10664-020-09903-x>.

Kiely, G., Butler, T. and Finnegan, P. (2021). Global virtual teams coordination mechanisms: building theory from research in software development. *Behaviour & Information Technology*, 41(9), pp.1–21.

Kim, H., Sefcik, J.S. and Bradway, C. (2017). Characteristics of qualitative descriptive studies: A systematic review. *Research in Nursing & Health*, [online] 40(1), pp.23–42. doi:<https://doi.org/10.1002/nur.21768>.

Kirpitsas, I.K. and Pachidis, T.P. (2022). Evolution towards Hybrid Software Development Methods and Information Systems Audit Challenges. *Software*, [online] 1(3), pp.316–363. doi:<https://doi.org/10.3390/software1030015>.

Kittler, M.G., Rygl, D. and Mackinnon, A. (2011). Special Review Article: beyond Culture or beyond control? Reviewing the Use of Hall's high-/low-context Concept. *International Journal of Cross Cultural Management*, [online] 11(1), pp.63–82. doi:<https://doi.org/10.1177/1470595811398797>.

Klyukanov, I.E. (2020). *Principles of Intercultural Communication*. Second edition. | New York, NY : Routledge, 2020.: Routledge. doi:<https://doi.org/10.4324/9780429353475>.

Kolasani, S. (2023). Innovations in digital, enterprise, cloud, data transformation, and organizational change management using agile, lean, and data-driven methodologies. *International Journal of Machine Learning and Artificial Intelligence*, [online] 4(4), pp.1–18. Available at: <https://jmlai.in/index.php/ijmlai/article/view/35>.

Kozma, D., Varga, P. and Larrinaga, F. (2021). System of Systems Lifecycle Management—A New Concept Based on Process Engineering Methodologies. *Applied Sciences*, 11(8), p.3386. doi:<https://doi.org/10.3390/app11083386>.

Krishnakumar, H. (2020). Challenges to Adopting Hybrid Methodology: Addressing Organizational Culture and Change Control Problems in Enterprise IT Infrastructure Projects. *Dissertations and Theses*. [online] Available at: https://digitalcommons.harrisburgu.edu/pmgt_dandt/54/ [Accessed 19 Oct. 2024].

Lalic, D.C., Lalic, B., Delić, M., Gracanin, D. and Stefanovic, D. (2022). How project management approach impact project success? From traditional to agile. *International Journal of Managing Projects in Business*, [online] 15(3), pp.494–521. doi:<https://doi.org/10.1108/ijmpb-04-2021-0108>.

Laussen, J. and Sutanovac, A. (2021). Evaluation of Agile Team Performance. *odr.chalmers.se*. [online] Available at: <https://odr.chalmers.se/handle/20.500.12380/303587> [Accessed 11 Aug. 2024].

Layik, D. (2021). *Agile vs. Lean : a systematic literature review comparing underlying principles, work-floor practices, and team-level behaviours*. [online] essay.utwente.nl. Available at: <http://essay.utwente.nl/86125/> [Accessed 23 Oct. 2024].

Leite, C., Fernandes, P. and Figueiredo, C. (2019). National curriculum vs curricular contextualisation: teachers' perspectives. *Educational Studies*, 46(3), pp.259–272. doi:<https://doi.org/10.1080/03055698.2019.1570083>.

Lin, J. (2015). *Human Factors in Agile Software Development*. [online] arXiv.org. doi:<https://doi.org/10.48550/arXiv.1502.04170>.

Lindskog, C. and Netz, J. (2021). Balancing between stability and change in Agile teams. *International Journal of Managing Projects in Business*, 14(7). doi:<https://doi.org/10.1108/ijmpb-12-2020-0366>.

Liu, C., Wart, M., Kim, S., Wang, X., McCarthy, A. and Ready, D. (2020). The effects of national cultures on two technologically advanced countries: The case of e-leadership in South Korea and the United States. *Australian Journal of Public Administration*, 79(3), pp.298–329. doi:<https://doi.org/10.1111/1467-8500.12433>.

Locke, K., Feldman, M. and Biddle, K. (2020). Coding Practices and Iterativity: Beyond Templates for Analyzing Qualitative Data. *Organizational Research Methods*, 25(2), p.109442812094860. doi:<https://doi.org/10.1177/1094428120948600>.

MacLeavy, J. (2020). Care-work, Gender Inequality and Technological Advancement in the Age of Covid-19. *Gender, Work & Organization*, 28(1). doi:<https://doi.org/10.1111/gwao.12534>.

Malakar, S. (2021). *Agile Methodologies In-Depth*. [online] Google Books. Available at: <https://books.google.com/books?hl=en&lr=&id=4WMWEAAAQBAJ&oi=fnd&pg=PT14&dq=srum+advocates+the+segmentation+of+extensive+projects+into+smaller> [Accessed 7 Sep. 2024].

Malyuga, E.N. (2024). The Linguistic-Cultural Dimension of Corporate Communication. pp.83–151. doi:https://doi.org/10.1007/978-3-031-58905-8_2.

Marini, F. (2024). Team members' agile values and behaviours : A cross-cultural study in Italian and Dutch organisations - University of Twente Student Theses. *Utwente.nl*. [online] doi:<https://purl.utwente.nl/essays/100553>.

Markopoulos, E., Aggarwal, V. and Vanharanta, H. (2019). Democratization of Intrapreneurship and Corporate Entrepreneurship Within the McKinsey's Three Horizons Innovation Space. *Human Systems Engineering and Design II*, 1026, pp.1007–1017. doi:https://doi.org/10.1007/978-3-030-27928-8_150.

Matthews, K. (2022). *The Influence of National Culture Dimensions on Agile Implementations in the South African Software Development Context*. [online] Available at: <https://open.uct.ac.za/bitstreams/e79f310c-91fd-4bdb-93c6-3c7f053ca1bc/download> [Accessed 10 Sep. 2024].

Meckenstock, J.-N. (2024). Shedding Light on the Dark Side – A Systematic Literature Review of the Issues in Agile Software Development Methodology Use. *Journal of Systems and Software*, pp.111966–111966. doi:<https://doi.org/10.1016/j.jss.2024.111966>.

Mohammad, A. and Kollamana, J.M. (2024). Causes and Mitigation Practices of Requirement Volatility in Agile Software Development. *Informatics*, [online] 11(1), p.12. doi:<https://doi.org/10.3390/informatics11010012>.

Mohammad, M.M. (2024). Perceived Key Factors Influencing Inter-Team Coordination in Large-Scale Global and Hybrid Environments Agile Software Development. *Ntnu.no*. [online] doi:[no.ntnu:inspera:187264004:128547037](https://doi.org/10.4324/9780203112694).

Moorhouse, B.L. and Wong, K.M. (2021). Blending asynchronous and synchronous digital technologies and instructional approaches to facilitate remote learning. *Journal of Computers in Education*, 9. doi:<https://doi.org/10.1007/s40692-021-00195-8>.

Morçöl, G. (2013). A Complexity Theory for Public Policy. *Taylor & Francis Group*. doi:<https://doi.org/10.4324/9780203112694>.

Moussa, M., Doumani, T., McMurray, A., Muenjohn, N. and Deng, L. (2022). *Cross-Cultural Performance Management*. Palgrave Macmillan. doi:<https://doi.org/10.1007/978-3-030-91268-0>.

Naeem, M., Ozuem, W., Howell, K.E. and Ranfagni, S. (2023). A step-by-step Process of Thematic Analysis to Develop a Conceptual Model in Qualitative Research. *International Journal of Qualitative Methods*, [online] 22(1), pp.1–18. doi:<https://doi.org/10.1177/16094069231205789>.

Naidoo, R. and Rikhotso, S. (2021). Balancing Autonomy and Control Tensions in Large-Scale Agile. *International Conference on Information Systems Development (ISD)*. [online] Available at: <https://aisel.aisnet.org/isd2014/proceedings2021/managingdevops/1/> [Accessed 12 Aug. 2024].

Nanda, S.K., Papathanasiou, A. and Zandoná, A.F. (2023). Curriculum change using Tuckman's model: Forming, Storming, Norming, Performing. *Journal of Dental Education*. doi:<https://doi.org/10.1002/jdd.13413>.

Nicholas, J.M. and Steyn, H. (2020). *Project Management for Engineering, Business and Technology*. Sixth edition. | Abingdon, Oxon ; New York, NY : Routledge, 2020.: Routledge.

Nyktarakis, G. (2022). *Technology Enabling Collaboration of Agile Development Teams in Hybrid Working : The case of Microsoft Teams*. [online] www.diva-portal.org. Available at: <https://www.diva-portal.org/smash/record.jsf?pid=diva2:1686662>.

Okoliko, J. (2023). Exploring the Mentoring Experience of High Power Distance Individuals in High And Low Power Distance Cultures. *Theses, Dissertations, & Student Scholarship: Agricultural Leadership, Education & Communication Department*. [online] Available at: <https://digitalcommons.unl.edu/aglecdiss/126/> [Accessed 28 Aug. 2023].

Oladapo, N., Ejiga, H., Okeke, D. and Akinoso, E. (2024). CONCEPTUALIZING AGILE DEVELOPMENT IN DIGITAL TRANSFORMATIONS: THEORETICAL FOUNDATIONS AND PRACTICAL APPLICATIONS. *Engineering science & tecnology journal*, [online] 5(4), pp.1524–1541. doi:<https://doi.org/10.51594/estj.v5i4.1080>.

Pererva, P., Kobieliava, T., Kuchinskyi, V., Garmash, S. and Danko, T. (2021). Ensuring the Sustainable Development of an Industrial Enterprise on the Principle of Compliance-Safety. *Studies of Applied Economics*, [online] 39(5). doi:<https://doi.org/10.25115/eea.v39i5.5111>.

Pincioli, F. (2024). Selection of agile project management approaches based on project complexity. *Journal of Software Evolution and Process*. doi:<https://doi.org/10.1002/smr.2716>.

Ragnedda, M., Ruiu, M.L. and Addeo, F. (2022). The self-reinforcing effect of digital and social exclusion: The inequality loop. *Telematics and Informatics*, 72, p.101852. doi:<https://doi.org/10.1016/j.tele.2022.101852>.

Rahy, S. and Bass, J. (2021). Overcoming team boundaries in agile software development. *Journal of International Technology and Information Management*, [online] 29(4). Available at: <https://salford-repository.worktribe.com/output/1355370> [Accessed 21 Oct. 2024].

Reiff, J. and Schlegel, D. (2022). Hybrid project management – a systematic literature review. *International Journal of Information Systems and Project Management*, [online] 10(2), pp.45–63. Available at: <https://aisel.aisnet.org/ijispdm/vol10/iss2/4/> [Accessed 23 Oct. 2024].

Rico, A., Agirre-Basurko, E., Ruiz-González, A., Palacios-Agundez, I. and Zuazagoitia, D. (2021). Integrating Mathematics and Science Teaching in the Context of Education for Sustainable Development: Design and Pilot Implementation of a Teaching-Learning Sequence about Air Quality with Pre-Service Primary Teachers. *Sustainability*, 13(8), p.4500. doi:<https://doi.org/10.3390/su13084500>.

Rose, J. and Johnson, C.W. (2020). Contextualizing reliability and validity in qualitative research: toward more rigorous and trustworthy qualitative social science in leisure research. *Journal of Leisure Research*, [online] 51(4), pp.1–20. Available at: <https://www.tandfonline.com/doi/abs/10.1080/00222216.2020.1722042>.

Sadiq, M., Muqeem, A., Yusuf, R. and Bilal, A. (2018). Frequency of Beta Thalassemia Trait Among Healthy Individuals -A Single Centre Study. *Beta Thalassemia Trait Pak Armed Forces Med J*, [online] 68(6), pp.1716–1735. Available at: https://applications.emro.who.int/imemrf/Pak_Armed_Forces_Med_J/Pak_Armed_Forces_Med_J_68_6_2018_1716_1719.pdf [Accessed 9 Nov. 2024].

Sahadevan, P. and Sumangala, M. (2021). Effective cross-cultural communication for international business. *Shanlax International Journal of Management*, [online] 8(4). Available at: <https://www.indianjournals.com/ijor.aspx?target=ijor:sijm&volume=8&issue=4&article=005>.

Sahota, M. and Sahota, A. (2021). *Agile Strategies for the 21st Century*. [online] Google Books. Available at: <https://books.google.com/books?hl=en&lr=&id=-XNjEAAAQBAJ&oi=fnd&pg=PP6&dq=+concept+of+agility+and+the+minimization+of+paper+work+contradict+local+rules+that+prescribe+strict+documentation+and+compliance+reporting> [Accessed 11 Sep. 2024].

Saini, M., Sengupta, E., Singh, M., Singh, H. and Singh, J. (2022). Sustainable development goal for quality education (SDG 4): A study on SDG 4 to extract the pattern of association among the indicators of SDG 4 employing a genetic algorithm. *Education and Information Technologies*, [online] 28(2). doi:<https://doi.org/10.1007/s10639-022-11265-4>.

Sanchez, A.M. and Oliva, S.V. (2022). Supporting agile innovation and knowledge by managing human resource flexibility. *International Journal of Innovation Science*, 15(3). doi:<https://doi.org/10.1108/ijis-11-2021-0200>.

Santos, P. de O. and Carvalho, M.M. (2021). Exploring the challenges and benefits for scaling agile project management to large projects: a review. *Requirements Engineering*, 27(1), pp.117–134. doi:<https://doi.org/10.1007/s00766-021-00363-3>.

Sarangee, K., Schmidt, J.B., Srinath, P.B. and Wallace, A. (2022). Agile transformation in dynamic, high-technology markets: Drivers, inhibitors, and execution. *Industrial Marketing Management*, 102, pp.24–34.

Siedlecki, S.L. (2020). Understanding Descriptive Research Designs and Methods. *Clinical Nurse Specialist*, [online] 34(1), pp.8–12. doi:<https://doi.org/10.1097/NUR.0000000000000493>.

Sithambaram, J., Nasir, M.H.N.B.M. and Ahmad, R. (2021). Issues and challenges impacting the successful management of agile-hybrid projects: A grounded theory approach. *International Journal of Project Management*, 39(5), pp.474–495. doi:<https://doi.org/10.1016/j.ijproman.2021.03.002>.

Sithambaram, J., Nasir, M.H.N.B.M. and Ahmad, R. (2021). Issues and challenges impacting the successful management of agile-hybrid projects: A grounded theory approach. *International Journal of Project Management*, 39(5), pp.474–495.

Šmite, D., Moe, N.B. and Huerta, J. (2021). Overcoming cultural barriers to being agile in distributed teams. *Information and Software Technology*, 138, p.106612. doi:<https://doi.org/10.1016/j.infsof.2021.106612>.

Šmite, D., Moe, N.B. and Huerta, J. (2021). Overcoming cultural barriers to being agile in distributed teams. *Information and Software Technology*, 138, p.106612. doi:<https://doi.org/10.1016/j.infsof.2021.106612>.

Smith, S.M. and Ruiz, J. (2020). Challenges and Barriers in Virtual teams: a Literature Review. *SN Applied Sciences*, [online] 2(6), pp.1–33. doi:<https://doi.org/10.1007/s42452-020-2801-5>.

Surin, C. (2022). *The Agile Factory*. [online] Google Books. Available at: <https://books.google.com/books?hl=en&lr=&id=VhyjEAAAQBAJ&oi=fnd&pg=PT10&dq=Lean> [Accessed 8 Sep. 2024].

Szabo, Z.K., Körtesi, P., Guncaga, J., Szabo, D. and Neag, R. (2020). Examples of Problem-Solving Strategies in Mathematics Education Supporting the Sustainability of 21st-Century Skills. *Sustainability*, [online] 12(23), p.10113. doi:<https://doi.org/10.3390/su122310113>.

Taherdoost, H. (2022). *What are Different Research Approaches? Comprehensive Review of Qualitative, Quantitative, and Mixed Method Research, Their Applications, Types, and Limitations*. [online] papers.ssrn.com. Available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4178694.

Taj, Y. (2023). Exploring Agile Hrm Framework Industry Approaches Challenges and Implementation Strategies. *International Journal for Multidisciplinary Research (IJFMR)*, [online] 5(4). Available at: <https://pdfs.semanticscholar.org/f649/fcf63c9c286d63aa956547c1b79ca50b1d19.pdf> [Accessed 2 Oct. 2024].

Tamburri, D. and Kamzan, R. (2023). *On the Relationship Between Organizational Structure Patterns and Architecture in Agile Teams / IEEE Journals & Magazine / IEEE Xplore*. [online] ieeexplore.ieee.org. Available at: <https://ieeexplore.ieee.org/abstract/document/9712241/> [Accessed 17 Oct. 2024].

Thesing, T., Feldmann, C. and Burchardt, M. (2021). Agile versus Waterfall Project Management: Decision Model for Selecting the Appropriate Approach to a Project. *Procedia Computer Science*, [online] 181(1), pp.746–756. doi:<https://doi.org/10.1016/j.procs.2021.01.227>.

Thunberg, S. and Arnell, L. (2021). Pioneering the use of technologies in qualitative research – A research review of the use of digital interviews. *International Journal of Social Research Methodology*, 25(6), pp.1–12.

Tolmantas Dagys (2022). "Team leader's practices for overcoming inefficiency in a team ". [online] Epublications.vu.lt. Available at: <https://epublications.vu.lt/object/elaba:192957063/> [Accessed 21 Oct. 2024].

Tseng, F.-C., Huang, T.-L., Pham, T.T.L., Cheng, T.C.E. and Teng, C.-I. (2022). How does media richness foster online gamer loyalty? *International Journal of Information Management*, [online] 62, p.102439. doi:<https://doi.org/10.1016/j.ijinfomgt.2021.102439>.

Tyagi, S., Sibal, R. and Suri, B. (2022). Empirically developed framework for building trust in distributed agile teams. *Information and Software Technology*, 145, p.106828. doi:<https://doi.org/10.1016/j.infsof.2022.106828>.

Ugorji, B. (2017). Culture and Conflict Resolution: When a Low-Context Culture and a High-Context Culture Collide, What Happens? *Online) Journal of Living Together*, [online] 4(5), pp.118–135. Available at: <https://icermediation.org/wp-content/uploads/2022/07/Basil-Ugorji-Culture-and-Conflict-Resolution-When-a-Low-Context-Culture-and-a-High-Context-Culture-Collide-What-Happens.pdf> [Accessed 17 Oct. 2024].

Virag, P., Edward and Remus, U. (2024). *Agile Project Management Styles and Control Ambidexterity in Agile Information Systems Development Projects: An Exploratory Case Study*.

[online] AIS Electronic Library (AISeL). Available at: <https://aisel.aisnet.org/jais/vol25/iss5/5/> [Accessed 15 Oct. 2024].

Wagner, T.J. and Ford, T.C. (2020). Metrics to Meet Security & Privacy Requirements with Agile Software Development Methods in a Regulated Environment. *2020 International Conference on Computing, Networking and Communications (ICNC)*. doi:<https://doi.org/10.1109/icnc47757.2020.9049681>.

Wang, T., Wu, J., Gu, J. and Hu, L. (2020). Impact of open innovation on organizational performance in different conflict management styles: based on resource dependence theory. *International Journal of Conflict Management*, 32(2). doi:<https://doi.org/10.1108/ijcma-09-2019-0165>.

Yang, Z. (2020). *The Study of Cultural Differences on International Business Negotiations between China and Western Countries* . [online] Available at: <https://e-research.siam.edu/wp-content/uploads/2021/02/IMBA-2020-IS-The-Study-of-Cultural-Differences.pdf> [Accessed 18 Oct. 2024].

Zahidul, A., Ferworn, A. and Islam, Z. (2020). *A Comparison between Agile and Traditional Software Development Methodologies A Comparison between Agile and Traditional Software Development Methodologies*. [online] Available at: <https://core.ac.uk/download/pdf/539593566.pdf> [Accessed 15 Oct. 2024].

Zuber, N., Gogoll, J., Kacianka, S., Pretschner, A. and Nida-Rümelin, J. (2022). Empowered and embedded: ethics and agile processes. *Humanities and Social Sciences Communications*, 9(1). doi:<https://doi.org/10.1057/s41599-022-01206-4>.

Zykov, S.V. and Singh, A. (2020). Sociocultural Aspects of Agility. *Smart innovation, systems and technologies*. doi:https://doi.org/10.1007/978-3-030-40989-0_2.