NAVIGATING THROUGH CHANGE: UNCOVERING THE CHALLENGES OF AGILE COACHING IN INDIAN IT COMPANIES

by

Sravana Kumar Nellore

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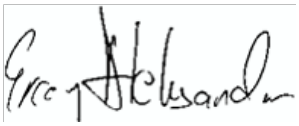
by

Sravana Kumar Nellore

Supervised by

Dr. Gustav Lindéus

APPROVED BY



Dissertation chair

RECEIVED/APPROVED BY:

Renee Goldstein Osmic

Admissions Director

Dedication

During the COVID-19 pandemic, as my organisation began embracing Agile methodologies, I found myself increasingly drawn to the principles of agility and change management. Motivated by this shift, I pursued training in Agile practices and delved into the world of coaching, eventually obtaining my ICF-ACC coaching certification. The convergence of these experiences inspired me to explore the interplay between Agile coaching and organisational change, ultimately shaping the focus of this research.

I am sincerely thankful to the Swiss School of Business and Management for creating an environment that encouraged academic growth and personal reflection. I am especially grateful to my mentor, Dr. Gustav Lindéus, for his thoughtful guidance and unwavering encouragement throughout this journey.

I would also like to express my appreciation to my friends for their ongoing support and meaningful conversations, which enriched this experience. Finally, to my family and close circle — your patience, love, and quiet confidence in me have made all the difference.

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Sravana Kumar Nellore

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Dissertation Chair: Aleksandar Erceg, PhD

Abstract

This research explores the key challenges faced by Agile coaches in Indian IT companies during Agile transformation. As Agile practices become more widespread, the role of coaching has grown in importance—yet many organisations continue to face difficulties that impact the success of Agile implementation.

The study is based on quantitative data collected through a structured survey, with 203 valid responses from Agile Coaches and Scrum Masters across various Indian IT firms. Using descriptive statistics, correlation, regression analysis, ANOVA, and one-sample t-tests, the research examines how factors such as organisational culture, Agile maturity, and remote working influence Agile coaching outcomes.

The findings reveal that cultural barriers, lack of clarity in roles, leadership misalignment, and communication issues in remote environments are among the most significant challenges for Agile coaches. These obstacles consistently emerged across participants, indicating shared pain points within the industry.

While the research does not focus on offering solutions, it draws attention to areas where Agile coaching is most impacted. By doing so, it adds to the broader understanding of Agile adoption in India's IT sector and provides a basis for future research focused on addressing these systemic challenges.

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CHAPTER I: INTRODUCTION

1.1 Research Background

Agile practice is one of the important strategic practices used by an IT organisation to achieve efficiency and organisational management. Agile project management relies on short-customer-oriented feedback loops and also relies on the self-organisation of the interdisciplinary groups of the organisation. The core strength of the Agile project management approach is to deal with the complexity and uncertainty within the organisation.

The key objective of the Agile approach is to start the training process for the employees. This helps to develop the competencies among the employees (Scholz et al. 2020). The strategic incorporation of flexible management can also be influenced by Agile approach within the organisation.

The adaptation of Agile practices can be costly and comprehensive for organisations due to the presence of complex procedures and management. Gaining a better understanding relating to Agile practices can be incredibly beneficial for projects as the implementation of these methods and approaches has turned out to be mainstream for organisations (Kasauliet al. 2021). Besides this, the practice is generally optimised through two distinct metrics, namely the performance relating to the delivery and customer satisfaction. It is important to understand the effect of incorporating Agile practices and methods within organisational projects. The key metrics facilitated to measure and optimise the effect of the efforts include usage time, conversion rate and NPS.

The specific use of this approach plays an important role in software development in the IT sector. The challenges in software development projects can be addressed through this

approach. The principles of the Agile software development approach enhance the organisation's capability. This helps the organisation to stay aligned with dynamic customer requirements. The capability of the organisation to react to the changing organisational environment can also be influenced by the adoption of the Agile approach in the IT sector (Ylinen, 2021). The speed of the organisational process can increase as the organisation's capabilities grow with the support of an Agile approach.

The coordination between the business units within the IT industry is also improved through the adoption of Agile practices within this industry. Agile coaches help to support the teams both individually and collectively, which helps to improve the ways of working in the IT firms. The Agile coaches play a key role in helping the organisation and stakeholders understand and adopt Agile practices. The effective use of the Agile approach has been facilitated and monitored by the Agile coaches (Klünder et al. 2022). This monitoring process helps ensure the team effectively follows Agile practices, maximising benefits from it and enhancing overall organisational efficiency.

Agile coaches play a key role in guiding training for digital transformation and innovation processes within IT firms. They do this by emphasizing the importance of adaptability in successfully implementing these processes within the organisation. The providence of organisational support, the creation of the leadership mindset and the creation of the new corporate culture are also influenced by the guidance of the Agile coaches (Coimbra et al. 2023). These factors help to enable the digital transformation process within the organisation. Therefore, the overall organisational performances of IT firms have been increased by the guidance of Agile coaches.

Agile practices are closely linked to team maturity within the organisation, which is crucial for the development of software programming in IT firms. In this context, effective communication among employees and motivation of developers play a vital role in

influencing the successful management of Agile projects. There are numerous Agile practices which are associated with software development including stand-up meetings, customer acceptance tests and others which are effective for the successful conduction of the software development process (Gren et al. 2020). Team mentoring is also another important role of an Agile coaches.

Agile coaches play a crucial role in providing guidance to both clients and teams, fostering the development of valuable solutions. This approach enhances customer value by ensuring that the delivered products and services meet client needs and expectations. This customer-centric approach helps to enable the organisation to validate the assumptions on the products and services of the organisations. The transparency and visibility of the organisation can also be increased through the implementation of Agile practices (Kolasani, 2023). This helps to encourage the team members to reflect on their approaches and motivates them to implement new ideas for continuous improvement.

Agile development has gained widespread traction in recent years due to its ability to improve responsiveness and reduce delivery risk. As highlighted by Altuwaijri and Ferrario (2022), incorporating Agile practices has significantly transformed software development processes, particularly by promoting iterative progress and adaptability. As a result, the term Agile methodology has become essential for IT companies, helping improve project quality by breaking the project process into manageable phases. However, several factors, including technological and social influences, impact the adoption of this methodology. These factors present challenges for the IT sector when attempting to implement Agile practices, highlighting the need for more effective training programs. Despite these challenges, Agile framework remains essential for delivering projects in an unpredictable world.

Change is critical aspect of every sector, especially in the IT industry, where most companies operate in international markets. According to (Su et al. 2022), the acceptance of

changes among the people or workers of IT companies is also significant to maintaining the business's sustainability. The world has witnessed the significant changes during the COVID-19 period, which have transformed the global business environment. Identifying the challenges faced by Indian IT companies in relation to achieving Agile maturity, implementing Agile practices, and enhancing Agile coaching is crucial for strengthening the industry's adaptability and effectiveness. The study is conducted to identify these challenges, shedding light on the factors that influence Agile adoption in the sector.

The digital era is evolving rapidly, with businesses continuously adapting to new changes and emerging trends. Agile plays a crucial role in this transformation, helping organisations streamline their processes and adopt a more responsive and efficient approach to change. The Agile approach has changed the IT industry by evolving and making the work more reliable and flexible, this approach has also enhanced the productivity of the industry and made the work team-oriented (Sundararajanet al 2022). Agile can be referred to as a way of managing the projects and development of software that aims to be more stretchable and satisfactory for the customers.

Agile focuses on improving customer satisfaction by helping organisations refine their products and services. Positive feedback comes from guiding both companies and individuals in adopting Agile practices effectively. Agile coaching plays a key role in this, involving team training, process monitoring in IT companies, and optimising Agile implementation. It brings together multiple strategies to enhance project outcomes.

Beyond technical processes, adopting Agile also depends on soft factors such as a clear vision, strong commitment, and continuous training to build an Agile mindset within organisations. This aspect includes the combination of business requirements, technological improvements and behaviour (Tyagiet al 2022). Indian IT companies predominantly handle

large-scale operations and play a significant role in the global market. To boost productivity and profitability, these companies are increasingly adopting Agile practices.

This shift can enhance their contributions to the global market. However, implementing Agile practices often presents several challenges, including cultural and communication barriers, as well as a lack of skills necessary for effectively applying the Agile methodology. Indian IT companies follow the top-down management approach and when adopting Agile practices, they often encounter challenges related to team structure. Agile, on the other hand, emphasises a flat team structure, where individuals are granted autonomy to work independently and organise themselves. Despite this, teams may struggle to find the right direction in the absence of traditional hierarchical guidance.

This results in fewer innovations and slower responses which affects the productivity of businesses (Sithambaram et al. 2021). Employees and managers in many organisations prefer sticking to traditional process and show limited interest adopting Agile practices. This resistance can slow down the progress and hinder the effective implementation of Agile principles. The communication issue is one of the main challenges faced by Agile coaches in their practices. The Indian culture tends to favour formal and indirect communication, which can pose a challenge for adopting Agile practices.

Effective communication is essential for shaping both an organisation's business and its employees, and it plays a crucial role in successfully implementing Agile methodology. Practising the Agile methods involves honest and direct communication to enhance the process that takes place in the organisation or a company (Sandstø and Reme-Ness 2021). Indirect communication can cause misleading information which can decrease the efficiency of work.

In IT industries there might be a lack of understanding or experience in engaging with the technologies and this can lead to poor results and frustrations for the employees who are

working (Caldwell, 2021). Agile practices require proper execution of projects and without adequate training and knowledge, IT sector employees may misapply these practices, potentially reducing the efficiency of the organisation.

Motivation is closely tied to empowering and self-organised teams, giving them a sense of control over their work and decisions, while increasing autonomy. Agile practices, such as sprints and stand-up meetings, can have both positive and negative impacts on motivation. When effectively implemented, these practices can inspire teams, boost employee confidence, and enhance their sense of involvement and engagement. The motivation level of the employees decreases due to the longer time of meetings and excessive job pressure (Sandstø and Reme-Ness 2021). This practice can also lead to increased stress and may distort the principles of Agile. To address the challenges of implementing Agile, organisations should conduct continuous sessions to foster a better understanding and smoother adoption of the methodology.

Organisations may introduce new training techniques, with a focus on hands-on workshops, to help reduce the challenges in practising Agile. Gradual implementation can begin with specific projects, allowing teams to explore and experiment while adopting Agile practices. Expanding these implementations over time and incorporating more practices can help mitigate business risks. Regularly collecting feedback and building strong relationships are key strategies to enhance the use of Agile methodology. By using feedback to make necessary iterative improvements, organisations can foster a culture of Agile coaching within Indian IT companies.

These five qualities are used in the Agile measurement index including collaboration, evolution, effective, adaptive and ambient are essential components in Agile practices (Jovanovićet al. 2020). The Agile measurement index level focuses on enhancing communication for collaboration among teams and focuses on the continuous delivery of

software. This also involves the quality and effective development process and maintaining levels of feedback.

It is important for Agile coaches to understand and respect the evolving nature of Indian industries and to motivate teams and individuals to work collaboratively to overcome these challenges and differences (Memon, 2020). The issues arising from insufficient training and awareness can be addressed by investing in training and workshops that cover both the principles and values of Agile. Maintaining a continuous learning environment helps teams stay engaged, updated, and motivated. By fostering these changes, Agile coaches can better overcome the challenges associated with promoting Agile practices. These improvements can lead to enhanced customer feedback, ultimately boosting business productivity. Additionally, successful Agile transformations enable Indian IT companies to become more competitive in the global market.

1.2 Research Problem

Agile coaching, a transformative practice, indeed has its challenges. However, it also holds immense potential, particularly in the context of Indian IT companies. The unique challenges faced in this setting, such as the need for a delicate equilibrium of leadership, team dynamics, and product development; make the study of Agile coaching in Indian IT companies particularly intriguing. The ability to comprehend and steer through these challenges is pivotal for the triumph of Agile coaching in this specific industry. Product-level activities aid organisations in crafting 'customer-centric' product design and 'design thinking.' With its addictiveness to new technical inclusions, collaboration with existing working procedures, and continuous improvement processes, Agile coaching has become popular in software development and design (Niever et al. 2021). The organisational structure has significantly influenced the implementation of the Agile process, given its functional

qualitative impact in this context. Agile coaching presents opportunities to create diverse business strategies to enable the organisations' transformation toward their improvement and create a success rate in implementing various business ideas to thrive within the present business market (Coimbra et al. 2023). Despite the various positive signs of this coaching within the business, most organisations face challenges when implementing Agile coaching within the organisational structure.

Agile project management primarily focuses on velocity as a measure of Agility in the organisational structure and the creation of various complementing features of IT companies. In this context, Agile coaching plays a pivotal role in empowering employees. It not only helps to adopt Agile methodologies within the organisational structure but also enhances the experience level of the employees, making them more proficient in their business (Zasa et al. 2020). Agile coaches initiate dynamic improvement and analyse the effectiveness of the projects. By fostering an Agile mindset among the team members, Agile coaching enhances individual productivity, a key factor in the success of any business, and contributes to overall business growth (Grass et al. 2020). Many IT industries have embraced this coaching process to enhance communication skills and project management processes. Agile coaching fosters transparency among team members, making them more adaptable and efficient in their work processes.

Agile coaching promotes the iterative Agile culture by encouraging employees to adopt the continuous development process and experiment with new ideas within the business. This process provides the knowledge of adopting different ideologies and strategies for improving the organisational structure with time, which is necessary for gaining ground within the market. Agile coaching gives experienced professionals the ability to overcome sudden challenges and cope with transformation by restructuring the teams and departments of an organisation (Arokodare and Falana, 2021). Different types of product-based coaching

and customer-centric behavioural approaches are the primary factors behind implementing Agile coaching within IT companies. Continuous improvement is another important approach to implementing this coaching within the organisational structure of technology-based production (Thomas, 2021). Coaches guide the teams and the employees of an organisation to embrace the effective ways they can improve to achieve their business goals and increase their production. The potential benefits of Agile coaching in the Indian IT industry are vast, ranging from improved communication and project management to enhanced adaptability and efficiency in work processes.

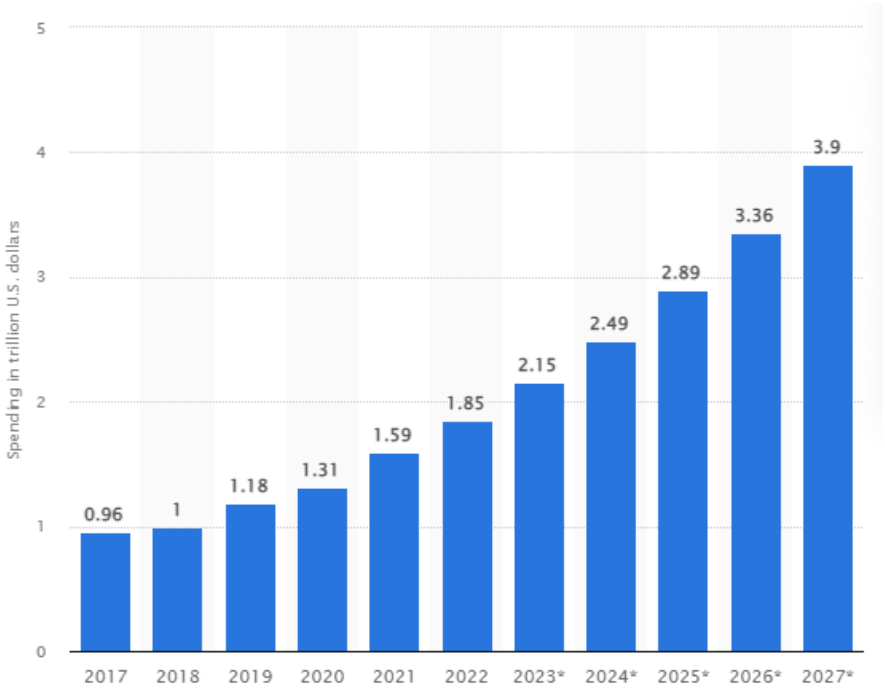

Figure 1.1.1: Spending on Digital transformation of the technology services

Source: Sherif (2024)

Technology and services play a crucial role in the modern advancement of society, which is why there has been a gradual increase in investment within this sector. Studies show that, in 2017, the rate of expenditure on the growth rate of technology and services was 0.96 trillion dollars, and in 2027, the proposed expenditure will be about 3.9 trillion dollars (Sherif, 2024). The adoption of digital technology is a key driver of growth in technological

services, including moving data to the cloud, utilising big data systems within business platforms, and employing digital tools for enhanced collaboration and communication development. After the pandemic, every industry's utmost importance was improving the technologies within the business based on customer demand and competing with other competitors within the market (Jones et al. 2021). However, technological transformation demands more Agile upgrades to improve business and to achieve successful penetration within the growth rate.

The IT industry has witnessed significant growth following the adoption of Agile coaching within organisations. The Indian IT services market encompasses a diverse range of processes used by organisations to create, manage, and deliver critical information. These services play a vital role in providing software-related support across various business functions. The development of the IT industry in India aimed to establish a strong technological infrastructure and advance the creation of applicable operating systems (George and George, 2023). Optimising IT consultation and development contributes to the growth of advisory services. Aligning these services with the business strategies of client organisations helps create an effective growth strategy. The implementation of IT consultancy across various regions of the Indian subcontinent supports organisations in fostering innovation within their strategic business approaches. Developing internal processes through system software and various adaptive technologies has created a roadmap for the companies to gain profit (Xuewen and Loang, 2024). Business process outsourcing (BPO) services are another key feature of Indian IT organisations.

Through these services, IT vendor organisations manage the complete business operations of their client companies. A wide range of individual business activities is organised through BPO, using the back office, human resources, and front office tele calling. The new-age technical solutions procured by the Indian IT organisations additionally include

software development outsourcing services (Laužikas and Miliūtė, 2021). IT hubs support organisations by facilitating contract generation for freelance personnel, reducing reliance on in-house human resources. Various vital activities within the organisation include administrating the system database, hosting the web, and generating source code (Poursmaeilet al. 2021). The Indian IT firms have established themselves as the messiah in creating new and unique job opportunities for millions of newly recruited fresher candidates. During the last period of the decade, IT organisations have a probability of becoming the most revenue-generating sector present within the Indian subcontinent.

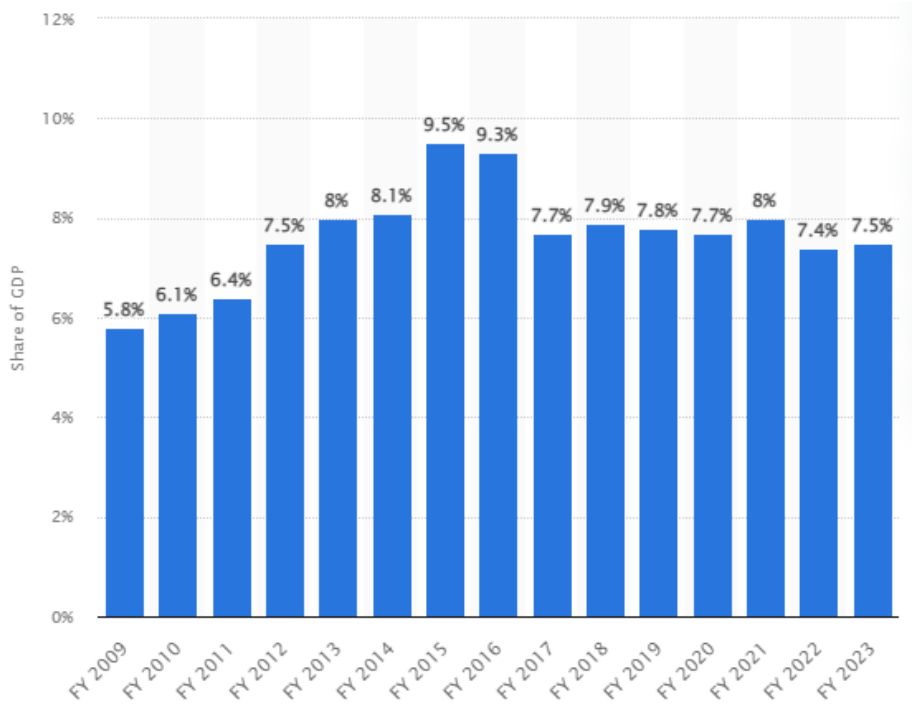

Figure 1.1.2: Role of IT business on the GDP rate of India

Source: Sun (2023).

As a key contributor to India's revenue generation, the IT sector has had a significant impact on the country's GDP. Information technology has supported the total GDP rate at a share of about 7.5% in the financial year of 2023; on the other hand, in the financial year of 2015, the rate was about 9.5% (Sun, 2023). The IT sector of India has provided an export value of approximately 149.1 billion US dollars and initiated the highest rate of employment

generation in India (Sun, 2023). This sector has experienced significant revenue growth in recent years, directly contributing to increased income levels among young people in India. Studies show that approximately 470 million people were employed in 2021, and in 2019, the employment rate was the highest among all (Rathore, 2024). The growing influence of the IT sector has contributed to rising national income and increased revenue generation.

Innovation has been a key driver in transforming the development of India's IT sector, particularly with the emergence of the Fourth Industrial Revolution across various industries. The IT industries can shift their peripheries to a more compact and wider area. Companies like Tata Consultancy Services, Cognizant Technological Solution, Accenture, and other technological companies have slowly reached the position of creator of the economic value of the nation's business and have empowered Indian citizens (Garg *et al*. 2020). Generating a collaborative atmosphere with the Indian government by adopting new technologies to upgrade the IT industries, all these organisations help to create the movement (Adefolake and Omodero, 2022). The IT companies are driving India toward adopting technology in every aspect of life at the fastest rate. The close collaboration between IT organisations, government digitalisation initiatives, commercial innovation, and strategic investments has played a crucial role in shaping the current state of the industry.

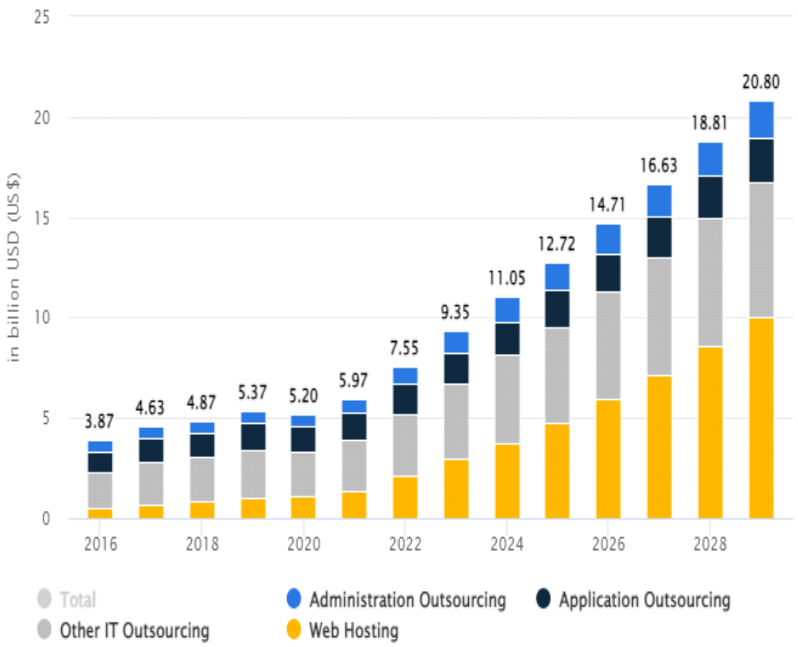

Figure 1.1.3: Revenue generation of IT industries

Source: Statista (2023).

The National Association of Software and Service Companies (NASSCOM) has played a foundational role in the growth of India's IT sector. It has identified key factors driving India's emergence as a global leader in the industry. Research indicates that the IT industry's revenue is expected to reach around $20.80 billion (USD) in the 2026–2028 financial year (Statista, 2024). The primary driver of this growth is India's status as the world's most populous nation. Furthermore, the distinct characteristics of Indian IT organisations have enabled them to take a leading role in driving transformation across the nation. IT consultancy, full-stack digital engineering, and product development have played a key role in helping organisations industrialise and establish business process management methods. Furthermore, the country is one of the closest allies of the United States of America and the largest nation to embrace the rapid growth of technological innovation (Onifade and Alola, 2022). The Indian government, through its initiatives to enhance the impact of the IT

industry on the nation's development and employment generation, has worked in collaboration with the private sector to improve business processes.

Technological growth impacts employee training and productivity by driving development within the organisational structure. By adapting technological inclusion within the organisation, employees can get accessible training and improve their flexibility in their work process, as Agile technologies help employees learn about anything at any time (Rahmadaniet al. 2024). This process refers to developing the organisational structural and functional programmes focused on the employees' collaboration, speed, and flexibility. By developing the software development processes within the structure, Agile training develops the problem-solving attitude and improves the value-based delivery process. Technological innovation and inclusion within the training process help the employees adapt to new ideas that help develop the working procedure and increase the employees' engagement within the structural formation of an organisation (Sofia et al. 2023). Employees get the facility to practice and implement their knowledge after the technological implementation of Agile coaching in the IT industry. Agile technologies provide the support to easily practice complex ideologies when designing customer-based products and services to attract customers to the business.

Agile coaching promotes efficiency in business processes, streamlines business operations, and improves employees' productivity. An employee-based environment boosts job satisfaction and enhances the employees' moral being. Agile boosts the cultural phenomena of fun, laughter, and open learning sessions for employees, which help to generate the proper working procedures for team members and organisations (Šmite et al. 2021). By implementing Agile coaching within the workplace, teams are always engaged in the continuous learning process that provides them with an advance in their career growth and enhances their experience level in their work. Besides this, the Agile culture within the

workplace promotes a prosperous world characterised by “volatility”, “uncertainty”, “ambiguity”, and “complexity” (Rulinawaty and Samboteng, 2020). Due to the open communication system among the employees, Agile improves the working culture and problem-solving quality of the employees of an organisation. Agile methods focus on feedback and learning sessions of the employees, promoting proper collaboration and the flexible nature of the employees within an organisation.

There are fundamental differences between traditional methodology and Agile methodology in how organisations approach their work processes. The traditional approach focuses on extensive planning and design of business processes, whereas Agile methodology emphasises adaptability and flexibility in the execution of tasks (Najihi et al. 2022). Traditional methodologies focus on deliverables for an organisation's product, whereas the Agile process is centred around customer engagement and feedback at every stage. An important hindrance to implementing the management process within the organisation is that the Agile process focuses on changes and encourages new ideas. At the same time, the conventional one is strict about an organisation's existing management processes (Ćirić Lalić et al. 2022). The conventional methods suit well-defined organisational requirements, but the Agile process is based on changing requirements. The risk management system in the Agile process is reactive, but in the conservative process, the risk management is proactive.

The most significant challenge in Indian IT companies is the **lack of clarity in employees' roles and responsibilities**. This issue is critical for Agile coaching to address in its current form, as it often leads to a disconnect between employees and coaches. This lack of transparency has created confusion about individual roles within teams, posing a major obstacle to the effective implementation of Agile coaching (Venkatesh et al. 2020). Conflicting and ambiguous roles in Agile coaching create hindrances in implementing this coaching in the workplace. Sometimes, there creates one type of uncertainty about the role of

the coaches as they cannot create clarity about the role of an individual. Automatically, some conflicting environment is created with the existing hierarchy related to their working procedure (Gritsenko and Wood, 2022). Besides this, multiple expectations are created at a higher level, and the employees cannot fulfil them.

Decision-making problems due to proper clarification are another important challenge an organisation's employees must face after implementing Agile coaching. Another important challenge faced by employees is the need for more experience. This coaching demands a deep understanding and knowledge about the proper methodologies, characteristics, and implementation process of Agile coaching within an organisation. The coaches sometimes need help to cope with the organisation's existing culture and working procedures, including the reward system and work procedures (Coimbra et al., 2023). Unfortunately, the IT industries have experienced a need for more expert coaches forming the working culture. Resistance to accepting changes is the most common challenge faced by team members and employees in an organisation, as all the members are comfortable with the existing procedure (Grass et al. 2020). Mostly, the team members and the employees are reluctant to accept the changes, and due to their unwillingness to accept the changes, the Agile coaches face various problems in coping with them.

Agile coaching in the organisational structure depends on measuring the impact after implementing the process. The impact of coaching within the organisation is intangible compared to the other roles of an organisation, including the managerial role and other advisory bodies. The coaches play an important role in the next level of managers, and their effect on the employee's performance level is quite challenging to measure. Difficulty measuring the role of the Agile coaches is a significant factor that creates challenges in the IT industries after enforcing Agile coaching (Dutra and Santos, 2020). Agile coaches impact the emotional and behavioural aspects of the employees due to their attachment to them in the

working procedure. Building a shadow structural formation of the organisation another challenge that Agile coaches have faced (Schell and Bischof, 2022). Coaches must demonstrate their value and gain the approval of organisational advisory bodies to enhance their role. They also need to navigate the organisation's existing cultural and behavioural dynamics in order to successfully implement Agile coaching for the organisation's growth.

Training and development of employees play a vital role in driving an organisation's success factors; in the case of Indian IT companies, some unique challenges are present. Among them, a diverse workforce is the most important challenge faced by the nation's IT sectors (Chaudhry *et al*. 2021). Due to the impact of being the most populated nation in the world, the cross-cultural intersections among the Indians are a simultaneous reason behind the growth of a diverse workforce in the country (Wilmot *et al*. 2024). People belonging to different races, communities, and educational and socioeconomic backgrounds, cater to different requirements. On the other hand, more than a hundred languages remain the mother tongue of the people residing in different states of India. Most companies use Hindi and English as their communication medium while conducting online and offline training procedures for employees. The language barrier is a significant challenge regarding employee training.

In various cases, individuals relocating to rural regions for work in IT hubs require internet connectivity in their home areas. Following the shift to a hybrid work model in the post-pandemic era, Indian IT companies have encountered challenges in conducting remote training programmes. Additionally, the knowledge retention rate from employee training is low because India is a developing nation (Elsafty and Oraby, 2022). Most employees undergoing training in IT hubs come from middle-class families in India. However, the challenges faced within these employees' families often hinder them from fully utilising their talents and delivering optimal performance in training programmes. Companies provide

different offers, incentives, and rewards to enhance their performance. Furthermore, training initiatives taken by organisations are, in most cases, highly cost-intensive (Chilińsk*iet al*. 2023). Owing to the substantial workload, organisations have yet to dedicate the necessary time for the process. Another key challenge across training programmes in IT organisations is ensuring compliance with regulatory requirements.

All IT companies must adhere to the regulations set by the Indian government. While collaboration with regulatory bodies such as the National Informatics Centre and the National Association of Software and Service Companies can help address compliance issues, further efforts are required to resolve all the necessary challenges (Awasthy *et al*. 2020). The key factors that act as the main way for the employees to participate in the training programmes and resolve their shortcomings actively are the openness to innovation, continuous research and development, and the flexible working culture of an organisation. Time and resource insufficiency for training is another major problem for implementing the Agile coaching in the IT sector (Coimbra *et al*. 2023). The organisation needs more resources to implement its structure. Scope creep, distributed teams, and changing requirements are the most prominent challenges facing Agile coaches within the organisation. The other burning challenges that Agile coaching professionals face are that they are more time-consuming and need more commitment to profit generation and improvement in the IT sector.

Bridging skill gaps and the involvement of third parties play a crucial role in implementing Agile coaching within an organisational structure. The adaptation of individuals and the integration of new strategic implementations into the business process present challenges, as Agile coaching involves complexities related to organisational culture, remote work processes, and alignment with technological implementations within the organisation.

1.3 Significance of the study

The evolving landscape of IT industry globally, the adoption of the methodologies of Agile becomes a vital thing for the different organisations which are trying to enhance their customer satisfaction, adaptability and productivity. Agile coaching has a significant role in transformational facilitates which basically get shifted to Agile practices from traditional ones. The study aims to uncover the challenges associated with Agile coaching within Indian IT firms, providing a nuanced understanding of their significance in both economic and socio-cultural contexts. The Agile framework is deeply embedded into the principles of improvement, collaboration, and flexibility which has revolutionised the process of product testing, delivery, and development (Ekechiet al. 2024). Agile methodologies in IT firms are characterised by iterative development and flexibility, focus on processes of revolutionising software development worldwide. They also emphasise delivering small, incremental changes which help in engaging the teams towards swiftly changing and improving requirements for the overall outcomes of the project.

Indian IT companies are key players in the global market, and the adoption of Agile practices has evolved beyond a mere trend. It has transformed the market landscape, establishing itself as a necessary requirement. Agile methodologies influence a highly competitive environment, driving the need for continuous efficiency and innovation, which they primarily promise. Agile coaches are pivotal in facilitating the maturation and adoption of Agile processes within an organisation, playing a crucial role in guiding this transformation. The Agile coaches are also counted among the other professionals who are involved in the process of software development (Traini, 2022). They focus on supporting and guiding the team while fostering leadership qualities that help individuals overcome resistance and cultivate a culture of continuous improvement. There are various reasons for

Indian IT firms to adopt Agile coaching, including sustaining change, developing skills, and driving cultural transformation.

Cultural transition planning requires a shift in both mindset and culture, with Agile coaches acting as a bridge to help the IT industry close the gap between traditional hierarchical structures and the self-organising, collaborative nature of Agile teams. The coaches primarily serve as a support system, helping to develop the necessary competencies and skills within the team, while ensuring the successful implementation of Agile practices. Agile transformation is not dependent on one-time events; it is conducted as an ongoing process, under which the coaches ensure sustainable change through embedding Agile principles in the organisation. The Agile process includes daily stand-up meetings, which help ensure the flexibility and adaptability of the project by providing regular opportunities for team members to discuss progress, obstacles, and next steps. (Jaiswal et al. 2022). These meetings also include quicker review, parallel process, faster delivery, enhanced connectivity and reduced need documentation; which helps them in integrating an operational framework. The Agile process emphasises incremental changes, which help engage teams in quickly adapting and improving the overall outcomes of the project.

This study explores changes that go beyond organisational value, also focusing on fostering a broader perspective of the Indian IT industry Adopting Agile helps organisations stay competitive by speeding up the delivery of high-quality software, giving Indian IT firms an edge in the global market. It also encourages a collaborative culture within the organisation, fostering continuous improvement and teamwork. These Agile processes foster creativity and innovation within the team. The Agile workplace also helps cultivate a sense of responsibility, paving the way for the organisation to lead and collaborate effectively with others (Porkodi, 2024). Agile leadership has become a key focus in the training programs of many leading firms and organisations, given its importance. This study examines how Agile

works to deliver value to customers through regular feedback and incremental releases, ultimately boosting satisfaction and engagement.

1.4 Research Questions

To understand the impact of Agile coaching on the IT sector and identify the challenges associated with it, it's essential to explore how this coaching system influences the overall development of IT employees within organisations. The following questions will be examined in this research paper

- What organisational culture and leadership challenges do Agile coaches face within Indian IT firms?
- What Agile maturity-related challenges affect Agile coaching in Indian IT firms?
- What challenges do Agile coaches face in applying Agile practices within Indian IT firms?
- What specific challenges related to remote working environments impact Agile coaches in Indian IT firms?

1.5 Hypothesis

The hypothesis emerged due to the challenges faced by the Indian IT sector in implementing Agile coaching, as the sector encounters several issues when integrating Agile practices into their workflows.

H1: Organisational culture significantly influences Agile coaches' ability to implement Agile practices.

H2: Higher levels of Agile maturity positively affect Agile coaches' effectiveness in applying Agile practices.

H3: Remote working conditions introduce challenges that significantly impact Agile coaches' implementation of Agile practices.

1.5 Limitations, delimitations and assumptions

Limitations

The study on the challenges of Agile coaching in Indian IT companies has several limitations. It is specifically focused on Indian IT companies, which may limit the generalisability of its findings to other geographic regions or industries. The Agile coaching effectiveness varies diversely across different organisations. A limited diversity and small sample size among the participating companies can easily lead to skewed results. IT industry's evolving nature influences the challenges and practices which are identified today but it is possible that it would not be relevant in a rapidly changing future. Continuous changes in market demand and technology impacted the relevant nature of findings. Most data on the effectiveness and challenges of Agile coaching is typically collected through surveys, which can be prone to bias.

Agile coaching practices and methodologies are not uniformly implemented across organisations due to their varying nature. As organisations mature, these variations in implementation approaches also emerge, which can influence the overall structure of outcomes and the interpretation of the study. Different external factors, economic conditions and regulatory changes influence the success and the adoption of Agile methodologies while adding the analysis complexity. The study also faces limitations in discussing the regulator changes which are influenced by external factors. The Agile methodology's nature of less predictability also includes the limitation as its flexibility in the core Agile method directly influences its low degree of predictability.

Delimitations

This study sets clear boundaries to ensure a focused and manageable scope, enabling a more precise analysis. One key limitation is that the research is confined to Indian IT companies, deliberately excluding firms from other countries to provide a more concentrated examination within the specific context of India. The study primarily focuses on examining the workplace dynamics within the IT industry, excluding other sectors where Agile coaching may also be relevant. Its main emphasis is on mid-sized to large IT companies, as the challenges and practices of Agile coaching tend to differ significantly in smaller organisations. The study actively confines its focus to the formally recognised practice of Agile coaching, intentionally excluding ad-hoc or informal coaching methods from its analysis.

The research is conducted within a defined time frame, allowing the study to focus on capturing relevant data during this period. It does not aim to extend into a long-term analysis, keeping the scope limited to the set timeframe for the study. The study primarily uses qualitative methods, focusing on surveys to collect insights, while excluding quantitative approaches due to their reliance on different data collection techniques.

Agile coaching plays a crucial role in guiding organisations and teams, encouraging them to adopt effective practices. The study's parameters are clearly defined, helping to eliminate ambiguity and ensuring that the research remains focused on its key questions and objectives.

Assumptions

The study examines the potential relationship between several organisational factors and Agile operations, based on the assumption that Agile practices are implemented within the IT industry. The study assumes that the IT firms involved have adopted Agile practices to a significant extent, incorporating methodologies or other Agile frameworks that help

integrate these practices into their operational processes. Management support is counted among the success factors in the large-scale Agile transformation of an organisation (Mishra et al. 2021). The study also assumes that the organisational culture within these participating companies directly impacts factors such as employee engagement practices, leadership styles, and communication patterns. This study also assumes that integrating Agile practices has a tangible impact on cultural elements within the organisation.

Agile maturity is defined by the consistency and depth of Agile practices within an organisation, which can be assessed reliably. This section assumes the study will establish benchmarks and metrics to more accurately measure the level of Agile maturity. Agile methods such as XP and Scrum are adopted in the process of development of large-scale systems (Kasauliet al. 2021). The study also assumes that the remote working practices in the participating organisations are well-defined. It presumes that these companies have implemented communication protocols, policies, and tools to support the efficiency of remote work.

1.6 Definition of Terms

IV1-Organisational Culture & Leadership

The governance of an organisation can significantly impact its corporate culture. The decision-making process, including task allocation, distribution of employee duties, and other work-related aspects, can be shaped by the organisation's culture (Fumasoli*et al.* 2020). Organisational culture plays a crucial role in strengthening the company's identity and establishing a strong position in the market.

IV2-Agile Maturity

Agile maturity is crucial for implementing the Agile team practices within the company. It acts as both a diagnostic and improvement tool, effectively offering recommendations for improving team performance. Four maturity levels can be identified to enhance the performance level of the company. This maturity level includes defined agility, managed agility, initial agility and proactive agility (Moi and Cabiddu, 2021). These different levels of maturity are associated with accuracy in the working process and the systematic approach in the organisation. These Agile maturity levels help to enhance the overall performance of the organisation.

IV3-Remote Working

Remote working has become a prevalent practice in recent times, significantly impacting overall employee performance. Remote work provides numerous opportunities for organisations. This work culture enhances employee productivity by offering work-from-home options, allowing employees to work in quieter and more convenient environments (Popovici and Popovici, 2020). This also helps employees accomplish a greater number of similar tasks in the same amount of time. Additionally, remote working influences employees' work-life balance by allowing them to adjust their working hours.

DV-Agile Practices

Agile coaching is a specialised area of coaching that supports team members in adopting and improving Agile methodologies, helping them develop the skills and mindset needed to effectively implement Agile practices within their teams and organisations. Agile coaching is associated with addressing and mitigating the problems that arise during the adoption of Agile methods while developing software (Stray *et al.* 2020). Agile coaching also

plays a crucial role in advocating for the integration of Agile methods into the daily routines of teams, guiding them towards consistent and effective practice of Agile principles. The primary role of an Agile coach is to foster a productive Agile team within the organisation. This involves educating and supporting team members throughout the process. An effective Agile coach must possess strong listening skills, allowing them to understand team members' concerns and provide constructive feedback that helps improve performance.

1.7 Dissertation Structure

The structure of this research begins with the Introduction, which provides an overview of the study. This is followed by a Literature Review chapter, which examines various scholarly works, articles, and journals relevant to the research topic. The third chapter details the research methodology used to address the research questions and test the hypothesis. Following this, the results of the research methods are presented. The final chapter discusses the findings, draws conclusions, and offers recommendations based on the analysis. These recommendations aim to guide further improvements and inform future research directions in the field.

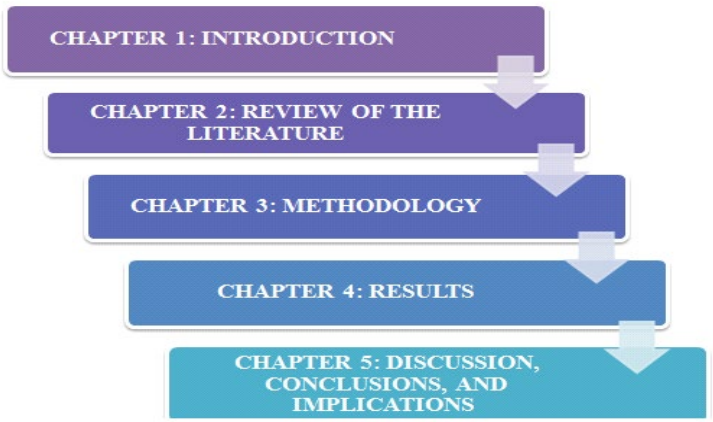

Figure 1.8.1: Dissertation Structure

Source: Nellore (2024)

CHAPTER II: REVIEW OF THE LITERATURE

2.1. Introduction

Agile in software development is an ideology that includes the techniques and practices for the development of software in an adaptive sequence. This approach focuses on the results of an increment of working software to meet the requirement of the customer while using the interaction within teams and association with the customers. Agile approach has been widely adopted in the software development industry and has recently extended to various mainstream sectors. While the growth and popularity of Agile techniques within organisations have been significant, the “Agile Manifesto” and other related frameworks provide limited guidance on effective leadership in Agile software development teams. Existing studies focus on pre-existing challenges in the Agile transformation process or examine specific time frames for integrating Agile methods, which restricts the scope of research. This limited focus means that crucial aspects of leadership and long-term Agile integration are often overlooked in current analyses.

2.2. Growth of IT companies in Southeast Asia over the last three years

Information technology companies have generated innovations that significantly enhance in reshaping the world. The fourth industrial revolution had a positive impact on the growth of IT companies. Digitalisation has accumulated data for expanding the business and increasing profitability (Polyakov et al. 2020). IT companies play a crucial role in shaping the economic growth of a country. Through the past few years, IT companies have had a high turnover in the market. However, the growth of the IT market has been highly competitive and challenging. Several startups with their effective client management provide consumers a

quality services that efficiently improve the company's growth in the market. Southeast Asia has witnessed a rapid expansion of its digital economy, driven by increasing internet users, Smartphone adoption, and the increase of e-commerce platforms.

The growth has moved the demand for IT services and solutions across several sectors such as finance, retail and health. Over the past decades, the rapid development and advancement of technology and communication have led to changes in the modern economy and society. The expansion of its digital economy through the increase of internet users and Smartphone users has led to the growth of IT services in Southeast Asia. Several retail stores positively take digitalisation to increase their sales turning the stores online (Battisti*et al* 2020). This engagement of retailers with IT companies has led the IT industry to grow in the market by providing them with services to make the retail stores come online.

Through the enhancement of tools such as electronic health records, patient portals, remote patient monitoring and so on in the healthcare facilities by the IT industry. This has led to an increase in the demand for the industry and significantly enhanced the profitability of the IT industry. Healthcare pieces of information are highly personal for the patients thus the integration of tools for storing the data of the patients is highly required (Hermes *et al.* 2020). The advancement of technologies in the transition towards the green revolution plays a crucial role. Balancing the environmental factors sustainable forms of living are adopted that are enhanced by the IT companies.

IT companies have emerged with technologies such as artificial intelligence, cloud computing and the IoT that significantly help in the transition to the green revolution (Bradu*et al.* 2020). Block chain technology has become a popular Internet of Things (IoT) tool, attracting significant interest from governments, energy companies, start-ups, financial institutions and investigators. It is crucial to comprehend the role that block chain technology development plays in the IoT ecosystem. This includes looking at how block chain

technology contributes to the greening of the IoT ecosystem and providing the fundamental factors that need to be taken into account when establishing a GIoT ecosystem. These technologies have evolved in the IT industry and significantly help in enhancing the profitability of the IT sector.

Several countries have become successful hubs for start-ups in the IT sectors including countries in Southeast Asia such as Singapore, Indonesia, Malaysia, and Vietnam. Additionally, to attract the local business owners, these start-up ecosystems are catching the attention of foreign investors and IT firms hoping to take advantage of the expanding market prospects in the area. The cooperative atmosphere encourages innovation across industries and ads to the general vibrancy of the digital economy (Lisa *et al.* 2020). Moreover, the Start-up seeks the tools from the IT companies and firms to increase their engagement with the consumers.

The covid-19 has had a positive impact on digital transformation in Southeast Asia reshaping the business strategies and consumer behaviour. As countries implemented lockdowns and social distancing measures businesses turned toward remote work that requires advanced tools for communication to ensure security. The IT industry has evolved in the market by providing support for remote work. Cloud-based collaborations enhance communication and have a positive impact on the growth of IT companies.

The increase in online shopping for necessities led to an expansion of e-commerce platforms (Almeida *et al.* 2020). This spike in demand pushed IT companies to innovate and improve e-commerce infrastructures, shipping, and payment systems to fulfil changing customer expectations. This efficiently helped the IT industries to grow in the last three years in the Southeast Asia.

The popularity of digital payments has grown in the last few years, individuals preferred to go cashless and choose digital payments. Digital payments are more secure and

easy to use which mitigates the cash workflow (Javaid*et al.* 2020). The IT industry emerged with digital payments methods which are more reliable and secure for transactions. During the COVID-19 pandemic, people more often chose to have contactless transactions. The digital payment tools developed by the IT industries gained popularity for contactless transaction methods.

IT companies were crucial in creating safe and secure transactions to reduce physical encounters. With the rise of distant labour and digital connections, the pandemic also highlighted the significance of cyber security. In response, IT firms strengthened cyber security protocols to safeguard confidential information and lessen the hazards brought on by a rise in online activity. This eventually helped the IT industry to grow in the market.

Technological advancement has transformed various Southeast Asian societies over the recent few years. People used to transfer money and shop online using methods which are unknown a few years back. However, there is still a significant amount of space available to grow. The SEA economy report of 2023 expects to notice increased growth in transport, food, online travel, e-commerce, online media, and financial services. They are expecting some new sectors to integrate with them like climate technology within 2024.

This field is expected to get attention from financial investors who are more concerned about the change of climate. Eco-friendly discoveries are expected to reduce the emissions of greenhouse gas along with protecting soil, clean water and clean energy and create jobs. Although private funding fell to its lowest in the last six years in 2023, there are hopes to get funds in the winter which starts this year as interest rates fall. IT companies need to show that they already have plans for profitable and viable paths to attract investors.

Countries like Singapore continue to lead the IT sector. The position of Singapore as the lead Asia-Pacific financial centre and becoming third internationally gives the country an important advantage in attracting more capital ventures. On the other hand, Indonesia has the

second largest tech sector with a start-up valued at one billion US dollars in Southeast Asia after the position of Singapore. Thailand also has a friendly ecosystem for start-ups. The Boston Consulting Group (BCG) forecasts that a huge number of tech start-ups are going to take off in the UK in recent years which provides an ample number of opportunities and advantages including a strong online connection and infrastructure. Malaysia is striving to regain its glory as it was once known as the Silicon Valley of the East. Overall, the IT sector in Southeast Asia needs to pursue and continue the growth in the coming years.

2.3 Role of employee training and coaching in IT company development

Employee training and coaching play a crucial role in the development of the company. Employee training and coaching are the pillars that drive growth within IT companies as employee training with enhanced skills can help the company to grow. Training has been increasingly important for increasing productivity in HRM. Employee training and coaching foster innovations and ensure long-term sustainability. (Burhan Ismael *et al.* 2021).

Training refers to a structured process that helps employees reshape their understanding and acquire new knowledge related to specific tasks or topics. The primary objective of an effective training programme is to equip individuals with the competencies and performance standards required to support the organisation’s goals.. Investing in skill enhancement programs is essential to remain competitive in the market. Businesses want to succeed by offering unique products, services, capabilities, and programs. However, these components require skilled people to design, develop, deploy, and maintain them.

Organisations spend more than a billion annually on employee training and development even though it may be a difficult undertaking for many executives (Laing, 2021). This is done to enable employees to have a beneficial impact on company outcomes. The Association for Talent Development's State of the Industry report states that over the

previous three years, there has been an increase in the direct cost per employee for training and development.

Employee training in IT organisations helps employees becomes more technically proficient and able to quickly adapt to new developments in technology. Employees can update and gain the technical skills required for proficiency in software development, cyber security, cloud computing, and future technologies like block chain and artificial intelligence through chances for continuous learning. These abilities not only improve individual performance but also make a big difference in the company's capacity to produce creative solutions and keep a competitive advantage in the marketplace (Dachner*et al* 2021).

IT firms use training programs as a means of coordinating company objectives with best practices and industry standards. Studies show that well-thought-out training programs guarantee that staff members have the information and abilities needed to satisfy changing customer demands and legal obligations. Because of this alignment, the organisation is more adaptable and resilient to changes in the market and in technology.

Employee training and coaching significantly help employees to enhance their work performance. Training makes the employees more engaged with the workflow and motivates them to innovate new ideas and showcase productivity. Promotions to higher positions are easier to get for staff members with strong performance (Niati*et al.* 2021). Work performance is the outcome of an individual's effort or seriousness in completing a task assigned to him using his knowledge, expertise, and sincerity in compliance with the duties that have been assigned to the individual. Work performance is the outcome of an individual's accomplishment of duties given to them according to their qualifications, experience, sincerity, and availability of time.

One of the significant impacts of learning and training programs is the development of leadership skills. IT companies are emerging with innovation and bringing change in the

current trend. The development of leadership can foster the employee through the risk-taking behaviour on the innovations. The success of an organisation is determined by various factors including leadership development. A leader is referred to the one who can drive the atmosphere of growth and development of the performance of the subordinates (Guterresa*et al.* 2020). Leadership style motivates innovation and eventually leads to the growth of the organisation. Through the figure, it can be identified that education training and leadership style motivate an employee's performance. The training encourages employees to achieve personal and organisational goals.

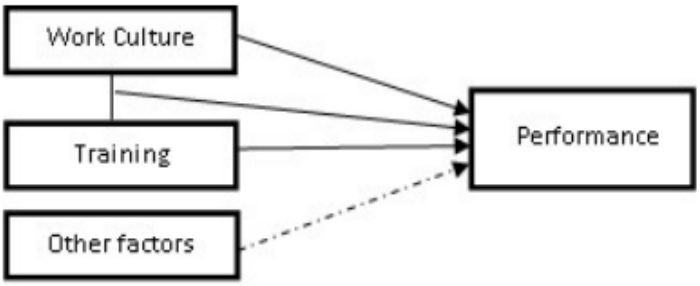

Figure 2.3.1: Operational thinking framework

Source: Abdullah (2020)

Considering the foregoing, the writers subsequently put out the following theory by the research. The work culture of an organisation impacts employee performance, Moreover, training in a negative work culture impacts the employee's performance due to a lack of skills (Abdullah, 2020). However, having a positive work culture may foster employee training with the skills which impact the employee's performance positively. Through a positive training engagement, the employees can enhance their skills and significantly enhance productivity. Work performance is the outcome of an individual's accomplishment of duties given to them according to their qualifications, experience, sincerity, and availability of time an employee's ability to execute a variety of tasks in relation to job requirements is referred to

as job performance. The results of training and development include in essence, increased production, better goods and services, and the maximising or optimisation of resources.

During this fast-paced era of technological advancement, training is a must for any firm hoping to compete in the global market. The organisations have focused a lot of their research attention on training and development because it has long been acknowledged. Different meanings of training and development have resulted from this. Learning events, programmers, and instructors use training methods to modify behaviours in a systematic and planned manner. Moreover, for working efficiently and effectively employee training and coaching is essential (Persada and Nabella, 2023). Training and coaching play a central role in enabling employees to work more efficiently by building relevant competencies and enhancing performance. As Persada and Nabella (2023) emphasise, access to learning opportunities allows individuals to strengthen their skills, improve task execution, and meet organisational expectations more effectively. The degree of training opportunities available to employees is known as access to training. Having successfully executed customer-oriented strategies, firms should recognise the significance of training and development.

Employee retention is a strategy that increases the benefit of the company by offering training and development opportunities to staff members, who subsequently become experts in their field and are dedicated to it. Therefore, retaining current employees is the ultimate goal for any business, even if hiring qualified candidates comes first. However, keeping current employees is more crucial than hiring new ones because training new hires is more expensive and takes longer to achieve optimal performance, which lowers output (Elsafty and Oraby 2022). Thus, training employees establishes a connection and trust to increase productivity and reduce expenses through reducing the hiring process. The elements that influence employee retention and divided into two groups: internal and external variables.

The employees due to a lack of training often try to leave their current jobs and find better opportunities.

Through various researches, it has recognised some characteristics that set these two ideas apart objective, involvement, work experience, and focus. Moreover, research distinguishes “development” as a process aimed at preparing individuals for future roles, typically involving voluntary participation and leveraging prior experience. In contrast, “training” is often associated with building competencies required for current job responsibilities and tends to involve structured and compulsory participation. Literature suggests that training is closely related to productivity and performance and heavily emphasises workforce capability building through learning. Training is a means of boosting employee confidence in the workplace to improve performance (Mohammed *et al.* 2022). Training is thought of as a systematic procedure that helps employees understand the profession so they can be competent in carrying out some or all of their tasks.

Training and development serve as key functions within organisations, aiming to enhance employee skills and align workforce performance with broader business objectives. In practice, organisations typically divide training into two categories: activities that occur while performing work tasks and those conducted separately from daily operations.

Learning that takes place in real-time workplace settings often involves mentorship, task shadowing, or guided practice, while external programmes and workshops provide structured opportunities for skill acquisition outside the work context. Both formats contribute to improving adaptability and performance, especially when preparing employees for role transitions or introducing new technologies (Mohdet et al., 2020). IT companies focus on developing skills through on-the-job training and this training efficiently motivates employees to enhance their productivity.

Having the right strategies in employee training can enforce the workflow and create a positive impact on the working effectiveness of employees. Having higher skills through training with correct tools and measures helps organisations generate innovations and eventually have a positive impact on profitability. Additionally, to impart the necessary methods and abilities, training helps employees enhance their problem-solving, technological, interpersonal, and basic reading skills, among other things, in preparation for future organisational demands Training programs are designed to enhance an individual's performance in their current role, equip them with new abilities for a future job or position, or foster overall growth for the business and its staff (Thwin*et al.* 2022). Achieving organisational goals and employee performance is a crucial thing that depends on various factors however training receives a high importance as it improves the skills that eventually contribute to increase the profitability.

Employee training and coaching programs are essential in IT companies for maintaining and enhancing technical advancement and implications in this rapidly evolving market. Continuous learning opportunities are highly motivated by the employees to stay updated with the recent trends and strategies in software development frameworks. The enhancement of artificial intelligence is bringing new frameworks and to evolve in the market the employees need to be trained with new technologies (Mamy*et al.* 2020). This training in the advancement of technical skills can efficiently increase productivity and contribute to the economic development of the industry.

When combined with career development strategies, direct instruction, and training employee development has a good and important in terms of work behaviour, which is based on teamwork, discipline, commitment, honesty, and a service-oriented mind-set. The employees tend to increase their productivity and engage to motivate the other employees. The development of leadership through work behaviour is recognised when the employee has

proper skills and knowledge of the work. This finding actively motivates the employees to take training and develop their skills that eventually lead to the success of the industry.

2.4 Emergence of India as the biggest IT vendor nation in the world

The Information Technology sector has become one of the significant fields in India's integration into the international or global economy. At the time of global capitalism restructuring in the 1980s, India was the primary provider of IT support to various companies based in various developed economies. Current giants in the IT sector of India like "Tata Consultancy Services" (TCS), "Wipro", "Infosys" and some others are some of those companies who started to operate in that time. The economic reformation which also started at that same time contributed important inputs in this export-oriented sector. This sector has grown exponentially in the last decade and has a total earning of 39.6 billion UD dollars and from that, 31.4 billion US dollars were from exports (Upadhya, 2020). At present India accounts for 65% of the international IT market. With the shift to an offshore model, most of the outsourced work in IT services is carried out in India, and that creates a significant scope for IT employment and start-ups in the country.

The outsourcing and global offshore services of the Indian IT sector have increased in the last four decades. It has grown by 150 billion dollars per year from 200 million dollars in the 1980s for the last few years as per the record from "NASSCOM" (Pereira, 2021). The improvement and growth are significant in this sector as in the "Global Financial Crisis" (GFC) period, the industries made important changes in their business model with the adaptation and changes in technical and managerial aspects in both the period like pre and post-GFC time. Earlier the companies relied on the predominated strategies and customised IT services in their workflow. Currently, they prioritise the research and development of the product along with innovation, design, and development for the recent trend. This important

shift process links to various aspects like managerial and organisational capabilities, evolving technical of the IT companies, and majorly in the investment in skill development capabilities as per the client specification.

With rapid globalisation along with technical development, various Multi-National Companies establish their operations in other economies. As per that context, India is also considered an economic superpower due to its foreign language skills, demographical factors, low cost of operations, and intellectual capital. Indian government's think tank, "National Institution for Transforming India Aayog", started a movement on Artificial Intelligence and its application in various industries which can drive the economy to the digitalisation and AI application in the system. Artificial Intelligence is projected to add an increase of 957 billion dollars or nearly about 15% of India's recent gross value (Jaiswal *et al*. 2023). Besides that, the Indian IT sector gained a huge global reputation for the deployment of a global service delivery model.

The success of the IT sector has grown towards a more positive perception of India. The middle-class people take the credit for the transformation and economic boom. Numerous numbers of employees stated their pride in working in the IT sector as their role is prominent in the consequent progress of the IT industry. Previously the NRIs had to live in a foreign country in order to get success in their life, however, the new scenario changed completely (Gupta, 2022). The current generation of professionals can live and work in the nation along with the lifestyle and salary structure similarly available to the US software professionals. This encouraged them to stay in India or return permanently to India after working for a few years abroad. Due to this situation in the IT industry, the country is successful in retaining skilled professionals inside the nation. Indirectly this affects the national income as those professionals work on the projects that are outsourced from other foreign services that help to bring foreign money. As well as their lifestyle which is similar to

that of abroad professionals, helps to generate income for the local market due to their high capacity for spending expenses.

Marketing strategy planning on a wider spread space which runs through by both employees and leaders regarding the differences between the “Old Economy” and IT sector within their business culture impacts significantly. Global and economic changes encouraged many companies to merge with international markets. These wide ranges of changes bring various opportunities to the “Emerging Market Firms” (EMF) and help them to increase their revenue and profitability in the global market (Ahammad *et al*. 2021). Along with this, it carries important challenges like more competition and sustainability issues. Earlier research shows that the challenges of EMF are amplified due to the nature of resource deficiency and the carrying of the legacy of liabilities as the newness in the global market. EMFs are planning new strategies to face these challenges and at the same time searching for new and better opportunities in the international or global market.

India has emerged as an innovator in Information Technology sooner or later in the sector. The IT sector has a massive improvement space for the Indian economy. Information Technology’s elements have gone through a big task of transforming India’s image into a functional business organisation, and international participant while providing global magnification, innovation preparations, and company administration. The Indian Information technology companies raised 181 billion US dollars in 2018-2019. The advancement of the fare from the IT companies progressed to 137 billion in the financial year 2019, along with the neighbourhood earnings progressed to 44 billion US Dollars. For innovation, in India, the budgeted value on the records was 90 billion US dollars in 2019. The income from automated assessed to collect 38% of the projected 350 billion US dollars in enterprise gains through 2025 (Raju and Rao, 2020). The IT factors lead towards monetary progression as a long way as techniques of lifestyle, earnings age, fare development, and work. The “Industrial Method”

of 1991 progressed along with several adjustments in joining the arena of the financial system. Through privatisation, globalisation and advancement the progression reaches in the present situation.

One of the giant IT companies in India is Tata Consultancy Services which is the biggest and popular IT Company. These companies enlisting can be found in the Bombay Stock Exchange along with the National Stock Exchange from the year 2004 (Anjum, 2022). The company offers top-class consultancy services in various other sectors of digital media with the inclusion of integrated business processes alongside the organisation supporting the software facility to financial and banking sectors, insurance companies, and other businesses like retail, telecommunication, and aviation. Some of the industries include manufacturing facility with them. The TCS currently operates outside of the country as well to provide their expertise service in various other foreign economies. They set up their branches in those abroad locations and provide adequate manpower from India which again comes back as the employees return to India after a few years. This process makes India an important provider of IT-related services in the global market.

After the pandemic breakdown all over the world, India has the rapid improvement in every sector. Information Technology leaves the most significant impression in this context. As a large IT service provider in the world, the workflow was affected due to the unwanted circumstances at that time. To operate smoothly, a lack of manpower resources impacts the global market significantly. The use of various platforms made the job easier at that time when people were stuck in their respective places (Ahmad *et al.* 2020). The IT sector provides continuous support at that time by providing their services instead of facing physical difficulties. IT sector employees invented the new work culture known as work from home to support the widely demanded support for the consumers. The whole world noticed the contribution of India especially the IT sector after the healthcare industry which was

remarkable. The other factors along with this are also important in the term like low cost of operation, easy availability of skilled manpower, and many more help to gain a large market share in the global aspect. Other foreign investors find it beneficial for them to operate in India using the resources available in the country.

2.5 Indian IT companies and their challenges in the development of human resources

Stress in the workplace is a noticeable and important factor that affects employees across the globe irrespective of all the organisation and types of employment. Although with the growth in science and technology, most of the communities' express high level to moderate level stress in their work life in the organisation (Prasad *et al.* 2020). Research shows that the major reason for the work-life stress depends upon challenges in lifestyle, continuous change in social space, working societies, and cultural environment which are disturbing the performance of the employee, work-life balance. This affects the productivity of the organisation. Job stress is the result of the never ended physical demands of a human being. Employee frustration in the organisation is at the higher rate and become common among the Human Resources challenges. Unclear direction, poor leadership, toxic work culture, and work overload are among the top reasons that can be counted as a stress element in the IT Company's HR division.

Apart from the job stress, getting qualified candidates in the Information Technology sector is also an important challenge for the Human Resources department. Software development along with the services provided by the IT companies is a knowledge-intensive job. Only properly qualified persons can be eligible for jobs in the IT sector. The advancement of rapid technological growth requires new updates regarding the changes. Talent becomes the key element of rivalry in today's market, which was not there a few years back. The increasing rate of unemployment rate makes it difficult to find properly and

technically qualified candidates. Google increased the hiring of software engineers by 12% in 2020 (Yarger *et al.* 2020). IT managers believe that it is becoming difficult day by day to find an efficient tech talented candidate even after an increased rate of hiring in the IT sector. There are many other alternative career paths available in the market and the demand for a technical candidate is also increasing in those sectors as they want to digitise their business to efficiently operate. That's why recruiters face greater difficulties at the time of hiring in the IT sector.

The demand for skilled employees in the IT sector is high as the alternate sectors become the competitors along with the mainline competitors. It becomes essential for the IT companies to make the hiring and on boarding process faster and more effective (Nyberg *et al.* 2021). IT companies adapt the remote work support and on boarding process to cope with the huge number of manual chores that they encounter daily in the normal or traditional on boarding process for successful and effective on boarding in the tech industry. Managing remote on boarding, while employees work from their home which is a new way of working, they do not have to visit various departments and there is no need for paper documents also to make the whole process faster and more efficient.

Modern cloud computing-based HR software allows employers to generate electronic-based offer letters using digital signatures and on boarding processes which are automated. This total process helps to save time and resources. However, there are challenges in implementing this type of system in an organisation due to the traditional methods used at a large rate in the current era of technology.

Various human resources divisions are investigating the factors that influence employees based on personality for long time retention. The IT industry faces a high rate of employee turnover in a worldwide context. Information Technology sector is one of the major resources of the Indian economy. Due to the current challenges in the job market, IT sectors

are facing this high turnover of the employees (Pallathadka et al. 2022). Various reasons are there that affect the decision of the employee to look for another job. IT companies are taking measures to control this attrition rate. People leaving an organisation play an important role in the success of the company.

The loss of the key members in an organisation affects the financial development and the maturity of the organisation. Even the brand image is also affected due to the loss of the significant number of employees in an organisation. IT companies have to make sure and adopt some systems which help retain employees like providing various policies to encourage the employees to remain in the organisation.

Most of the IT companies want to hire the top most skilled persons for their organisation which is a small amount of people compared to the large number of applicants available in the market. This practice leads the majority of the technical people to accept the low paid or alternative jobs in other sectors. The education system contributes to this scenario as there are no proper training models are available in the market to prepare people with the right set of skills, which those IT companies are looking for in a candidate (Litvinenko, 2020). Even experts are saying that the quality of education deteriorates day by day that resulting in an increase in the number of educated people but a decrease in the number of talented skilled people in the industry.

The existing employees are also affected by this condition. Advancement of technology resulting change in the present process, however, the gap between the employee's understanding of the new change and adaptation of the changed process is important. The organisations have failed to conduct proper training for the employees which affects the performance of the company. The need for proper training and development for skilled persons become one of the major issues in the IT companies.

Information Technology industry is one of the modern working sectors which takes pride in breaking the barriers for the progression of the organisation. However, the traditional culture of gender discrepancy is still visible in the working culture of the IT industries. The percentage of female employees in an organisation is less compare to the number of male employees. Though the employee's age of starting their career is same, the internal growth of male employees is more prominent and the female employees are stuck in the same position due to the slow progression rate. Even it is significant that there is less number of female employees in the management of any organisation which becomes a major challenge in the IT sector.

The IT companies need to hire more women employees to overcome these challenges. Organisation needs to design work practices that provide proper support to the women employees which encourages them to work efficiently and promotes the work culture to other female applicants. These practices are majorly based on the needs of female employees like their families and financial promises for independent women. As the current scenario offers less opportunity to women in the field of IT sector, it needs to be changed by adopting and providing opportunities to the women employees to face this challenge.

The rapid growth of information and technologies has had multiple impacts on most areas such as social, economic and so on. However, Indian IT companies are facing multiple issues such as inadequate skills, education quality, and infrastructure and so on in developing human resources. Indian IT companies in developing Human resources mainly deal with the skill gap. IT companies have large manpower; however, an important portion is not completed due to the lack of skills that the industry requires (Vahdat *et al.* 2022). This gap in skills among the demand for skilled laborers had a negative impact on the development of human resources. Moreover, training and coaching of the employees is an issue for the development of human resources.

Several educational institutions in India are unable to provide quality education and training related to the development of human resources, which leads to graduates who need to prepare for the demands of the job market. Indian IT companies lack the infrastructure to develop the skills of the employees which leads to a challenge in the development of human resources (Šmite *et al* 2021). Various IT companies have multiple strategies to implement human resources management such as cost reduction and enhancing the skills of the employees. Implementing human resources develops the profitability of the company by enhancing the productivity of employees. Indian IT companies find limitations in implementing quality management and innovation strategies for the employees. The advancement of technologies has rapidly evolved with the market trends and employees developing their skills through proper training to be competitive in the market.

2.6. Agile coaching in Indian IT hubs: Brief History

The rapid evaluation of the Indian IT companies in the early 90s transformed the business climate. Technological disruption, quick changes, and turbulence have become hallmarks of the business environment. AI, machine learning, IoT, virtual software Big data have taken an essential role in Indian IT companies. Agile coaching in the Indian IT hubs has efficiently helped in improving the company's growth through improving productivity. Agile coaching is a sub-field of coaching that helps teams and individuals embrace and improve Agile practices, as well as rethink software development (Das *et al.* 2023). Agile coaching entails advocating for Agile practices and integrating them into an organisation's teams' everyday routines. Building a successful Agile team is the responsibility of the Agile coach. Additionally, a coach's duties include instructing, facilitating, supporting, observing, and providing feedback to the teams. One of the most important skill sets a coach needs to

possess is listening ability. Through these skills, the agility coach in IT companies has led the company forward.

Indian IT Companies are likely to face challenges as a result of cultural incompatibilities since numerous scholars have addressed the significance of cultural compatibility or fit between corporate cultures and the software development approach they employ. Studies have specifically looked into the connection between Agile methodology adoption and organisational culture. Agile working practices are derived from a collection of approaches bound by a shared ideology, set of values, and set of guidelines that impose certain demands on both teams and organisations (Šmite et al. 2021). Agile methodologies emphasise collaboration and mostly depend on a software team's capacity for self-organisation or self-management.

Through the studies, it has been identified that the IT companies that adopt Agile coaching have enhanced the organisation through feedback and learning. Additionally, to serve as a facilitator of collaborative leadership the companies have defined the general project goals. This motivates the employees to enhance their creativity and eventually leads to a successful competition of organisational goals. Within the organisation, there is competent, cooperative, and trustworthy social interaction that is improved by implementing Agile coaching.

Coaching plays a crucial role in supporting Agile initiatives within Indian IT companies. As Agile methodologies continue to gain traction, many organisations have established the role of an Agile coach to help guide teams through the transition and sustain effective practices. Implementing Agile coaching in Indian IT companies has improved team accountability, dedication, and decision-making are all enhanced by Agile coaching in the Indian IT companies. Agile coaching has also been shown to improve teamwork, boost comprehension of Agile practices, improve product quality, and reduce total product

development costs (Stray et al. 2020). According to a recent study, teams with a coach's assistance were better able to monitor project progress and had more defined team goals than teams without one. Additionally, some signs of adopting Agile approaches have more financial benefits than drawbacks when it comes to engaging an Agile coach.

The coach provides the necessary support to teams, enabling them to navigate through challenges and adapt to changes swiftly. This enhancement of the skills has led to a better approach for IT companies to grow and have greater profitability.

One of the key success factors in an Agile transition has been discovered to be coaching. An Agile coach is a new job that has evolved to assist firms in seamlessly implementing Agile processes. The demand for Agile coaches to assist with Agile transformations is steadily growing. A person who coaches and supports Agile teams and managers in embracing and putting Agile techniques, procedures, and values into practice in software development is known as an Agile coach (Daljajev et al. 2020).

It plays a crucial part in organisational transformation. However, there are a lot of obstacles to adopting Agile, most of which are human-related. These obstacles include reluctance to change, poor communication, a lack of customer cooperation, and a lack of experience with and understanding of Agile techniques and practices. Through the research, it has been identified that various companies have a higher chance of surviving thus the division of the business should modify the policies and procedures to provide the employees more freedom and flexibility.

Agility is a method of thinking, a mindset and a set of principles that guide how every business process is executed for the quickest and most effective response to environmental change. The IT sector has rapid development in terms of technologies that need the contribution of the employees to continuously exchange skills and compete in the market (Das *et al.* 2023). They use various coaching techniques to identify and mitigate resistance

while helping the individuals and teams overcome their apprehensions about new ways of working. The foundation of Agile techniques is the partitioning of the task into brief circles wherein individuals, teams, and departments continuously exchange inputs. The goal of Agile leadership is to motivate the employees with more power to engage with the work and give responsibility for the organisation and performance.

Agile leaders motivate the employees through having transparency in their communication, having informal communication that fosters the rapid development of the engagement of the companies in the IT sectors. Agile coaches' main responsibility is to build and train teams that foster the development of companies. They assist them in becoming adept at Agile techniques like self-organisation. To manage an Agile transition and help managers and stakeholders understand their new duties, Agile coaches also assist in their understanding of Agile processes. That being said, an Agile coach's responsibilities do not end with implementing Agile techniques. To stop abuse and find solutions, Agile coaches must continue to support and oversee the efficient application of Agile techniques (Crnogaj*et al.* 2022). Agile methods are frequently not immediately applicable Agile coaches must assess the unique environment in which Agile methods are being implemented and adjust their approach to fit those specific circumstances. Agile development relies mostly on the appropriate values being implemented.

In Indian IT companies, where hierarchical structures are often deeply rooted, Agile Coaches play a crucial role in changing organisational culture. IT companies in India have been using Agile concepts in their innovation processes for some time now. The short cycle development and ongoing product validation under constant plan adaption are the cornerstones of Agile working (Niever *et al.* 2021). However, since these methods are frequently based on the software development culture, they frequently bring new risks to the physical product development environment, which means that new issues always arise.

This makes it challenging for the processes of the companies to be implemented successfully. Agile coaches assist organisations in identifying the principles they wish to uphold and the course that the business should take. Trust is a key component in Agile development. Agile coaches foster open communication among staff members to increase trust. Additionally, Agile coaches are in charge of encouraging teamwork and removing roadblocks to productive teamwork.

The organisation to implement lower cost, better productivity and enhanced business strategies needs to adopt Agile coaching methods. The Agile methods provide better control and flexibility to the organisation to grow and expand their business. The IT companies in India have emerged in the past decades for better productivity and have increased the speed of delivery of products. Rather than the traditional approaches that slow down the companies to deliver and are ineffective in the business.

The benefits of adopting Agile methods include flexibility and short time for delivery. The Indian companies have succeeded due to the management support for the Agile adoption as without the management support the success of large-scale transformation of adopting the Agile practices is useless (Mishra *et al.* 2021). Thus, Indian IT hubs have emerged with the highest success towards the development of the economy by adopting Agile practices. This practice has enhanced the productivity and employee engagement that has fostered the growth of the company.

2.7 Advantages of Implementing Agile Coaching in IT Companies

The 1990s saw growing frustration with the failure of many software development projects, prompting a search for more economical and efficient methods to manage and organise activities and resources. Early in 2001, a group of influential figures in the software industry got together to explore ways to boost employee performance and productivity while

also providing customers with software that meets their expectations (Weichbroth, 2023). Moreover, Agile practices involve a more flexible and adaptable working structure that engages the employee to make an extra effort to meet the organisational goals. The advantage of implementing Agile coaching in IT companies includes the transparency that motivates the employees to have job satisfaction. Moreover, the Agile methods can influence team collaboration in a positive way. An Agile coach fosters the team members through the transparency of communication and the team-oriented goals that make the employees feel recognised. The role of an Agile Coach is pivotal in this process, acting as a catalyst for change and a guide for teams and organisations striving to embrace Agile methodologies. An Agile coach enhances team cooperation by forming team meeting and encouraging team members to participate, motivating employees to take risks and generate the ideas through which the companies have great success.

Pair programming is one of the advantages of Agile coaching as pair programming is a practice of Agile coaching that enhances team performance (Durbin and Niederman, 2021). This is followed by the two employees having situated side by side and collaborating to generate ideas and solutions for the problem that helps the companies to rapidly improve a solution by discussing, reviewing, and so on. This helps the companies to rapidly deliver the products and eventually leads to the success of a project. Implementing Agile coaching in IT companies promotes growth encourages learning and enhances a culture that motivates the team members to share the skills and expertise to develop creative solutions. Implementation of Agile coaching leads to a positive environment in an organisation that promotes the nature of learning and developing new ideas and creative solutions to improve the productivity of the organisation.

Agile practices have been identified to have a positive impact on building teams that can act quickly to mitigate the issues. Through the studies, it has been identified that by

adopting Agile methods companies have emerged in increasing the delivery time, enhanced creativity, transparency, a positive working environment and so on (Zasa *et al.* 2020). IT companies have been identified to adopt Agile practices to develop creativity through workshops that exchange creative skills. Through Agile methods, the leaders communicate about the organisational goals and problems with transparent processes. Measuring team strengths and weaknesses allows the leaders to identify the efficiency leads to tackle the delivery times. Agile coaching involves leading the team with efficiency and encouraging the team members to work efficiently by mitigating the issues. Through the implementation of Agile coaching, companies reduce the expanses and enhance business strategies that can efficiently contribute to the economic sector.

The capacity to quickly adapt to changes to maintain a competitive advantage is known as agility. Organisational agility can be addressed by the knowledge of the employees who are able to identify the solution to problems. The role of an Agile Coach in implementing Agile coaching is multifaceted and crucial for the success of Agile transformations in Indian IT companies. Through the studies, it has been identified that to maintain competitiveness in the digital economy the Agile core competencies are increasingly being developed through continuous learning.

Agile learning techniques also provide support in simplifying the continuous learning process so that staff members can continuously produce and exchange knowledge (Armanious and Padgtett, 2021). Unlike traditional, static corporate training, Agile learning methodologies create an environment where knowledge workers can continuously learn, enabling them to quickly adapt to the complexities of the external world and develop core Agile competencies.

Companies are evolving by embracing advanced technologies and market tools, enhancing their products and services with innovations such as AI, ML, data science, and

more. Implementing Agile practices involves adopting advanced digital tools that make decision-making more effective and valuable (Tominc*et al.* 2023). Moreover, companies that adopt Agile practices foster a balanced work environment, enabling employees to work efficiently and tackle challenges collaboratively. Studies have highlighted that the urgency of an Agile work environment has become one of the most critical approaches for adapting to change and responding swiftly. Agile coaching encourages organisations to be more adaptable to change; for example, the rapid development of technologies can drive increased customer demand. Companies that embrace Agile practices through continuous learning and development are better positioned to create products that drive customer satisfaction.

Agile coaching brings a range of benefits, with its focus on flexibility and prioritising customer needs. In Agile environments, companies form cross-functional teams that work closely together, communicate regularly, and adapt their plans based on feedback. This approach encourages a dynamic, responsive way of working, where change is not just accepted but actively embraced. By identifying areas for change and implementing improvements, teams can stay in tune with shifting demands and evolving circumstances.

Ultimately, Agile coaching helps organisations stay aligned with their customers' needs while continuously enhancing their processes and outcomes. The identification of the change required is to be evaluated by the external and internal factors that evaluate the need for developing the skills (Harvey and Valerio, 2022). The Agile software development technique prioritises adapting to changes rather than adhering to a set plan. While strategic vision may be more appropriate for organisations operating in stable and predictable industries, Agile strategy is better suited for businesses operating in dynamic and rapidly changing marketplaces. Eventually, the most effective technique is to include components of the two approaches to produce a flexible and long-term vision-focused plan.

The benefits of implementing Agile coaching include enhanced collaboration within the team, which significantly boosts efficiency in workflow management. Following Agile principles helps employees develop better strategies for problem-solving and fosters innovation. Moreover, employees gain individual benefits, including the enhancement of their knowledge and the development of new skills. This enables individuals to work more efficiently while fostering a positive environment that encourages growth. Agility is an essential tool in terms of innovation and to compete in the market (Biçer, 2021). Various studies have highlighted the advantages of Agile coaching, revealing that its implementation significantly enhances creativity within employees, which in turn fosters better productivity. By adopting Agile coaching, companies can cultivate an environment where innovation thrives, leading to improved performance and overall success.

An Agile Coach plays a crucial role in bridging the gap between theoretical knowledge and its practical application. In the fast-paced and competitive landscape of India, it has become an essential part of the transformation journey for IT companies, guiding them through the challenges of adopting Agile practices effectively. Agile project management guide to address this type of shortcomings under an approach which is different from the traditional project management (Malik, Sarwar & Orr, 2021). Agile Coaches act as change agents, driving continuous improvement and innovation within the organisation. It helps organisations stay competitive and responsive to market changes.

The advent of digitalisation has profoundly influenced various aspects of business operations, and Agile coaching in IT companies is no exception. Digitalisation has introduced a plethora of tools which enhance collaboration and communication among Agile teams. While the processes of digital transformation have a strong tendency to exceed costs, complete failure and delays (Grosse & Bauer, 2024). Digital transformation has not only altered the way IT companies deliver products and services but also reshaped the

methodologies and practices associated with Agile coaching. Platforms including Slack, Microsoft Teams, Jira, and Trello have become integral to Agile coaching. In Indian IT companies, where teams may be spread across different locations, these digital tools help maintain cohesion and ensure that Agile practices are consistently applied. The rise of digitalisation has also led to an increased emphasis on data-driven decision-making. These tools help to facilitate proper communication, real-time collaboration, and effective project management while enabling Agile Coaches to better support distributed and remote teams.

2.8 Theory of Reasoned Action

Ajzen and Fishbein's Theory of Reasoned Action (TRA) suggests that an individual's behaviour is guided by their intention, which in turn is influenced by their attitudes and perceived social expectations. According to Harb et al. (2024), these attitudes and subjective norms play a critical role in shaping behavioural intentions. When applied to Agile coaching in Indian IT companies, this framework helps explain how employee motivation and openness to development are shaped by cultural and organisational expectations. In this context, Agile teams are often driven to enhance their competencies and adopt emerging digital tools to improve operational workflows, refine customer interactions, and adapt to evolving business demands through new service models or process innovations. According to the theory of reasoned action, employees engage in new roles to meet the organisational goal and to achieve the personal goal.

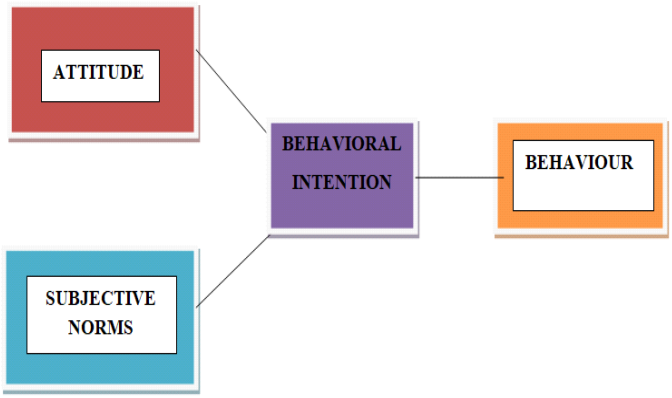

Figure 2.8.1: Theory of Resonated Action

Source: Nellore (2024)

The resonated action is a widely used framework for understanding and predicting human behaviour. The approach aligns with an Agile coach who is responsible for enhancing the engagement of the employees and evaluating the lacking portions of the employees. Through this action theory, IT companies can assess the understanding and can positively motivate the employees to reach a certain goal. The approach emphasises regulated decision-making and goal-directed behaviour. Agile coaching in IT companies influences the employees to foster the development of team collaboration and mitigate the issues that are creating problems. Enhancing the team through Agile coaching that may leave a lasting impression on other team members during the transition (Klünder*et al.* 2022). Agile advocates play a hidden role in facilitating change and convincing others to change as well. The IT function's agility refers to its capacity to identify emerging opportunities and adapt swiftly to shifting business demands and market conditions.

Through the theory, it can be evaluated that the employee's intention to execute behaviour is determined by their attitudes toward that activity and subjective norms, which are perceived societal pressures to perform or not to perform the behaviour. The implementation of Agile coaching and its success in the IT industry depends on the

employee's adoption of the practice of Agile methods that can significantly improve the efficiency of the company. Agile coaches use the theory to shape positive behaviour and create a positive environment that can significantly motivate the other employees to take part in developing the skills (Stray *et al.* 2020). These practices by Agile coaches can improve the company's efficiency in producing products and delivering themes with minimum time and so on. Agile practices in the context of the theory foster the engagement of the employees to meet individual and personal goals.

An Agile coach who follows the theory of reasoned action aims to improve team capabilities and achieve more success, comparable to a traditional team coach. Applying this theory Agile coaching enhances the decision-making process among the teams, commitment to the organisation's goal, and team accountability. The theory increased understanding of Agile practices that result in better product quality, and lower overall cost for product development. These enhance in creation of a positive environment through education and training that improves the company's adaptability, faster delivery and improved collection (Paasivaara, 2021). Adopting the theories of reasoned action allows companies to enhance organisational culture and rewards. The theory of reasoned action allows the companies to set the objectives for the employees and develop skills that can foster productivity and eventually lead to the success of the company.

Individual learning traits include goal orientation and having a significant role in promoting innovative behaviour. According to the theory of reasoned action, it improves the strategic influences on the employees by addressing the individual and social influences within the organisation (Trzeciak and Banasik 2022). Applying the theory in Agile practices motivates employees to enhance their creativity and eventually leads to successful competition of organisational goals. A positive environment within the organisation as there is a cooperative, and trustworthy social interaction that is improved by implementing Agile

coaching. The theory of Agile adoption and its implementation within IT companies largely depends on the organisational culture. By incorporating the theory of reasoned action into Agile coaching, companies can enhance their success by driving more effective adoption and execution of Agile practices.

2.9 Grounded Leadership Theory

The grounded theory method helps researchers to improve the theoretical analysis. This strategy focuses on the development of new concepts and evaluating the concepts finding opportunities for the companies to grow. Grounded theory is unique in that it generates data-driven theories that may be applied to professional policies and practices in psychology and other fields. Some grounded methodologists believe that theory, whether substantive or formal, should always come from analysis (Stough, and Lee). Applying grounded theory to the leaders addresses the Agile coach in the Agile coaching that efficiently enhances team collaboration, employee engagement and so on. An Agile coach plays an important role in shaping a positive environment for the employees to work efficiently. Through the grounded theory, Agile coaching is an important practice and its impact on team performance and organisational culture can be evaluated.

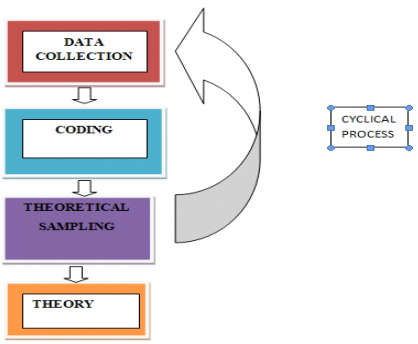

Figure 2.9.1: Grounded theory

Source: Nellore (2024)

By applying grounded leadership theory to Agile coaching, Agile coaches inspire and motivate team members to reach their goals effectively. Coaches focused on refining work processes to boost performance. They helped teams align on norms and improvement strategies, while also fostering a greater awareness of individual responsibilities and workflows. This approach led to a reduction in stress levels (Stray et al., 2020). Uncertainty in roles leads to stress, which negatively impacts the team performance. By applying this theory, Agile coaches can build stronger leadership skills and refine performance strategies. Agile coaching is all about supporting Agile methods, encouraging continuous improvement, and ensuring that teams stay true to Agile principles. When coaches bring this theory into their coaching approach, they inspire employees to grow their knowledge and adopt techniques that tackle challenges in the Agile process, leading to better results and more efficient workflows.

Moreover, grounded theory plays a crucial role in implementing Agile coaching within IT companies, as Agile teams are diverse and individuals may have varying approaches to their behaviour and work style. Implementing Agile practices allows executives to openly discuss organisational goals and challenges, fostering transparency in processes and decision-making. Measuring team strengths and weaknesses allows executives to identify effective leaders and address delivery timeframes more efficiently. Through grounded theory research, common data analysis methods include coding, constant comparison, memoing, and memo sorting (Urcia, 2021). Theoretical sampling involves regularly gathering and analysing fresh data and instances to refine the emerging theory. Inductive data analysis involves developing hypotheses and theories based on empirical facts, rather than verifying them against existing beliefs.

According to the grounded theory research, data collection and analysis of the data take place at the same time in the theory research. This iterative process is important for Agile

coaching as it enables researchers to change their objectives according to newly discovered insights. Grounded theory studies aim to achieve theoretical saturation, which means thoroughly contextualising and dimensionalising all major concepts (Burns *et al.* 2022). Taking an example initially, a coach may notice that teams have problems in communication. They can continue examining these interactions using the grounded theory technique, which they keep on enhancing their comprehension by determining ways of overcoming these hindrances to communication. Thus, the results obtained through this method are firmly held on the actual involvement of the team, hence practical and useful advice. Grounded theory requires flexibility, inventiveness, and reflexivity during interviews to develop concepts, categories, and theories.

Applying grounded theories to Agile coaching can help in the ability to disclose the social process and apply specific techniques to evaluate the understanding of the study. Grounded theories help in enhancing the communication between the Agile coach and the team member. The influence of the market trends and the impacts of the advancement of technology needs to be evaluated by the Agile coach to bring advancements. Agile approaches excel in meeting unpredictable requirements, delivering high-quality solutions on schedule and within budget, and ensuring customer satisfaction. Agile working involves collaborating across people, processes, technology, time, and location to determine the most effective approach to complete a task (Gren and Lindman 2020). Understanding the process is crucial for an Agile coach to grow their companies. Agile coaches focus on improving the delivery process and enabling the team to collect the resources and understand the market trend.

Agile coaching is successful in aligning the grounded theory with Agile coaching. Through the analysis, it has also been found to improve teamwork, promote grasp of Agile principles, increase product quality, and lower total product development costs. According to

a recent study, teams with a coach's support were better able to track project progress and had more defined team goals than teams without one.

2.10 Literature Gap

There is limited research on Agile coaching in Indian companies, often overlooking the cultural aspects and organisational challenges that can empower employees. Furthermore, there is a lack of qualified and analytical data on the impact of Agile coaching within the Indian organisational structure. Additionally, the lack of exploration into how Indian companies culturally adapt to empower organisational norms and ethics highlights a gap in the implementation of Agile coaching. Long-term research on the impact of Agile coaching is another area lacking attention, which could significantly influence the understanding of its importance in Indian companies. A detailed investigation into the challenges faced by "industry-specific" organisations is required to effectively enforce Agile coaching in Indian companies.

CHAPTER III: METHODOLOGY

3.1. Introduction

This chapter outlines the methodology, detailing the process of collecting and analysing the information relevant to this study. First, the research problem was addressed, which allowed for the assessment of the concepts and ideas linked to the study. Secondly, various theoretical frameworks drawn from the literature review were explored, along with the challenges faced in Agile coaching within the IT sector. Additionally, the chapter outlines the research purpose and questions, offering a clear overview of the direction for the subsequent stages of the study. The sample size and the methods used for their selection were also covered, providing clarity on the data collection and analysis process. Furthermore, the instruments utilised for gathering information were outlined. The analysis of the collected information was presented, followed by a discussion of the limitations of the research design. This helped refine the data collection process and further enhanced the methodology of the study.

3.1.2 Overview of the Research Problem

The research examines the challenges encountered by Agile coaching within the Indian IT sector. Agile coaching is an important component in the Agile project management framework and is essential for facilitating Agile processes and driving digital transformation within organisations. Despite its importance, there are significant gaps in the literature, particularly concerning the Indian IT context. The challenges of Agile coaching in India have not been comprehensively addressed, leaving a void in understanding the specific issues and barriers that Agile coaches encounter. A common problem arises while doing research if there is not a relationship between the research goals and the research questions (Akyıldız and Ahmed, 2021). This research aims to fill this gap by exploring the difficulties faced by Agile

coaches, their roles, and the effectiveness of their strategies in enhancing Agile practices within the Indian IT sector. The study intends to provide a deeper insight into the unique challenges of implementing Agile methodologies in India and offers potential solutions to overcome these barriers.

3.1.3 Operationalisation of Theoretical Constructs

The theoretical framework of this research is designed to explore the core principles of Agile coaching and its influence on project management within the IT sector. Agile coaching practices involve guiding and supporting teams to help them adopt and apply Agile methodologies effectively in their day-to-day operations. The theories of “Resonated Action” and “Grounded Leadership” were among the key theoretical foundations discussed in the previous chapter. At the heart of Resonated Action lies the principle of 'resonance', which aligns with cognitive, emotional, and behavioural approaches. This is followed by the concept of 'amplification', which refers to the strengthening of resonated actions through social networks and the active engagement of communities. Finally, there is the component of “Feedback loop” for the evaluation of actions based on the reviews help to evaluate the process of Agile coaching within the IT sector (Ahmed et al. 2022). The fundamental principles of the Grounded theory are the “lead from within” to understand and manage the innermost qualities. Connecting the inner feelings and ideas with others is the next step in building the collaboration and trust of the employees in IT sector. Effective management of the organisational dynamics and working culture and the embodiment of values and ethics are the fundamental aspects of this grounded theory that is applicable for the Agile training of IT sector. Measuring this operational strategy is important and it is done by using a survey method, where participants from the Indian IT sector provide quantitative data on their experiences with Agile coaching.

The survey aims to uncover the key challenges Agile coaches face around organisational culture, Agile maturity, day-to-day practices, and remote working. By focusing on these areas, the goal is to better understand the real experiences of coaches working in the Indian IT sector. This approach helps build a clearer picture of how these challenges influence team performance and the journey towards developing a sustainable and well-integrated Agile mindset. These ideas also support how the key variables were defined earlier in chapter 1.7.

3.2 Research Purpose and Questions

The purpose of this research is to explore the key challenges surrounding Agile coaching within the Indian IT sector. It aims to understand the core issues that Agile coaches face, particularly in areas such as organisational culture and leadership, Agile maturity and remote working and how these influence the application of Agile practices. This study also highlights the noticeable gap in existing literature, where Agile coaching—especially in the Indian context—has not been widely examined. By addressing this gap, the research seeks to contribute meaningful insights. The study is guided by the following research questions:

- What organisational culture and leadership challenges do Agile coaches face within Indian IT firms?
- What specific challenges related to remote working environments impact Agile coaches in Indian IT firms?
- What Agile maturity-related challenges affect Agile coaching in Indian IT firms?
- What challenges do Agile coaches face in applying Agile practices within Indian IT firms?

3.3 Research design

Research design is the most important part of conducting research which is used to integrate valuable components of the research thesis logically. Research designs play a significant role in deciding the entire research process such as methods, research strategy and importantly sampling (Subedi, 2021). The purpose of the research design is to provide a blueprint and collect relevant data for planning the methods. The research design is structured to answer the research question of the thesis and control variance. It also helps in the mapping system that is usually built to collect and analysis of measurable data to guide the researcher. Therefore, on behalf of saving time and resources and accumulating relevant specific information is gathering for this thesis. The research design helps to look at the background of groups and individuals it also tries to identify the policies, concepts and tools which are essential for the research.

To guide this research thesis, an "Exploratory Research Design" has been adopted to better understand the characteristics of the phenomenon under study. This approach is well-suited for examining real-world challenges faced by organisations, particularly those looking to improve their working practices and evaluate innovative solutions. Exploratory design is ideal in this context, as it allows for open-ended investigation into Agile coaching within the Indian IT sector, where existing knowledge is limited and evolving. This design helps uncover organisational challenges by examining real issues on the ground. In this study, a quantitative approach was used within an exploratory framework, using surveys and analysis to better understand the hurdles faced in Agile coaching.

The questionnaire-based survey to collect the numerical information is used for further analysis. After the statistical analysis, the patterns and the trends will be discussed. Exploratory research is helpful when there is insufficient knowledge about a phenomenon or problem and it also helps to explore the research topic in depth (Mbaka and ISIRAMEN,

2021). Exploratory research is an important strategy for this research as it provides the opportunity to the studied subject instead of drawing conclusive remarks. The research questions are shaped by the main objectives of the study, focusing on key aspects of Agile coaching within the IT sector. Insights gathered from the literature review played a vital role in forming these questions. By using an exploratory research design, the study aims to broaden its scope and gain a deeper understanding of the various factors contributing to the challenges faced by Agile coaches in the Indian IT industry.

3.4 Population and sample

Sampling is the process of selecting a smaller group from a larger population, allowing researchers to collect accurate and meaningful data without needing to survey everyone. There are different types of sampling methods used in the collection of samples from large populations. In this research thesis, the "purposive sampling method" has been used to select a specific group of individuals in a particular area for analysis. Purposive sampling holds a developmental history and it also consists of several views that it is as simple as there are about its complexity (Campbell *et al.* 2020). Supporting that, the samples are collected from the largest population of Indian IT companies to understand their view on Agile coaching. Applying the purposive method of sampling has been enhancing the quality of the research thesis by providing in-depth data regarding the specific topic and provides valuable insights.

Purposive sampling was used in this study, as it allows the researcher to focus on a specific group within the population and collect relevant data from those best suited to provide meaningful insights. Purposive sampling applies to the studies which contribute to access to a piece of new knowledge and exploratory studies (Mweshi and Sakyi, 2020).

Initially, 370 people are chosen for conducting a survey, which is then refined to 203 after the adoption of the purposive model of sampling.

3.5 Data collection and instrumentation

According to the study of Moises (2020), majorly two types of data collection methods are used namely qualitative and quantitative data collection methods to determine the practices and opinions of a large population. Quantitative and qualitative research designs are different from each other as qualitative research methods involve observing and interviewing while quantitative research methods are countable and measurable. This study carried out primary quantitative data collection through a survey, using Google Forms to create the questionnaire, email to distribute it to the participants, and SPSS to interpret the collected data.

Primary quantitative data was collected through a questionnaire-based survey conducted with employees from an IT company. Primary data collection in this study refers to gathering information directly through a survey. The data collection method depends on the different fields of the study and varies as per the essential information (Mazhar *et al.* 2021). This question helps uncover the challenges faced by Agile coaches and explores the various initiatives companies have taken to address these difficulties in Agile coaching.

Ethical consideration is important for the quantitative study and that ensures the responsibility of the researcher related to the conduction of this study. All the information used within this study is gathered from the participants with their informed consent. All the participants of this survey were free to apply their views to the questions. They were free to withdraw their consent from this research.

Confidentiality and anonymity of the participants were well maintained within this survey as not a single personal information was used rather than the basic information within

this survey. Ensuring the “data integrity” for the accuracy and completeness of this research were maintained. The primary data is only collected by using the method of data collection that is used by scientific approval and the secondary data is mainly required to support the background of the research question that is formulated (GHR and Aithal, 2022). The primary qualitative collection of data refers to any type of research where the data has to be collected by observational studies or by online survey.

3.6 Data Analysis

The data analysis for this study was grounded in a structured, quantitative approach, using survey responses collected through Google Forms. A total of 203 participants from the Indian IT sector contributed to the dataset. The responses were coded and analysed using SPSS, a widely used statistical software known for its reliability and ease of use (Rahman and Muktadir, 2021). The analysis incorporated both descriptive and inferential statistical methods to evaluate the data comprehensively.

Descriptive statistics were first employed to summarise the dataset, offering key insights into the central tendencies and variability of the responses. Metrics such as mean, median, mode, standard deviation, and variance were calculated to understand the distribution and spread of responses (Rahman and Muktadir, 2021). These summaries provided an initial overview of the participant demographics and core survey variables.

To explore relationships between variables, correlation analysis was applied. This method was used to identify and quantify the direction and strength of associations between the independent variables — organisational culture and leadership, Agile maturity, and remote working — and the dependent variable, Agile practices. Regression analysis was then used to assess the predictive power of these independent variables. Multiple regression models helped to isolate the individual effect of each predictor while accounting for the

influence of confounding variables. This process allowed the study to test its hypotheses and better understand the impact of Agile coaching on project outcomes (Lee, 2022).

Factor analysis was conducted to detect patterns in the data and reduce the number of observed variables into a smaller set of meaningful components. This helped to identify underlying constructs relevant to Agile coaching challenges. The factor analysis offered structural insights by grouping related survey items, enhancing the interpretation of results.

Additionally, a one-way ANOVA was employed to examine differences in perceptions of Agile-related challenges among groups with varying levels of Agile maturity. This method is effective for comparing group means and determining whether statistically significant differences exist. To complement this, one-sample t-tests were run to evaluate whether participants' responses regarding remote working challenges significantly deviated from a neutral point, further supporting the study's hypothesis testing strategy (Alita et al., 2021).

All survey items were closed-ended and constructed using a consistent 5-point Likert scale, ranging from 1 (Strongly Disagree) to 5 (Strongly Agree), with 3 representing a Neutral response. This standardisation ensured consistency across all calculations and enabled straightforward application of both descriptive and inferential statistical techniques.

Each research question was analysed independently. Descriptive statistics provided initial summaries, followed by correlation, ANOVA, and regression analyses to determine the strength and direction of relationships between variables. This multi-layered approach enabled a robust quantitative assessment of the challenges faced by Agile coaches in the Indian IT sector.

3.7 Research Design Limitations

The research design is robust to the quantitative approach while evaluating different forms of limitations which have to be acknowledged. First among them is the use of a survey

method that relies on the data which is self-reported, which can introduce bias. Participants may provide socially desirable responses or may not accurately recall their experiences which suggests that it limits the validity and reliability of the data collected. The drawback of convenience sampling is that the study results lack generalisability because of the bias of the sample (Emerson, 2021). Secondly, the study's focus on the Indian IT sector, while providing important insights into a specific context, limits the generalisability of the findings.

The practices and challenges of Agile coaching can also be significant for different geographical regions and different industries. It can also affect the result of the study which may not be applicable to other sectors or countries without further research and validation.

Thirdly, the sample size of 203 participants, although adequate for statistical analysis, may not capture the full diversity of experiences and perspectives within the IT sector of India. Determining a perfect sample size is an unresolved and important issue for the mediation model utilisation (Sim *et al.* 2022).

A larger sample size could provide a more comprehensive understanding of the issues at hand and enhance the robustness of the findings. Additionally, the study employs purposive sampling, which is useful for targeting the specific characteristics in the population, and can also introduce selection bias. This bias can limit the external validity of the study. The participants who are chosen may not represent the broader population of Agile coaches and practitioners in the Indian IT sector. The cross-sectional nature of the survey also counted among the limitations of the research design. The data is collected at a single point in time, which means that it cannot capture changes and developments in Agile coaching practices over time.

Longitudinal studies are effective in understanding the evolving Agile coaching and its long-term impact on project outcomes. Researchers can refer to the results when estimating through a sample size in research proposals, which also leads to the efficient use

of clearer justifications and research resources for proposed the sample sizes (Hennink and Kaiser, 2022). The reliance on quantitative methods, while providing measurable and statistically analysable data, may overlook the qualitative aspects of Agile coaching that are crucial for a comprehensive understanding, SPSS in data analysis help to robust the study, however, it has some limitations.

Interpretation of the statistical models requires a high level of expertise and there is a risk of misinterpretation of the results. To mitigate this risk, it is important to analyse that the research is conducted by experienced researchers. Surveys are an important tool which helps to understand public behaviour and opinion, under their dependent accuracy of maintaining a statistical representativeness of target populations through minimising the biases form of all sources (Bradley *et al.* 2021). The study assumes that the participants have a uniform understanding of Agile terminologies and practices.

Providing a clear definition while ensuring that all of the participants have a baseline understanding of the terms used in the survey can help address this issue. However, variations in the interpretation of Agile concepts among respondents can introduce inconsistencies in the data. The research design is structured to provide a valuable insight into the challenges of Agile coaching in the Indian IT sector, it is important to consider these limitations when interpreting the findings.

Addressing these limitations in future research can help in developing a more comprehensive understanding of Agile coaching practices and their impact on project management. Limitations impact the overall study due to its constraint's nature on the research design, theses represent the weaknesses and flaws of a study, that can also influence the research outcome.

3.8 Conclusion

The research methodology of the research thesis describes different approaches which have been followed to conduct the study. The use of exploratory research design provides the opportunity to look into different aspects and elements related to the studied subject instead of drawing conclusive remarks. The sample population consisted of 203 participants who act as a voluntarily participating group of people representing the selected target population for this research.

This study conducted a primary quantitative data collection process which further analysis through IBM SPSS. The use of primary quantitative data analysis is impactful for explaining the study's gathered information through statistical and numerical means. Since the research is for a specific purpose which needs a brief description of the study topic, therefore exploratory research design has been chosen. A purposive method of sampling helps the researcher eliminate the identified population and get the actual sample to gather data.

CHAPTER IV: RESULTS

4.1 Introduction

The evaluation of the data that has been gathered and further evaluated to provide a primary data analysis of the survey that was conducted on the total number of 203 respondents, who make up the sample population, is presented in the following chapter. The upcoming chapter assesses and elaborates on the research topic in connection with the data collected in relation to the research questions based on the variables of the study, which include organisational culture, Agile practices, Agile maturity, and remote working. A total of 203 willing participants with extensive knowledge of Agile coaching and experience in the field participated in the survey. IBM SPSS has been used as a tool to evaluate the data through reliability test, descriptive statistics, correlation analysis through model summary and ANOVA and one sample t-test. The chapter structure is aligned with the four main research questions and their associated variables: organisational culture and leadership support, Agile maturity, remote working, and Agile practices.

4.2 Data Analysis

4.2.1 Reliability Test

Table 4.2.1.1 Cronbach's Alpha

Cronbach's Alpha	Number of Items
0.909	28

Source: Nellore (2025)

The above table is accurately representing the value of Cronbach's Alpha for the survey data analysis that has been conducted by a questionnaire and it comprising around 28 survey questions. The given table is illustrating the reliability test that also further indicates

that the internal consistency of whole items effectively represents statements of survey questions that are used to gather information associated with the research topic. As per the findings that have been depicted within this table, the value for reliability along with internal consistency is 0.909. This value highlights a high level of internal consistency that is among all items, further revealing a strong relationship among research variables. The high value of a Cronbach Alpha explores that the survey items are almost closely related and also measures the similar concept that further ensures reliability of data that has been collected.

4.2.2 Demographic Statistics

Table 4.2.2.2: Participant Roles in Agile Teams

Participants were asked whether they were currently part of an Agile team as either a Scrum Master or an Agile Coach. Their responses are summarised in Table 4.2.2.2.

Role	Frequency	Percentage (%)
Agile Coach	110	54.2
Scrum Master	93	45.8
Total	203	100.0

Source: Nellore (2025)

The above table effectively highlights the spread of respondents that are presently included in enhancement processes of an Agile team particularly either like a Master of Scrum and as Agile Coach. The data shows that 54.2% of the respondents identified as Agile Coaches, while 45.8% were Scrum Masters. This highlights a fairly balanced representation between the two roles.

Table 4.2.2.3: Distribution by Organisation Size

Participants were asked to indicate the size of their organisation based on the number of employees. Their responses are summarised in Table 4.2.2.3.

Organisation Size	Frequency	Percentage (%)
Enterprise (More than 1000 employees)	72	35.5
Large (More than 251–1000 employees)	74	36.5
Medium (51–250 employees)	52	25.6
Small (Less than 50 employees)	5	2.5

Source: Nellore (2025)

The table above clearly presents the workforce size of the organisations employing the respondents. Around 36.5 percent of participants are working in large companies with employee counts between 251 and 1,000. In addition to this, about 35.5 percent of respondents are employed in enterprises with more than 1,000 employees. This distribution provides a clear indication that a significant portion of the respondents are part of larger organisations. These firms are more likely to have established Agile practices, structured processes, and greater access to resources. Within the context of this study's sample, this helps to understand how Agile is applied across different organisational sizes.

Table 4.2.2.4: Agile Experience Level of Respondents

Participants were asked to indicate their personal level in practising Agile methodologies. Their responses are summarised in Table 4.2.2.4.

Agile Experience Level	Frequency	Percentage (%)
Beginner	14	6.9

Intermediate	72	35.5
Advanced	93	45.8
Expert	24	11.8

Source: Nellore (2025)

This table above provides insight into the individual experience levels of respondents in practising various Agile methodologies. The data shows that a large proportion of participants consider themselves advanced (45.8%), followed by those at an intermediate level (35.5%), experts (11.8%), and beginners (6.9%). This distribution suggests that most respondents have a solid level of experience and proficiency in Agile practices. These findings help build a clearer understanding of how experienced the Agile teams are, and how this experience may contribute to the effective implementation of Agile methodologies within their organisations.

Table 4.2.2.5: Agile Maturity Levels of Respondents

Agile maturity levels reported by participants are summarised in Table 4.2.2.5.

Agile Maturity Level	Frequency	Percentage (%)
Initial (Just starting with Agile practices)	7	3.4
Repeatable (Some Agile practices in place, but not fully consistent)	16	7.9
Defined (Consistently following Agile practices across teams)	51	25.1
Managed (Monitoring and measuring Agile practices for improvement)	80	39.4
Optimising (Continuous improvement and innovation in Agile practices)	49	24.1

Source: Nellore (2025)

This table clearly illustrates the Agile maturity levels of the respondents' organisations. The data shows that the majority of organisations are at the 'Managed' level (39.4%), followed by 'Defined' (25.1%) and 'Optimising' (24.1%). Meanwhile, smaller portions fall under the 'Repeatable' (7.9%) and 'Initial' (3.4%) levels. This distribution suggests that most organisations have well-established Agile practices in place, with a notable proportion actively working towards refining and optimising their Agile processes.

4.2.3 Organisational Culture and Leadership Support Challenges

This section addresses Research Question 1: "What organisational culture and leadership challenges do Agile coaches face within Indian IT firms?

The analysis focuses on survey items that explore how organisational culture influences Agile coaching practices. Specifically, it includes questions related to challenges in promoting openness and transparency, fostering a culture of continuous learning and adaptation, resistance to change within the organisation, and lack of clarity regarding Agile roles and responsibilities. These responses provide insight into how cultural factors may hinder or support the implementation of Agile methodologies.

Table 4.2.3.1: Descriptive Statistics for Organisational Culture and Leadership Challenges

The table presents mean scores and standard deviations for all survey items related to organisational culture. Full survey questions are included for clarity and contextual interpretation.

Survey Item	Mean	Std. Deviation
The organisational culture in my company poses challenges for Agile coaches in promoting openness and transparency	4.01	.893
Senior management support for Agile initiatives is often lacking, resulting in more obstacles for Agile coaches	3.61	1.077
Cultural barriers within the organisation significantly hinder Agile coaches' efforts to implement Agile practices and principles effectively	3.64	.978
Our organisational culture challenges for Agile coaches in fostering a culture of continuous learning and adaptation	3.81	.977
Resistance to change within the organisation creates significant challenges for Agile coaches when introducing new methodologies	3.98	.890
The hierarchical structure of the organisation hinders Agile coaches in promoting collaboration and self-organizing teams	3.81	.943
Agile coaches face difficulties due to the lack of a clear vision and alignment from leadership regarding Agile transformation goals	3.54	1.045

Source: Nellore (2025)

The table above shows how participants responded to several questions about organisational culture and the challenges it creates for Agile coaches. Overall, the average scores for each question range between 3.54 and 4.01, suggesting that most people agree these are common and important issues. The responses were also fairly consistent, meaning that different participants had similar experiences or opinions.

The highest-rated challenge was around a lack of openness and transparency in the organisation (mean = 4.01). This is a key part of Agile culture, and without it, Agile coaches often struggle to get teams to collaborate openly or share feedback freely. Resistance to change (mean = 3.98) was another strong theme, showing that Agile coaches often face

pushback when introducing new ways of working. Many also felt that the culture doesn't support continuous learning (mean = 3.81) or self-organising teams, especially in organisations with rigid, top-down structures (mean = 3.81).

Other challenges included a lack of support from senior leaders (mean = 3.61) and unclear direction from leadership about Agile goals (mean = 3.54). These two issues highlight that Agile coaches are not only helping teams adopt Agile, but are also dealing with gaps in communication and alignment from the top.

In general, the results show that organisational culture plays a big role in how easily Agile can be introduced and sustained. Agile coaches are often dealing with more than just getting teams to follow Agile practices. They are also working within larger systems that may be slow to change, resistant to new ideas, or not fully supportive from a leadership level. For Agile to truly work, the culture needs to support transparency, learning, collaboration, and a shared understanding of what Agile means across all levels of the organisation.

4.2.4 Remote Working Challenges and Agile Coaching

This section addresses Research Question 2: "What specific challenges related to remote working environments impact Agile coaches in Indian IT firms?"

This section analyses responses to survey items that focus on how remote working affects communication, collaboration, team cohesion, and the adaptation of Agile coaching strategies. Key variables include asynchronous communication difficulties, lack of in-person interaction, challenges in maintaining a sense of team identity, and the additional effort required by Agile coaches to facilitate effective coaching in distributed teams.

Table 4.2.4.1: Descriptive Statistics for Remote Working Challenges Encountered by Agile Coaches

Survey Item	Mean	Std. Deviation
Agile coaches encounter difficulties in adapting their coaching and facilitation techniques to effectively support Agile teams in remote working environments	3.76	0.963
Managing time zone differences and asynchronous communication in global remote Agile teams adds complexity to Agile coaching and coordination efforts	3.73	0.975
Remote working introduces additional obstacles for Agile coaches in fostering team cohesion and alignment with Agile principles and practices	3.79	1.003
Addressing the increased risk of communication breakdowns and misunderstandings in remote Agile settings, and implementing effective strategies to mitigate these risks, poses challenges for Agile coaches	3.78	0.929
The lack of in-person interaction and social connections in remote Agile settings affects team morale and motivation, posing challenges for Agile coaches in maintaining team spirit	3.85	0.976
Maintaining a sense of team identity and culture in remote Agile teams poses challenges for Agile coaches in promoting shared values and collaboration	3.82	1.015
Lack of informal communication and reduced social bonding in distributed Agile teams limits the effectiveness of team collaboration	3.84	0.943

Source: Nellore (2025)

This section explores the challenges Agile coaches face while working with teams in remote environments. Based on the responses to seven survey questions, it is clear that remote working introduces a number of consistent difficulties for Agile coaching.

The first major concern identified was the difficulty Agile coaches face in adapting their coaching and facilitation techniques to support remote teams. This item received a mean

score of 3.76, showing a strong agreement among respondents. Managing time zone differences was another key issue, with a mean of 3.73, indicating that coordination across different regions continues to be a practical challenge.

Building trust and psychological safety within remote teams was also seen as difficult, reflected by a mean score of 3.79. Respondents also agreed on the need for better synchronous communication tools and practices, with a mean of 3.78, highlighting the limitations of current remote collaboration tools.

Observing Agile ceremonies in a distributed setup was another common concern, scoring 3.85 on average. Similarly, maintaining continuous feedback loops remotely had a mean score of 3.82, which shows that regular interaction and feedback are harder to sustain virtually. Finally, the question on whether remote work affects team motivation and engagement received a mean of 3.84, reinforcing the perception that virtual work can lead to disengagement over time.

Overall, the responses show that Agile coaches consistently experience challenges when working remotely, especially in areas like team coordination, communication, trust-building, and maintaining engagement. These results suggest that effective remote Agile coaching requires not just technical tools but also thoughtful strategies to recreate the sense of presence and collaboration that co-located teams naturally enjoy.

4.2.5 Agile Maturity Challenges and Agile Coaching

This section addresses Research Question 3: “What Agile maturity-related challenges affect Agile coaching in Indian IT firms?

The analysis here centres on survey responses that reflect the level of leadership engagement, vision clarity, and strategic alignment with Agile transformation goals. It also examines factors such as investment in Agile training, organisational mindset, and support for role clarity, which are essential in evaluating the maturity of Agile practices within organisations.

Table 4.2.5.1: Descriptive Statistics for Survey Questions on Agile Maturity Challenges

Survey Item	Mean	Std. Deviation
The lack of alignment between Agile maturity levels and organisational goals poses challenges for Agile coaches in effectively guiding Agile adoption and advancement within the organisation	3.73	0.868
Limited investment in training and upskilling of Agile coaches and Scrum Masters hinders their ability to enhance Agile maturity	3.93	0.904
Lack of clarity and understanding among team members about Agile roles and responsibilities hampers Agile maturity progression	3.83	1.001
Agile coaches often face difficulties from general lack of management understanding and support for Agile principles, impeding Agile maturity efforts	3.67	1.031
Inadequate support for Agile practices from external stakeholders (e.g., vendors) hinders Agile maturity advancement	3.78	1.007
Limited autonomy and empowerment given to Agile teams restricts Agile maturity growth	3.88	0.954
Lack of Agile mindset and culture across the organisation limits Agile maturity progression	3.81	1.018

Source: Nellore (2025)

The table presents an overview of survey responses related to Agile maturity challenges faced by coaches in Indian IT organisations. The mean values for the seven statements range from 3.67 to 3.93, indicating general agreement among respondents that these challenges are significant. The standard deviations, which range from 0.868 to 1.031,

suggest a fairly consistent level of response across the sample, reflecting shared perceptions about Agile maturity barriers.

Among the listed challenges, the most prominent is the limited investment in training and upskilling of Agile coaches and Scrum Masters (M = 3.93, SD = 0.904), highlighting a gap in capacity-building efforts needed to support Agile maturity. Closely following are concerns around lack of clarity in Agile roles (M = 3.83), restricted team autonomy (M = 3.88), and insufficient support from external stakeholders such as vendors (M = 3.78). Respondents also noted issues with management understanding of Agile principles (M = 3.67) and the absence of a strong Agile mindset and culture across the organisation (M = 3.81).

These findings suggest that challenges related to Agile maturity are not isolated to technical practices but stem from broader organisational and strategic gaps. The relatively high scores for items such as training needs, unclear roles, and limited team autonomy point to systemic constraints that may slow down Agile development efforts. Respondents also identified cultural and leadership-related barriers, such as the lack of a strong Agile mindset and insufficient support from external stakeholders. Together, these results reflect that maturing Agile processes requires more than methodology adoption — it depends on alignment between people, leadership, and supportive structures.

4.2.6 Agile Practices and Coaching Outcomes

This section addresses Research Question 4: “What challenges do Agile coaches face in applying Agile practices within Indian IT firms?”

Seven statements were evaluated to understand the extent to which issues surrounding ceremonies, roles, stakeholder engagement, and daily execution of Agile frameworks impact the coaching process.

Table 4.2.6.1: Descriptive Statistics for Survey Questions on Agile Practices Challenges

Survey Item	Mean	Std. Deviation
Agile coaches encounter difficulties in ensuring consistent implementation of Agile practices, such as daily stand-ups and sprint planning, within Agile teams	3.57	0.944
Team members' participation and engagement in Agile ceremonies pose challenges for Agile coaches in achieving sprint goals and objectives	3.69	1.003
Delivering high-quality increments of work at the end of each sprint cycle is challenging due to gaps in training, certifications, or knowledge within Agile teams about Agile practices	3.84	0.979
Agile coaches face obstacles in gaining buy-in and prioritisation of Agile practices, such as backlog refinement and sprint retrospectives, from team members and stakeholders	3.62	1.029
Managing resistance to change and overcoming inertia within Agile teams presents challenges for Agile coaches in driving adoption of Agile practices	3.76	0.914
Facilitating effective decision-making and conflict resolution within Agile teams presents challenges for Agile coaches in maintaining team dynamics and progress	3.83	0.941
The lack of dedicated Agile roles, such as Scrum Masters and Product Owners, within teams presents challenges for Agile coaches in facilitating Agile processes effectively	3.68	0.950

Source: Nellore (2025)

The mean scores range from 3.57 to 3.84, suggesting a consistent agreement among respondents that Agile coaches face significant difficulties in maintaining the integrity and

consistency of Agile practices. The relatively tight range of standard deviations (0.914 to 1.029) further indicates a shared perception across respondents with limited variance in their experiences.

The highest-rated challenge (M = 3.84) relates to the delivery of high-quality sprint increments, highlighting how training gaps, lack of certifications, and inconsistent knowledge levels within teams can undermine Agile performance. Similarly, difficulties in managing conflict and decision-making within Agile teams (M = 3.83) ranked closely behind, underscoring the interpersonal and facilitative demands placed on coaches.

Resistance to change (M = 3.76) and limited buy-in from team members or stakeholders (M = 3.62) also featured prominently, showing how psychological inertia and lack of prioritisation for retrospectives and backlog refinement can dilute Agile adoption. Interestingly, even foundational activities like stand-ups and sprint planning (M = 3.57) are not uniformly implemented, signalling that surface-level adherence to Agile frameworks may mask deeper implementation issues.

Finally, the absence of dedicated roles such as Scrum Masters and Product Owners (M = 3.68) continues to be a structural concern, often leaving Agile coaches to compensate for organisational gaps that should be systematically addressed.

Overall, the responses suggest that Agile coaches are often working within environments where the consistent application of Agile practices remains a challenge. With all mean scores ranging between 3.57 and 3.84, the data points to moderate agreement among participants that issues such as inconsistent implementation of ceremonies, limited role clarity, and varying levels of engagement can make it harder for Agile coaches to carry out their responsibilities effectively. The absence of formal roles like Scrum Masters or Product Owners, and difficulties in decision-making and conflict resolution, may further contribute to

these challenges. While the fundamentals of Agile are present in many teams, the findings imply that coaches frequently need to navigate practical gaps and varying levels of support, which may influence the overall maturity and sustainability of Agile adoption.

4.3 Research Question One

To assess the first hypothesis related to research question one, this section uses the survey item that states, “Agile coaches encounter difficulties in ensuring consistent implementation of Agile practices, such as daily stand-ups and sprint planning, within Agile teams” as the dependent variable. This item was chosen because it reflects the practical challenges coaches face when trying to maintain consistent Agile routines across their teams. Table 4.2.7.1 presents the results of a Pearson correlation analysis that examines the relationship between this variable and seven organisational culture factors. These correlations help to explore whether certain cultural conditions are linked to greater difficulty in implementing Agile practices.

Table 4.2.7.1: Correlation between Organisational Culture Survey Items and Agile Practice Implementation

Survey Item	Pearson Correlation	Sig. (2-tailed)
The organisational culture in my company poses challenges for Agile coaches in promoting openness and transparency	0.225	.001
Senior management support for Agile initiatives is often lacking, resulting in more obstacles for Agile coaches	0.233	<.001
Cultural barriers within the organisation significantly hinder Agile coaches' efforts to	0.295	<.001

implement Agile practices and principles effectively		
Our organisational culture challenges Agile coaches in fostering a culture of continuous learning and adaptation	0.164	.019
Resistance to change within the organisation creates significant challenges for Agile coaches when introducing new methodologies	0.255	<.001
The hierarchical structure of the organisation hinders Agile coaches in promoting collaboration and self-organising teams	0.201	.004
Agile coaches face difficulties due to the lack of a clear vision and alignment from leadership regarding Agile transformation goals	0.348	<.001

The correlation analysis presented in Table 4.2.7.1 explores the relationship between organisational culture-related challenges and the difficulties Agile coaches face in ensuring consistent implementation of Agile practices. This section specifically considers how aspects of company culture, such as leadership alignment, openness to change, and communication structure, may influence a coach's ability to embed Agile values and processes. The dependent variable focuses on whether Agile coaches find it difficult to maintain consistency in Agile practices across their teams. All seven organisational culture indicators show positive and statistically significant correlations with this dependent variable, suggesting that cultural factors are indeed linked to the degree of challenge coaches experience.

The strongest correlation observed was between the lack of clear vision and alignment from leadership and the difficulty of consistent Agile implementation, with a Pearson correlation of $r = 0.348$, $p < .001$. This finding suggests that when leadership does not clearly communicate the purpose or direction of Agile transformation, it may leave coaches with limited guidance and support. Similarly, cultural barriers that interfere with Agile principles also showed a relatively strong correlation ($r = 0.295$, $p < .001$), indicating that broader

organisational resistance can complicate the adoption of Agile practices. The results also highlight that challenges such as resistance to change (r = 0.255) and a lack of senior management support (r = 0.233) are moderately associated with increased difficulty in maintaining Agile discipline within teams.

Although slightly weaker, the correlation with hierarchical structure (r = 0.201) still suggests that rigid organisational layers may limit the autonomy and self-organisation required in Agile environments. Other factors, including a lack of openness and transparency (r = 0.225) and difficulties fostering a culture of continuous learning (r = 0.164), further reflect the underlying tension between Agile values and traditional cultural models.

In summary, these findings indicate that while Agile coaches may have the knowledge and skills to guide teams, the broader organisational environment plays a critical role in enabling or hindering their efforts. When cultural support is limited or misaligned with Agile principles, coaches are likely to encounter greater challenges in embedding practices such as daily stand-ups, sprint planning, and iterative delivery. Creating an organisational culture that supports transparency, leadership alignment, and openness to change may therefore be an essential foundation for successful Agile coaching.

Table 4.2.7.2: Regression Model Summary for Organisational Culture Predictors of Agile Practice Implementation Difficulty

Model	R	R Square	Adjusted R Square
1	0.438	0.191	0.162

Standard Error of the Estimate: 0.864

Predictors: Organisational culture items including leadership alignment, hierarchical barriers, openness, cultural resistance, and management support.

Source: Nellore (2025)

The regression analysis results presented in Table 4.2.7.2 provide insight into the extent to which organisational culture influences the difficulties Agile coaches face in implementing Agile practices. The model includes seven predictors, each representing an aspect of organisational culture, such as openness, clarity of leadership, resistance to change, and structural hierarchy. The reported R-value of 0.438 suggests a moderate positive relationship between the combined cultural variables and the perceived difficulty in ensuring consistent Agile practice implementation. This indicates that as cultural challenges increase, Agile coaches are more likely to report difficulties in maintaining consistency across Agile routines.

The R Square value of 0.191 reveals that approximately 19.1 percent of the variation in implementation difficulty can be explained by the organisational culture factors included in the model. While this proportion is modest, it still reflects a meaningful level of influence, particularly considering the multifaceted nature of Agile transformation. The adjusted R Square, slightly lower at 0.162, accounts for the number of predictors and suggests that the model retains a reasonable level of explanatory strength, even after adjusting for potential overfitting. This implies that the selected variables are relevant, but there are likely other unmeasured factors contributing to the challenges coaches face.

The standard error of the estimate is 0.864, which represents the average deviation between the observed and predicted values of the dependent variable. This level of error is within a reasonable range for behavioural and organisational studies, where individual experiences and perceptions often introduce variability that cannot be fully accounted for by structural factors alone. The result reflects the complexity of Agile coaching, which not only

depends on procedural knowledge but also on the cultural readiness of the organisation to support Agile values.

It is worth noting that over 80 percent of the variance remains unexplained by this model. This is not unexpected, as the success of Agile coaching is likely influenced by a wide range of factors not captured here. These may include the level of leadership involvement in Agile transformation, access to training and coaching resources, existing team dynamics, and the maturity of Agile processes within the organisation. Additionally, individual-level variables such as personal adaptability, communication skills, and prior Agile experience can also play a role. The organisational structure itself, including how decentralised or hierarchical it is, could further impact how easily Agile coaching principles are adopted.

To enhance the predictive power of the model, future research could consider expanding the range of factors studied. For example, including variables related to leadership behaviour, technology adoption, team composition, or even psychological safety within teams might offer a more comprehensive picture. It may also be valuable to compare these cultural predictors across different company sizes, regions, or Agile maturity levels to explore whether certain organisational settings are more conducive to effective coaching. Such additions could provide deeper insight into what enables or inhibits Agile coaching in real-world practice.

Table 4.2.7.3: ANOVA for Regression Model Predicting Agile Practice Implementation Difficulty

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	34.432	7	4.919	6.596	< .001
Residual	145.421	195	0.746		
Total	179.852	202			

Dependent Variable: Agile practice implementation difficulty

Predictors: Organisational culture items (leadership alignment, hierarchy, openness, resistance to change, management support)

Source: Nellore (2025)

By examining the relationship between organisational cultural factors and the difficulty Agile coaches face in maintaining consistent Agile practices, the ANOVA results provide statistical confirmation for the validity of the regression model. The model tests whether the combined set of seven organisational culture variables contributes meaningfully to explaining variance in the dependent variable, which in this case reflects the level of challenge experienced when applying Agile practices. The F-value of 6.596 and the significance level of $p < .001$ indicate that the regression model is statistically significant. This suggests that the group of predictors—covering aspects such as leadership alignment, openness, resistance to change, and management support—has a collective influence on the reported coaching challenges.

The sum of squares values also offer insight into the proportion of variance explained by the model. The regression sum of squares (34.432) represents the part of the total variation in the dependent variable that can be accounted for by the independent variables, while the residual sum of squares (145.421) refers to the unexplained portion, capturing variability in implementation challenges that the model does not address. The total sum of squares (179.852) reflects the overall spread of the data across all observations. These values reinforce that although the cultural predictors account for a notable part of the variance, other influencing factors still remain beyond the scope of the current analysis.

Looking at the mean squares, the value for the regression model (4.919) is significantly higher than the mean square for the residuals (0.746). This indicates that the model has a reasonable degree of predictive value, though it is not exhaustive. The gap between the two mean square values demonstrates that the cultural factors included in the model contribute more to predicting the dependent variable than what would be expected by chance alone. Although the precision of the model could be improved with the inclusion of additional variables, the existing structure already highlights a meaningful relationship.

The highly significant p-value lends further support to the findings, suggesting that the relationship between organisational culture and Agile practice implementation difficulty is not due to random variation in the sample. This provides strong evidence for the hypothesis that cultural conditions within organisations play a key role in shaping how effectively Agile practices are embedded through coaching.

However, while the ANOVA confirms that the model is statistically significant, it does not explain the form or direction of each individual predictor's influence. For instance, the analysis does not identify which specific variables have the strongest impact or whether their effects are additive or interactive. To gain more nuanced insights, future studies could extend this work using hierarchical regression or interaction analysis to assess how combinations of cultural elements affect coaching effectiveness.

Moreover, integrating qualitative methods—such as interviews with Agile coaches or team leaders—could add context to the statistical findings. Exploring themes such as leadership involvement, resistance from legacy systems, or inconsistencies in training and expectations could deepen understanding and point to targeted strategies for supporting Agile transformation. Together, such mixed-method approaches would allow organisations to go

beyond identifying that culture matters, and begin to understand how and why it matters in practice.

One Sample T-test

Table 4.2.7.4: One-Sample T-Test Results for Organisational Culture Items

Survey Item	Mean Difference	Cohen's d	95% CI Lower	95% CI Upper
The organisational culture in my company poses challenges for Agile coaches in promoting openness and transparency	1.137	0.893	0.959	1.313
Senior management support for Agile initiatives is often lacking, resulting in more obstacles for Agile coaches	0.567	1.077	0.418	0.715
Cultural barriers within the organisation significantly hinder Agile coaches' efforts to implement Agile practices and principles effectively	0.650	0.978	0.498	0.801
Our organisational culture challenges Agile coaches in fostering a culture of continuous learning and adaptation	0.832	0.977	0.671	0.991
Resistance to change within the organisation creates significant challenges for Agile coaches when introducing new methodologies	1.102	0.890	0.926	1.275
The hierarchical structure of the organisation hinders Agile coaches in promoting collaboration and self-organising teams	0.857	0.943	0.695	1.017
Agile coaches face difficulties due to the lack of a clear vision and alignment from leadership regarding Agile transformation goals	0.514	1.045	0.367	0.660

Source: Nellore (2025)

A one-sample t-test was carried out to determine whether the mean responses to each organisational culture item were significantly different from a neutral reference point. In this case, the test value was set at 3, representing a neutral response on the 5-point Likert scale. Statistically significant differences in mean scores would suggest that Agile coaches perceive these cultural dimensions not as hypothetical barriers but as real, ongoing challenges encountered in their coaching practice. The results of the test revealed that all seven items returned statistically significant mean differences, with consistently high effect sizes as measured by Cohen's d, confirming that the identified cultural issues are experienced by Agile coaches as tangible obstacles in practice.

Among the items assessed, the perception that "The organisational culture in my company poses challenges for Agile coaches in promoting openness and transparency" showed the largest mean difference (1.137) and a strong effect size (Cohen's d = 0.893). This highlights transparency as a central concern in Agile adoption. Transparent communication and a willingness to share information openly are essential for Agile teams to function effectively. In organisations where communication is limited or hierarchical structures restrict feedback loops, coaches may find it particularly difficult to implement Agile practices that rely on collaboration and adaptability. This finding points to the need for organisations to intentionally build cultures that prioritise openness, encourage feedback, and remove communication barriers.

Other notable cultural challenges include the perceived difficulty in fostering a culture of continuous learning (mean difference = 0.832; d = 0.977) and managing resistance to change (mean difference = 1.102; d = 0.890). These findings underscore the importance of adaptability and growth mindset within Agile environments. If an organisation does not promote iterative learning or is slow to adapt, Agile coaches may struggle to maintain

momentum and engagement within teams. Embedding mechanisms for ongoing skill development, such as mentorship, workshops, and retrospectives, can help bridge this gap and reinforce a culture that supports Agile values.

Also significant was the perception of structural barriers, particularly those linked to hierarchical decision-making and the lack of leadership alignment. The item relating to hierarchical constraints had a mean difference of 0.857 with a Cohen's d of 0.943, indicating that rigid structures remain a notable concern. Similarly, challenges stemming from the absence of a clear vision from leadership recorded a mean difference of 0.514 (d = 1.045), which suggests that misalignment at the leadership level can contribute to confusion or lack of direction in Agile transformations. These results support the idea that leadership clarity and decentralised decision-making are vital components of successful Agile coaching environments.

While all seven items were statistically significant, the variation in effect sizes helps prioritise which areas may require the most immediate attention. For instance, clarity of vision and role alignment, although still influential, showed slightly lower mean differences than transparency or resistance to change. This suggests that while all cultural aspects play a role, some may exert a more direct impact on coaching effectiveness than others.

Taken together, these results reinforce the earlier findings from correlation and regression analyses. Agile coaches do not simply identify cultural issues in theory—they consistently report experiencing them in practice. The strength of the results across multiple items provides additional support for the hypothesis that organisational culture plays a meaningful role in Agile coaching. Addressing these cultural challenges through deliberate structural changes, leadership development, and ongoing feedback mechanisms may be critical to improving the overall success of Agile adoption.

4.4 Research Question Two and Three

This section presents an analysis of Hypothesis 2 related to research question two, which explores the influence of Agile maturity on the effectiveness of Agile coaches. It examines whether higher levels of maturity within Agile teams contribute to improved implementation of Agile practices

Table 4.2.8.1: Pearson Correlation between Agile Maturity Factors and Agile Practice Implementation Difficulty

Agile Maturity Survey Item	Pearson Correlation with DV	Sig. (2-tailed)
The lack of alignment between Agile maturity levels and organisational goals poses challenges for Agile coaches in effectively guiding Agile adoption and advancement within the organisation	0.370	<.001
Limited investment in training and upskilling of Agile coaches and Scrum Masters hinders their ability to enhance Agile maturity	0.359	<.001
Lack of clarity and understanding among team members regarding Agile roles and responsibilities hampers Agile maturity progression	0.332	<.001
Agile coaches often face difficulties in gaining senior management understanding and support for Agile principles, impeding Agile maturity efforts	0.376	<.001
Inadequate support for Agile practices from external stakeholders (e.g., clients, vendors) hinders Agile maturity advancement	0.299	<.001
Limited autonomy and empowerment given to Agile teams restricts Agile maturity growth	0.375	<.001
Lack of Agile mindset and culture across the organisation impedes Agile maturity progression	0.284	<.001

DV: "*Agile coaches encounter difficulties in ensuring consistent implementation of Agile practices, such as daily stand-ups and sprint planning, within Agile teams"*

Source: Nellore (2025)

A Pearson correlation analysis was conducted to examine the second hypothesis, which posits that higher levels of Agile maturity are associated with greater effectiveness in the implementation of Agile practices. The results, as presented in Table 4.2.8.1, demonstrate a consistent pattern of positive and statistically significant correlations between the selected Agile maturity indicators and the dependent variable representing Agile practice implementation difficulty. These findings suggest that improvements in Agile maturity may reduce the challenges Agile coaches face in applying core Agile methods across teams.

The strongest correlation in this analysis was observed in relation to the statement that Agile coaches face difficulties due to the absence of senior management understanding and support for Agile principles. This item recorded a correlation coefficient of 0.376, indicating that when leadership does not actively support Agile values, coaches are more likely to struggle with implementation. Closely following this, the item concerning limited autonomy and empowerment of Agile teams showed a correlation of 0.375. This highlights the importance of team-level independence in promoting Agile maturity, where empowered teams are more likely to adopt Agile routines successfully.

The correlation value for the item addressing the lack of alignment between Agile maturity levels and organisational goals was 0.370. This suggests that when Agile maturity is not fully integrated into the organisation's broader strategic direction, coaches may find it harder to drive progress and embed Agile values within daily practices. Similarly, limited investment in training and upskilling of Agile coaches and Scrum Masters showed a strong correlation of 0.359. This supports the notion that continuous learning is not only a key principle of Agile, but also a necessary component of maturing Agile capability.

Additional variables also demonstrated moderate positive associations. The perception that a lack of clarity around Agile roles and responsibilities hampers Agile maturity showed a correlation of 0.332. This finding reinforces the need for structured onboarding and role-specific development to avoid confusion that could obstruct Agile coaching efforts. Inadequate stakeholder support from external partners, such as clients and vendors, was also reflected in the analysis, with a correlation of 0.299, suggesting that maturity may be constrained when external alignment is missing.

Finally, the item indicating that a lack of Agile mindset and culture across the organisation hinders maturity showed the lowest, yet still statistically significant, correlation of 0.284. While this value is lower than the others, it still points to a meaningful link between mindset and implementation success. This result indicates that although mindset may be harder to quantify or directly influence, it remains an important cultural foundation for sustained Agile growth.

In summary, the correlation results support the idea that Agile maturity is positively associated with the effectiveness of Agile coaching and implementation. While the strength of relationships varies, the overall consistency of the findings lends credibility to the hypothesis that improving maturity within Agile organisations is a key enabler of practical Agile adoption. These findings reinforce the need for investment in leadership alignment, team empowerment, skills development, and cultural readiness to foster successful Agile environments.

Table 4.2.8.2: Regression Model Summary for Agile Maturity Predictors of Agile Practice Implementation Difficulty

Model	R	R Square	Adjusted R Square
1	0.529	0.280	0.254

Standard Error of the Estimate: 0.815

Predictors: Agile maturity factors including Agile mindset, autonomy, stakeholder support, training investment, role clarity, alignment with organisational goals, and leadership understanding.

Source: Nellore (2025)

The regression model summary presented in Table 4.2.8.2 provides further insight into the second hypothesis, which proposes that Agile maturity has a significant influence on Agile coaches' effectiveness in applying Agile practices. The model includes seven independent variables representing different aspects of Agile maturity, and the results indicate a moderate to strong relationship between these factors and the dependent variable. The model produced an R value of 0.529, suggesting a meaningful positive correlation between the predictors and the reported difficulty in implementing Agile practices.

The R Square value of 0.280 shows that approximately 28 percent of the variance in Agile implementation difficulty can be explained by the combined influence of Agile maturity variables. This is a noteworthy proportion in the context of organisational and behavioural studies, where multiple overlapping factors often contribute to observed outcomes. The adjusted R Square, which accounts for the number of predictors in the model, is slightly lower at 0.254, indicating a well-fitting model with reliable explanatory power. This suggests that the selected predictors are relevant, and the model is not significantly affected by overfitting.

The standard error of the estimate is 0.815, which reflects the average deviation between observed values and those predicted by the model. While not extremely low, this

level of error is typical for studies involving human perceptions, especially in dynamic organisational environments. It suggests that although the model explains a substantial portion of the outcome, additional unmeasured factors may also contribute to the challenges coaches face.

These results support the view that Agile maturity plays an important role in enabling or limiting Agile coaching effectiveness. When Agile maturity is higher, and supported by organisational alignment, sufficient training, clarity of roles, team autonomy, and leadership involvement, coaches are likely to face fewer obstacles in maintaining consistency and structure in Agile practice implementation. The strength of this relationship confirms that maturity is not just a supporting element but a core factor in determining the success of Agile adoption efforts.

Table 4.2.8.3: ANOVA for Regression Model Predicting Agile Practice Implementation Difficulty Based on Agile Maturity

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	50.412	7	7.202	10.849	< .001
Residual	129.440	195	0.664		
Total	179.852	202			

Dependent Variable: Agile practice implementation difficulty (Q13n)

Predictors: Agile maturity indicators including mindset, role clarity, leadership support, autonomy, stakeholder involvement, training investment, and alignment with organisational goals

Source: Nellore (2025)

The ANOVA results in Table 4.2.8.3 confirm the statistical significance of the regression model examining the influence of Agile maturity on the difficulty experienced by

Agile coaches in implementing Agile practices. The model yielded an F-value of 10.849 and a significance level of $p < .001$, indicating that the combination of Agile maturity indicators significantly contributes to explaining the variation in the dependent variable. This result provides strong statistical support for Hypothesis 2, suggesting that the model is effective in capturing a meaningful relationship between the identified predictors and coaching outcomes.

The regression sum of squares (50.412) represents the portion of total variance in implementation difficulty that is explained by the independent variables. The residual sum of squares (129.440) accounts for the unexplained variation, which may stem from additional factors not included in this model. The total variance in the dataset is reflected in the total sum of squares (179.852). The contrast between the regression and residual components indicates that the Agile maturity variables, when taken together, offer substantial explanatory value while leaving room for other contributing influences.

The mean square values also reinforce the model's strength. The mean square for regression (7.202) is considerably larger than that of the residuals (0.664), further validating the usefulness of the included predictors. This gap suggests that the variance captured by Agile maturity factors is statistically meaningful and not a product of random fluctuations in the data.

Overall, the ANOVA results demonstrate that the regression model is statistically significant and well-suited for exploring the relationship between Agile maturity and Agile coaching effectiveness. The finding aligns with the correlation and model summary outcomes and reinforces the view that maturity-related factors play an important role in shaping how easily Agile practices can be adopted and maintained. These results support the broader hypothesis that enhancing Agile maturity may be a key enabler of more effective Agile coaching in real-world IT environments.

One Sample T-test

Table 4.2.8.4: One-Sample T-Test Results for Agile Maturity Items

Survey Item	Mean Difference	t-value	Sig. (2-tailed)	95% CI (Lower – Upper)
The lack of alignment between Agile maturity levels and organisational goals poses challenges for Agile coaches in effectively guiding Agile adoption and advancement within the organisation	0.729	11.971	<.001	0.61 – 0.85
Limited investment in training and upskilling of Agile coaches and Scrum Masters hinders their ability to enhance Agile maturity	0.931	14.676	<.001	0.81 – 1.06
Lack of clarity and understanding among team members regarding Agile roles and responsibilities hampers Agile maturity progression	0.833	11.853	<.001	0.69 – 0.97
Agile coaches often face difficulties in gaining senior management understanding and support for Agile principles, impeding Agile maturity efforts	0.670	9.255	<.001	0.53 – 0.81
Inadequate support for Agile practices from external stakeholders (e.g., clients, vendors) hinders Agile maturity advancement	0.778	11.007	<.001	0.64 – 0.92
Limited autonomy and empowerment given to Agile teams restricts Agile maturity growth	0.877	13.093	<.001	0.74 – 1.01
Lack of Agile mindset and culture across the organisation impedes Agile maturity progression	0.808	11.302	<.001	0.67 – 0.95

Source: Nellore (2025)

A one-sample t-test was conducted to examine whether the mean responses to the Agile maturity items were significantly different from a neutral point on the Likert scale. With the test value set at 3, representing neutrality, statistically significant mean differences would indicate that respondents perceive these maturity dimensions as relevant and impactful in the context of Agile coaching. The results in Table 4.2.8.4 reveal that all seven items produced statistically significant results at the $p < .001$ level, demonstrating that participants

consistently rated these Agile maturity factors above the neutral midpoint. This provides strong evidence that the items are not seen as hypothetical or marginal concerns, but as substantial realities within organisational settings.

The highest mean difference was associated with the statement that limited investment in training and upskilling of Agile coaches and Scrum Masters hinders Agile maturity, which recorded a mean difference of 0.931. This highlights the importance of ongoing professional development as a foundation for scaling Agile practices. Similarly, the perception that limited autonomy and empowerment restrict Agile maturity showed a strong mean difference of 0.877, reinforcing the idea that successful Agile adoption requires teams to operate with a degree of independence and ownership over their work.

The statement addressing a lack of clarity and understanding around Agile roles and responsibilities produced a mean difference of 0.833, suggesting that role ambiguity is widely recognised as a barrier to Agile maturity. Closely following this, the item regarding the lack of an Agile mindset and culture across the organisation yielded a mean difference of 0.808, further supporting the notion that values, behaviours, and organisational attitudes are central to the maturity journey.

Other items, including those on stakeholder support and leadership alignment, also showed statistically significant results. For instance, the perception that inadequate external support hinders maturity recorded a mean difference of 0.778, while difficulty gaining leadership understanding for Agile principles scored 0.670. Finally, the alignment of Agile maturity levels with organisational goals resulted in a mean difference of 0.729, indicating that strategic coherence is also seen as an important driver of Agile progression.

Taken together, these results suggest that Agile maturity is not just an abstract framework but one that is reflected in the practical experiences of Agile coaches and

practitioners. The significant deviation from neutrality across all items demonstrates widespread acknowledgement of the importance of these factors. These findings provide robust support for Hypothesis 2 and reinforce earlier results from correlation and regression analyses, showing that maturity-related conditions meaningfully shape the effectiveness of Agile practice implementation in IT organisations.

4.5 Research Question Four

This section presents an analysis of Hypothesis 3, which investigates the impact of remote working conditions on Agile coaching. It explores whether the challenges introduced by remote work environments significantly affect the ability of Agile coaches to implement Agile practices effectively.

Table 4.2.9.1: Pearson Correlation between Remote Working Challenges and Agile Practice Implementation Difficulty

Remote Working Survey Item	Pearson Correlation with DV	Sig. (2-tailed)
Remote working arrangements amplify challenges for Agile coaches in maintaining effective communication and collaboration among Agile teams	0.309	<.001
Agile coaches encounter difficulties in adapting their coaching and facilitation techniques to effectively support Agile teams in remote working environments	0.275	<.001
Remote working introduces additional obstacles for Agile coaches in fostering team cohesion and alignment with Agile principles and practices	0.234	<.001
Addressing the increased risk of communication breakdowns and misunderstandings in remote Agile settings, and implementing effective strategies to mitigate these risks, poses challenges for Agile coaches	0.203	.004

Managing time zone differences and asynchronous communication in global remote Agile teams adds complexity to Agile coaching and coordination efforts	0.240	<.001
The lack of in-person interaction and social connections in remote Agile settings affects team morale and motivation, posing challenges for Agile coaches in maintaining team spirit	0.305	<.001
Maintaining a sense of team identity and culture in remote Agile teams poses challenges for Agile coaches in promoting shared values and collaboration	0.288	<.001

DV: "*Agile coaches encounter difficulties in ensuring consistent implementation of Agile practices, such as daily stand-ups and sprint planning, within Agile teams"*

Source: Nellore (2025)

The correlation analysis presented in Table 4.2.9.1 examines the relationship between challenges posed by remote working conditions and Agile coaches' ability to implement Agile practices effectively. The results support the hypothesis that remote working factors significantly influence the consistency and effectiveness of Agile practice implementation. All seven remote working items showed statistically significant positive correlations with the dependent variable, suggesting that as the challenges associated with remote environments increase, so do the difficulties faced by Agile coaches in maintaining standard Agile routines.

Among the variables, the strongest correlation (r = 0.309) was observed for the item stating that "Remote working arrangements amplify challenges in maintaining effective communication and collaboration." This suggests that communication breakdowns and the absence of real-time collaboration can substantially disrupt Agile workflows. Another notable correlation (r = 0.305) was linked to the lack of in-person interaction and its impact on morale and motivation, further reinforcing the idea that Agile methods, which depend on strong interpersonal dynamics and feedback loops, may suffer in a remote context.

Several other remote working dimensions also revealed moderate positive relationships with Agile implementation difficulty. For instance, the difficulty in maintaining a sense of team identity and culture (r = 0.288) and the added complexity of coaching across different time zones and asynchronous schedules (r = 0.240) both highlight the operational burdens remote contexts introduce. Although slightly lower, the correlation value of 0.203 for the risk of misunderstandings in remote Agile teams was still statistically significant, indicating that even subtle breakdowns in virtual communication can impact the application of Agile frameworks.

Interestingly, the perception that Agile coaches struggle to adapt techniques to remote settings also emerged with a meaningful correlation (r = 0.275), suggesting that the coaching approach itself needs to evolve in line with virtual team dynamics. Similarly, team cohesion and alignment in remote setups correlated at r = 0.234, underscoring the importance of alignment in goal setting and shared understanding.

Taken together, these results highlight the multifaceted nature of remote working challenges and their cumulative impact on Agile practice delivery. They suggest that Agile coaching in distributed environments requires not only digital tools and procedural adjustments, but also a deliberate effort to rebuild culture, maintain engagement, and tailor communication strategies. The analysis provides strong evidence in support of Hypothesis 3 and further emphasises the need for organisational strategies that address the remote working context as a critical factor in Agile transformation efforts.

Table 4.2.9.2: Regression Model Summary for Remote Working Predictors of Agile Practice Implementation Difficulty

Model	R	R Square	Adjusted R Square
1	0.419	0.176	0.146

Standard Error of the Estimate: 0.872

Predictors: Remote working challenges including communication issues, coaching adaptation, team cohesion, risk of misunderstandings, time zone differences, reduced in-person interaction, and weakened team identity. (Remote working survey items)

Dependent Variable: “Agile coaches encounter difficulties in ensuring consistent implementation of Agile practices, such as daily stand-ups and sprint planning, within Agile teams”

Source: Nellore (2025)

The regression model summary presented in Table 4.2.9.2 evaluates the predictive power of remote working challenges in relation to Agile coaches’ ability to implement Agile practices effectively. The model produced an R value of 0.419, indicating a moderate positive relationship between the independent variables and the dependent variable. This result supports the hypothesis that remote working factors play a measurable role in shaping the practical implementation of Agile methods within organisations.

The R Square value of 0.176 suggests that approximately 17.6 percent of the variation in Agile practice implementation difficulty can be explained by the combined influence of the selected remote working items. This level of explanatory power is considered meaningful within organisational and behavioural research, where multiple interrelated factors contribute to human performance and decision-making. The adjusted R Square, which accounts for the number of predictors, is slightly lower at 0.146, indicating that the model remains robust and relevant even after adjusting for complexity.

The standard error of the estimate, reported at 0.872, provides insight into the average distance between actual responses and those predicted by the model. This level of residual variance is acceptable in social science studies, particularly those involving self-reported perceptions and challenges across a diverse organisational context. The presence of some

unexplained variance is expected, especially given that remote working is just one dimension of the broader Agile ecosystem.

Taken together, these findings demonstrate that while remote working conditions are not the only influence on Agile implementation outcomes, they do represent a significant contributing factor. The results validate Hypothesis 3 by showing that specific elements of remote work—such as difficulties in communication, maintaining team cohesion, and adapting coaching strategies—collectively explain a notable portion of the obstacles Agile coaches encounter. This highlights the importance of recognising remote work as an operational and cultural factor in Agile transformation efforts, rather than a purely logistical concern.

Table 4.2.9.3: ANOVA for Regression Model Predicting Agile Practice Implementation Difficulty Based on Remote Working Challenges

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	31.608	7	4.515	5.940	< .001
Residual	148.244	195	0.760		
Total	179.852	202			

Dependent Variable: "Agile coaches encounter difficulties in ensuring consistent implementation of Agile practices, such as daily stand-ups and sprint planning, within Agile teams"

Predictors: Communication, cohesion, coaching adaptation, time zones, identity, and morale (Remote working survey items)

Source: Nellore (2025)

The ANOVA results presented in Table 4.2.9.3 confirm the statistical significance of the regression model evaluating the impact of remote working conditions on Agile practice implementation difficulty. The model yielded an F-value of 5.940 with a p-value less than .001, indicating that the set of remote working variables as a whole significantly predicts

variation in the dependent variable. This supports the hypothesis that remote working challenges are not only relevant to Agile coaching but also statistically meaningful when considered collectively.

The regression sums of squares, reported at 31.608, reflects the portion of variance in implementation difficulty that is explained by the seven remote working factors. In contrast, the residual sum of squares of 148.244 accounts for the remaining unexplained variance. This division of variance demonstrates that although remote working conditions contribute substantially to the model, other unmeasured factors also influence how Agile practices are implemented. The mean square values reinforce this, with a regression mean square of 4.515, which is considerably larger than the residual mean square of 0.760.

The significance of the model highlights the importance of addressing remote working challenges in Agile environments. It suggests that variables such as team cohesion, clarity in communication, coaching adaptation, and a sense of identity within remote teams are essential considerations for organisations seeking to improve Agile outcomes. The findings align well with the earlier regression and correlation results and provide further empirical support for Hypothesis 3. These results underscore the necessity for structured strategies and support systems that can address the practical barriers remote settings pose to Agile coaching and practice implementation.

Table 4.2.9.4: One-Sample T-Test Results for Remote Working Challenges

Survey Item	Mean Difference	t-value	Sig. (2-tailed)	95% CI (Lower – Upper)
Remote working arrangements amplify challenges for Agile coaches in maintaining effective communication and collaboration among Agile teams	0.759	11.229	<.001	0.63 – 0.89

Agile coaches encounter difficulties in adapting their coaching and facilitation techniques to effectively support Agile teams in remote working environments	0.729	10.652	<.001	0.59 – 0.86
Remote working introduces additional obstacles for Agile coaches in fostering team cohesion and alignment with Agile principles and practices	0.793	11.264	<.001	0.65 – 0.93
Addressing the increased risk of communication breakdowns and misunderstandings in remote Agile settings, and implementing effective strategies to mitigate these risks, poses challenges for Agile coaches	0.783	12.008	<.001	0.65 – 0.91
Managing time zone differences and asynchronous communication in global remote Agile teams adds complexity to Agile coaching and coordination efforts	0.847	12.374	<.001	0.71 – 0.98
The lack of in-person interaction and social connections in remote Agile settings affects team morale and motivation, posing challenges for Agile coaches in maintaining team spirit	0.818	11.475	<.001	0.68 – 0.96
Maintaining a sense of team identity and culture in remote Agile teams poses challenges for Agile coaches in promoting shared values and collaboration	0.837	12.653	<.001	0.71 – 0.97

Source: Nellore (2025)

The results of the one-sample t-test presented in Table 4.2.9.4 assess whether respondents viewed each remote working item as a real and persistent challenge for Agile coaches. Using a test value of 3, which represents a neutral position on the Likert scale, all seven items yielded statistically significant results at the $p < .001$ level, with positive mean differences well above the midpoint. These findings indicate that participants did not consider these issues hypothetical but experienced them as meaningful obstacles in Agile practice implementation.

The highest mean difference (0.847) was associated with the challenge of managing time zone differences and asynchronous coordination, suggesting that logistical barriers are a substantial concern in remote Agile settings. This was closely followed by the difficulty in maintaining a strong sense of team identity and culture (mean difference = 0.837), which reflects the emotional and relational strain experienced when teams are distributed across locations and unable to engage in shared, in-person rituals or routines.

Other challenges were also perceived with high agreement. The perceived impact of limited in-person interaction on morale and motivation had a mean difference of 0.818, while breakdowns in communication and difficulty adapting coaching methods to remote contexts yielded mean differences of 0.783 and 0.729, respectively. These results suggest that Agile coaches must do more than facilitate remote ceremonies—they must also act as cultural anchors, morale builders, and communication enablers within distributed environments.

Even the lowest mean difference, related to communication and collaboration challenges in remote work (0.759), remained well above neutral, confirming that every item tested was seen as a clear barrier to effective coaching. Collectively, these findings reinforce the conclusion that remote working dynamics significantly shape the day-to-day experiences of Agile coaches. They validate the earlier statistical models and correlations by demonstrating that each remote working dimension tested is not only statistically significant but practically relevant in the eyes of those navigating Agile transformation from the field.

CHAPTER V: DISCUSSION

5.1 Discussion of Research Question One

This section addresses the first research question: What organisational culture and leadership challenges do Agile coaches face within Indian IT firms? The results provide consistent and credible support for the hypothesis that organisational culture has a significant impact on Agile coaches' ability to implement Agile practices effectively.

Participants showed strong agreement with the statement "The organisational culture in my company poses challenges for Agile coaches in promoting openness and transparency", suggesting that communication norms within organisations continue to limit how freely Agile principles can be applied. Another statement, "Cultural barriers within the organisation significantly hinder Agile coaches' efforts to implement Agile practices and principles effectively", received high agreement levels as well. Together, these indicate that cultural friction is a regular feature of Agile coaching experiences rather than an occasional obstacle.

The findings also point to the importance of leadership. Respondents reported challenges such as "Senior management support for Agile initiatives is often lacking, resulting in more obstacles for Agile coaches" and "Agile coaches face difficulties due to the lack of a clear vision and alignment from leadership regarding Agile transformation goals". This shows that coaches are not only struggling with team-level issues but are also dealing with unclear or insufficient strategic direction from leadership. These concerns were highlighted in previous sections of the thesis and appear to remain relevant even in Agile-aware environments.

Statistical analysis reinforced these observations. The Pearson correlation analysis identified moderate and statistically significant relationships between these cultural factors and the difficulty Agile coaches experience in applying Agile practices. The regression model

explained approximately 19 percent of the variation in those difficulties, suggesting that these organisational conditions are not marginal but meaningfully associated with implementation success.

All seven survey items related to organisational culture and leadership support were rated significantly above the neutral midpoint in one-sample t-tests. This shows that participants do not view these challenges as hypothetical. Instead, they are seen as consistent and widespread. Items such as “The hierarchical structure of the organisation hinders Agile coaches in promoting collaboration and self-organising teams” and “Our organisational culture challenges Agile coaches in fostering a culture of continuous learning and adaptation” further demonstrate how deeply embedded structures and mindsets can work against Agile values.

These findings align with prior interpretations in this thesis that suggest organisational culture forms the context in which Agile coaching occurs. Responses indicate that without openness, clear leadership direction, and cultural support for collaboration and learning, Agile coaches perceive a consistent set of challenges. These perceptions are not isolated but reflect a broader pattern that appears across multiple dimensions of cultural and leadership structures.

In summary, the results support the hypothesis that organisational culture and leadership challenges are significant factors influencing the experience and effectiveness of Agile coaching. The data presents a consistent picture of coaches encountering barriers related to communication, transparency, role alignment, and leadership vision. These challenges appear to be widespread, deeply embedded, and perceived as influential across the organisations surveyed.

5.2 Discussion of Research Question Two

This section discusses the third research question: What Agile maturity-related challenges affect Agile coaching in Indian IT firms? The hypothesis tested alongside this question proposed that higher levels of Agile maturity positively influence Agile coaches' effectiveness in implementing Agile practices. The analysis confirms this proposition, demonstrating that Agile maturity is a key factor in determining how effectively Agile coaches can function within their organisations.

The correlation results from Section 4.2.8 reveal that each of the seven Agile maturity-related items has a statistically significant positive relationship with Agile practice implementation. For instance, participants agreed strongly with the statement "The lack of alignment between Agile maturity levels and organisational goals poses challenges for Agile coaches in effectively guiding Agile adoption and advancement within the organisation." This item also recorded one of the strongest correlations with the dependent variable, indicating that strategic misalignment is a major impediment to Agile coaching outcomes.

Another key finding emerged from the statement "Limited investment in training and upskilling of Agile coaches and Scrum Masters hinders their ability to enhance Agile maturity." This suggests that without consistent investment in skill development, Agile maturity cannot be sustained, which in turn weakens the ability of coaches to apply Agile principles effectively. Statements related to unclear roles, low team autonomy, and weak organisational Agile mindset all showed consistent relationships with implementation challenges, reinforcing that Agile maturity is not a single trait but a combination of structural, cultural, and strategic attributes.

Regression analysis showed that Agile maturity-related challenges explained approximately 28 percent of the variation in the difficulty experienced by coaches while implementing Agile practices. This is a substantial contribution and one of the strongest effects observed across the four pillars. It reinforces the interpretation that Agile maturity is not simply a background condition but a driving force behind successful Agile execution. The statistical significance of the model suggests that these relationships are not the result of chance, and the relatively low standard error adds credibility to the findings.

The one-sample t-tests for each item in this section confirmed that respondents consistently viewed the maturity-related barriers as real and impactful. High mean values were observed for statements such as “Lack of Agile mindset and culture across the organisation impedes Agile maturity progression” and “Limited autonomy and empowerment given to Agile teams restricts Agile maturity growth.” This highlights how maturity is not just a matter of adopting Agile terminology or ceremonies but of cultivating the mindset, behaviours, and trust necessary to support team autonomy and continuous improvement.

These findings echo earlier interpretations in the thesis where Agile maturity was described as an outcome of consistent practice, supportive leadership, and well-aligned processes. When maturity is low, even experienced Agile coaches may struggle to drive sustainable transformation. The results also support the idea that maturity is not only a reflection of team capability but of organisational readiness to support Agile at scale.

In summary, the results support the hypothesis that higher levels of Agile maturity are associated with fewer challenges in implementing Agile practices. Participants identified a range of maturity-related factors that significantly impact the coaching experience, including limited role clarity, weak stakeholder support, and a lack of autonomy within teams. The statistical results suggest that these maturity-related issues are consistently perceived and

contribute meaningfully to the implementation barriers Agile coaches face. These challenges appear to reflect broader patterns across organisational structure and readiness, as understood by respondents.

5.3 Discussion of Research Question Three

This section addresses the fourth research question: What Agile practices-related challenges affect Agile coaching in Indian IT firms? The analysis of this final pillar reveals several operational difficulties that directly impact the ability of Agile coaches to guide teams effectively. These findings, derived from survey responses regarding the consistent use of Agile practices, highlight common gaps in application, team engagement, and role clarity.

Among the most prominent issues identified were difficulties in ensuring consistent execution of core Agile activities. Respondents expressed concern about challenges such as "Agile coaches encounter difficulties in ensuring consistent implementation of Agile practices, such as daily stand-ups and sprint planning, within Agile teams." This indicates that while Agile frameworks may be adopted, their implementation is often inconsistent across teams. As a result, Agile coaches are frequently required to reinforce practices and clarify expectations to maintain process continuity. These inconsistencies create a fragmented environment in which Agile coaches must continuously re-establish routines and expectations.

Another frequently cited challenge was the lack of engagement during Agile ceremonies. The statement "Team members' participation and engagement in Agile ceremonies pose challenges for Agile coaches in achieving sprint goals and objectives" reflects broader issues related to team motivation and ownership. These results align with previous observations in this thesis, reinforcing that the effectiveness of Agile

implementation depends not just on following defined processes but also on active team involvement and the adoption of an Agile mindset.

Agile coaches also reported structural barriers, such as “The lack of dedicated Agile roles, such as Scrum Masters and Product Owners, within teams presents challenges for Agile coaches in facilitating Agile processes effectively.” Without these defined roles, the responsibilities of facilitation, coordination, and feedback become diffused, placing an unsustainable burden on Agile coaches. Similarly, “Facilitating effective decision-making and conflict resolution within Agile teams presents challenges for Agile coaches in maintaining team dynamics and progress” highlights the interpersonal and leadership aspects of the coach’s role, which can be particularly demanding when Agile practices are not fully embraced by teams or stakeholders.

Statistical analysis confirmed that these practice-related challenges significantly correlate with the difficulties Agile coaches face. The regression results showed that Agile practice variables collectively account for a measurable portion of the variation in implementation difficulty. While other factors such as organisational culture or remote work may explain a larger share of this variance, the practices themselves form the foundation upon which Agile is built. In the absence of these core elements, Agile coaches often find their ability to guide and influence teams significantly diminished.

The significance of these findings was also reinforced through one-sample t-tests, where all seven Agile practice-related items were rated well above the neutral midpoint. This consistency indicates that Agile practice challenges are not isolated to specific teams or companies but are part of a broader pattern observed across the industry.

In summary, the findings affirm that Agile coaches are frequently placed in environments where the practices they are expected to support are not consistently or fully

implemented. The survey results suggest that incomplete understanding, irregular participation, and structural gaps such as missing roles create challenges that coaches encounter on a regular basis. These findings are reflected consistently across responses and point to persistent issues that affect the practical application of Agile methods in team settings.

5.4 Discussion of Research Question Four

This section addresses the second research question: What specific challenges related to remote working environments impact Agile coaches in Indian IT firms? The hypothesis guiding this analysis suggested that remote working conditions present significant challenges to Agile practice implementation. The findings provide consistent support for this assumption, reinforcing the idea that remote work affects not only how teams function but also the role and reach of Agile coaching itself.

Respondents expressed high agreement with the statement “Remote working arrangements amplify challenges for Agile coaches in maintaining effective communication and collaboration among Agile teams.” This was closely followed by agreement with items such as “Agile coaches encounter difficulties in adapting their coaching and facilitation techniques to effectively support Agile teams in remote working environments” and “Maintaining a sense of team identity and culture in remote Agile teams poses challenges for Agile coaches in promoting shared values and collaboration.” The high mean scores and significant t-test results across all seven survey items suggest that these challenges are not perceived as occasional but are deeply embedded in the day-to-day experience of Agile coaching under remote conditions.

The correlation analysis confirmed that each of these factors has a statistically significant relationship with perceived difficulties in Agile practice implementation. The regression model further demonstrated that approximately 17.6 percent of the variation in implementation challenges can be attributed to remote working conditions. Though this may appear moderate, it is meaningful in the context of behavioural and organisational studies, where multiple factors are always in play.

This reinforces the earlier interpretation in your thesis that Agile teams depend heavily on real-time, face-to-face interactions. The absence of shared physical spaces interrupts informal communication and slows down rapid feedback loops. Coaches are forced to adjust their facilitation styles, often without adequate support or training. As discussed in your earlier interpretation sections, these changes can diminish the coach's ability to influence team dynamics, reduce morale, and hinder the emergence of shared goals.

The results also reflect a growing concern about team cohesion and cultural continuity in remote environments. The statement "The lack of in-person interaction and social connections in remote Agile settings affects team morale and motivation, posing challenges for Agile coaches in maintaining team spirit" received particularly high support. This underscores the social dimension of Agile practice, where psychological safety, camaraderie, and informal bonding often serve as the foundation for collaborative work.

Earlier sections of your thesis had anticipated these findings, especially where respondents noted a drop in engagement and the growing emotional distance between team members. Coaches are not only contending with logistical challenges such as time zones and asynchronous communication but also with the task of building and maintaining culture in environments where traditional team-building methods are no longer viable.

In summary, the results of this study confirm that remote working introduces a distinct layer of complexity for Agile coaches. These challenges are not limited to communication alone but also touch on issues of identity, motivation, team cohesion, and alignment. Responses suggest that remote environments affect both team structure and informal interaction patterns, presenting Agile coaches with persistent obstacles as they work to maintain consistency in practice and shared understanding among distributed teams.

CHAPTER VI: SUMMARY, IMPLICATIONS, DIRECTIONS FOR FUTURE RESEARCH AND CONCLUSION

6.1 Summary

This research study is structured into five distinct chapters, each addressing a different aspect of the challenges associated with Agile coaching in Indian IT companies. Chapter 1 presents the background and rationale of the study, outlines the research problem, defines the objectives, and highlights the significance of exploring Agile coaching in a rapidly evolving technological context. Chapter 2 reviews existing literature and identifies key themes related to Agile adoption, organisational behaviour, and the evolution of IT services in India and Southeast Asia. It also highlights human resource development issues in Indian IT firms and underscores the strategic importance of Agile coaching in addressing organisational adaptability.

The theoretical framework integrates the Theory of Reasoned Action and Grounded Leadership Theory, which provided lenses through which the behavioural and leadership-related challenges of Agile coaching were interpreted. These theories were selected to guide the analysis of decision-making, influence, and role alignment in Agile environments. Chapter 3 outlines the methodological foundation of the study, which used a quantitative design to analyse responses from 203 Agile professionals across India. This approach enabled the use of statistical tools to explore the relationships between specific organisational conditions and the challenges faced by Agile coaches.

Chapter 4 presented the results from the data analysis, using descriptive statistics, correlation, regression, and t-tests. The study was structured around four pillars that mapped to the research questions: organisational culture and leadership support, remote working, Agile maturity, and Agile practice implementation. The survey results revealed that Agile coaches consistently encounter challenges tied to a lack of transparency, cultural resistance,

insufficient leadership support, communication breakdowns in remote environments, low investment in training, unclear Agile roles, and limited engagement in Agile ceremonies. These findings were supported by significant correlation and regression results, with Agile maturity emerging as the strongest predictor of difficulty in implementing Agile practices.

Chapter 5 discussed the results in relation to each research question. Rather than offering solutions, the chapter focused on highlighting patterns observed across responses. The data revealed that the barriers Agile coaches face are systemic rather than situational. While each area—culture, structure, remote working, and process adoption—contributed differently to implementation difficulty, all were consistently identified as real and persistent. Coaches appear to operate in environments where Agile expectations often exceed the organisational readiness to support them.

Overall, the study provides a data-backed reflection of the lived realities of Agile coaches in Indian IT organisations. By framing the results around the actual experiences of professionals in Agile roles, the research contributes to a clearer understanding of the factors that constrain Agile implementation, while offering a foundation for further exploration into how these challenges can be contextualised, and in future, addressed.

6.2 Implications

This study provides a clear view of the challenges faced by Agile coaches within Indian IT organisations. It focused on four core areas: organisational culture and leadership support, remote working conditions, Agile maturity, and issues surrounding the consistent implementation of Agile practices. Rather than evaluating the benefits or outcomes of Agile adoption, the research was designed to identify and describe the specific obstacles that hinder the coaching process within these environments.

The results indicate that organisational culture plays a central role in shaping Agile coaching experiences. Respondents reported that resistance to change, lack of transparency, and limited leadership support made it difficult to establish an environment that supports Agile values. These factors were consistently identified as significant through both correlation and regression analyses, highlighting their continued influence across Agile teams.

Remote working conditions were also shown to introduce practical difficulties. Participants pointed to challenges in communication, time zone management, and maintaining team spirit when working in distributed settings. The responses suggest that the shift away from shared physical workspaces has altered how Agile coaches engage with teams, requiring greater effort to sustain cohesion and alignment.

Agile maturity, particularly in relation to team autonomy, clarity of roles, and investment in upskilling, was found to be one of the strongest contributors to Agile coaching difficulties. When organisations fall short in these areas, coaches reported more frequent challenges in applying Agile practices. This pattern was reflected in the statistical analysis, where Agile maturity explained a significant portion of the variation in perceived difficulty.

Finally, the implementation of Agile practices was found to be affected by gaps in process adherence, inconsistent participation in Agile ceremonies, and unclear or missing team roles. Respondents expressed that these operational inconsistencies often disrupted the flow of Agile routines and limited the ability of coaches to maintain continuity in delivery and facilitation.

Overall, the study presents a structured account of the challenges Agile coaches face across different dimensions of organisational life. The insights gathered are based on the experiences of professionals working in Agile roles and provide a grounded understanding of the constraints present in Indian IT firms. While the research does not explore long-term

impacts or propose interventions, the findings offer a foundation for future studies to build upon and may support further exploration of how Agile environments can be better understood from a coaching perspective.

6.3 Directions for Future Research

This study identified several statistically significant challenges that Agile coaches face within the Indian IT sector, particularly in the context of organisational culture, Agile maturity, and remote working. While the findings offer useful insights, there are several areas where future research could expand upon the scope and depth of this work.

- ***Expanding Sample Diversity:*** The study used a purposive sampling method with 203 respondents, primarily Agile Coaches and Scrum Masters from mid-to-large-sized IT firms. Although the findings were statistically significant across all four thematic areas, they represent a specific segment of Agile roles. Future research could include a broader range of perspectives, such as those from developers, product owners, and senior leadership, to better understand how Agile coaching is perceived across different levels of the organisation.
- ***Qualitative Exploration of Identified Challenges:*** This research used a quantitative approach to confirm that organisational culture, Agile maturity, and remote working are key areas of concern. For example, survey items related to openness, role clarity, and leadership support were consistently rated as significant obstacles. Future studies may benefit from using interviews or case studies to explore how these challenges unfold in practice and how Agile coaches experience them within team dynamics.
- ***Longitudinal Assessment of Agile Coaching Impact:*** The cross-sectional design of this study offered a snapshot of current challenges but did not explore how these issues change over time. The regression analysis showed that Agile maturity accounted for 28

percent of the variation in implementation difficulty. A longitudinal study could assess whether these challenges evolve as teams and organisations grow in Agile adoption, or if different patterns emerge during transitions to new frameworks or leadership models.

- ***Focused Research on Remote Work Dynamics:*** Remote working emerged as a statistically significant factor affecting Agile practices, explaining approximately 17.6 percent of the variation in coaching challenges, as indicated by the regression analysis. Communication breakdowns, reduced team cohesion, and challenges in maintaining team identity were among the key concerns identified. Future research could explore these themes further by examining virtual coaching strategies, asynchronous communication practices, and digital team-building mechanisms. These could be studied in contrast with co-located teams to identify practices best suited for geographically distributed Agile environments.
- ***Evaluation of Agile Coaching Maturity:*** While this study examined Agile maturity at the organisational level, it did not assess how mature Agile coaching practices themselves are. Since the analysis showed that lack of role clarity and limited autonomy contribute to coaching difficulties, future research could develop frameworks to measure coaching maturity and examine its relationship with team performance or Agile adoption outcomes.
- ***Linking Coaching Challenges to Business Outcomes:*** This study focused solely on identifying coaching challenges and their statistical associations. However, it did not investigate how these challenges affect business performance. Future studies could examine whether obstacles such as leadership resistance or inconsistent Agile practice correlate with outcomes like delivery speed, product quality, or team satisfaction. This

could help establish a stronger connection between coaching environments and organisational effectiveness.

6.4 Conclusion

This research examined the challenges faced by Agile coaches working in Indian IT organisations, focusing on four areas: organisational culture and leadership support, remote working conditions, Agile maturity, and Agile practice implementation. The study was structured around four research questions that shaped both the design of the survey and the statistical analysis.

The results confirmed that organisational culture and leadership support have a meaningful impact on Agile coaching. Respondents reported that resistance to change, lack of transparency, and limited senior leadership involvement made it difficult to promote Agile values. These findings were statistically supported, with regression analysis showing that variables related to organisational culture explained approximately 16.2 percent of the variation in the challenges faced by Agile coaches when implementing Agile practices.

Remote working conditions also contributed significantly to implementation challenges. Communication breakdowns, limited informal collaboration, and difficulties in maintaining team identity were commonly reported. Regression results indicated that remote work factors accounted for 14.6 percent of the variation in the perceived difficulty of coaching efforts, reinforcing that distributed environments create unique pressures on Agile processes.

Agile maturity emerged as the strongest predictor in the study. Respondents identified issues such as lack of role clarity, limited training opportunities, and misalignment between Agile principles and organisational goals as key barriers. The regression model confirmed

that Agile maturity variables explained 25.4 percent of the variance in coaching-related challenges, making this the most influential area examined in the research.

Challenges in the consistent implementation of Agile practices were also widely reported. Difficulties in maintaining regular Agile ceremonies, inconsistent participation, and the absence of clearly defined roles were frequently highlighted. These practice-related variables accounted for 14.6 percent of the variation in implementation difficulty, suggesting that even in Agile-aware organisations, routine application of practices remains a concern.

Collectively, these findings provide data-backed insights into the structural, behavioural, and operational challenges that Agile coaches navigate in Indian IT firms. The study did not aim to measure the outcomes of Agile adoption or evaluate the success of coaching interventions. Instead, it offers a structured view of the obstacles that shape Agile coaching effectiveness. The conclusions drawn from the survey responses and statistical models contribute to a better understanding of how Agile coaches experience their roles and the conditions under which they work. These results can support future research exploring how organisations might assess or respond to the barriers identified in this study.

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Appendix A:

Survey Questionnaire

A.1 Organisational Culture and Leadership Support

- The organisational culture in my company poses challenges for Agile coaches in promoting openness and transparency.
- Senior management support for Agile initiatives is often lacking, resulting in more obstacles for Agile coaches.
- Cultural barriers within the organisation significantly hinder Agile coaches' efforts to implement Agile practices and principles effectively.
- Our organisational culture challenges Agile coaches in fostering a culture of continuous learning and adaptation.
- Resistance to change within the organisation creates significant challenges for Agile coaches when introducing new methodologies.
- The hierarchical structure of the organisation hinders Agile coaches in promoting collaboration and self-organising teams.
- Agile coaches face difficulties due to the lack of a clear vision and alignment from leadership regarding Agile transformation goals.

A.2 Remote Working

- Remote working arrangements amplify challenges for Agile coaches in maintaining effective communication and collaboration among Agile teams.
- Agile coaches encounter difficulties in adapting their coaching and facilitation techniques to effectively support Agile teams in remote working environments.

- Remote working introduces additional obstacles for Agile coaches in fostering team cohesion and alignment with Agile principles and practices.
- Addressing the increased risk of communication breakdowns and misunderstandings in remote Agile settings, and implementing effective strategies to mitigate these risks, poses challenges for Agile coaches.
- Managing time zone differences and asynchronous communication in global remote Agile teams adds complexity to Agile coaching and coordination efforts.
- The lack of in-person interaction and social connections in remote Agile settings affects team morale and motivation, posing challenges for Agile coaches in maintaining team spirit.
- Maintaining a sense of team identity and culture in remote Agile teams poses challenges for Agile coaches in promoting shared values and collaboration.

A.3 Agile Maturity

- The lack of alignment between Agile maturity levels and organisational goals poses challenges for Agile coaches in effectively guiding Agile adoption and advancement within the organisation.
- Limited investment in training and upskilling of Agile coaches and Scrum Masters hinders their ability to enhance Agile maturity.
- Lack of clarity and understanding among team members regarding Agile roles and responsibilities hampers Agile maturity progression.
- Agile coaches often face difficulties in gaining senior management understanding and support for Agile principles, impeding Agile maturity efforts.
- Inadequate support for Agile practices from external stakeholders (e.g., clients, vendors) hinders Agile maturity advancement.

- Limited autonomy and empowerment given to Agile teams restricts Agile maturity growth.
- Lack of Agile mindset and culture across the organisation impedes Agile maturity progression.

A.4 Agile Practices

- Agile coaches encounter difficulties in ensuring consistent implementation of Agile practices, such as daily stand-ups and sprint planning, within Agile teams.
- Team members' participation and engagement in Agile ceremonies pose challenges for Agile coaches in achieving sprint goals and objectives.
- Delivering high-quality increments of work at the end of each sprint cycle is challenging due to gaps in training, certifications, or knowledge within Agile teams about Agile practices.
- Agile coaches face obstacles in gaining buy-in and prioritisation of Agile practices, such as backlog refinement and sprint retrospectives, from team members and stakeholders.
- Managing resistance to change and overcoming inertia within Agile teams presents challenges for Agile coaches in driving adoption of Agile practices.
- Facilitating effective decision-making and conflict resolution within Agile teams presents challenges for Agile coaches in maintaining team dynamics and progress.
- The lack of dedicated Agile roles, such as Scrum Masters and Product Owners, within teams presents challenges for Agile coaches in facilitating Agile processes effectively.

Appendix B:

Summary of SPSS Outputs Used

- Correlation analysis was used to examine the relationship between survey items and the perceived difficulty of Agile practice implementation. Pearson coefficients were calculated for each pillar.
- Regression analysis identified the strength of influence for each pillar:
- - Organisational Culture and Leadership Support (Adjusted $R^2 = 16.2\%$)
- - Remote Working (Adjusted $R^2 = 14.6\%$)
- - Agile Maturity (Adjusted $R^2 = 25.4\%$)
- - Agile Practices (Adjusted $R^2 = 14.6\%$)
- One-sample t-tests confirmed that mean values for all survey items were significantly above the neutral midpoint, indicating strong agreement on the presence of these challenges.
- ANOVA tests validated that the models built were statistically significant at $p < 0.001$ for each pillar.
- All statistical analyses were conducted using SPSS v28, with a 5-point Likert scale for survey responses.